

CENTRAL WASHINGTON UNIVERSITY
2011-2012 ACADEMIC YEAR
UNDERGRADUATE/GRADUATE **CATALOG**

Central





Greetings,

As the university's 14th president it is my pleasure to extend warm greetings to new, transferring and returning students.

Central Washington University is two universities in one—a residential campus in Ellensburg and university centers located on six community college campuses throughout the state. Those completing degrees in Ellensburg will find a culturally rich campus life and an outdoor paradise, with some of the best fly-fishing, hiking, snowmobiling, and skiing in the Pacific Northwest. Those completing degrees at our centers will benefit from caring staff, conveniently scheduled classes, rich campus diversity, and locations close to home and work.

At Central Washington University, we stress excellence and innovation, we provide personal attention to each student, and we transform lives. We do this not only through classroom experiences, but also through a whole host of co-curricular and extra-curricular activities. I encourage you to join a club,

participate in student government, volunteer in the community, become a member of a research team, or engage in similar opportunities that will enrich your educational experience.

I hope to meet each one of you during your tenure as a student here. Please introduce yourself when you see me walking around campus, at a campus event, visiting the center, or even in the grocery store.

Welcome to CWU. I am glad you have chosen to attend this remarkable university.

Sincerely,

A handwritten signature in black ink, reading "James L. Gaudino". The signature is fluid and cursive, with the first name "James" being more prominent.

James L. Gaudino
President

The university catalog is prepared by Registrar Services, the Dean of Graduate Studies and Research, and the Public Affairs staff. Copies of the catalog may be obtained from the Wildcat Shop, Central Washington University, 400 East University Way, Ellensburg, WA 98926-7449. It is also available online at www.cwu.edu/~catalogs.

This catalog and its contents shall not constitute a contract between Central Washington University and prospective or enrolled students.

The information contained in this catalog reflects the current policies and regulations of the university. However, the university reserves the right to make changes in its policies and regulations at any time. Accordingly, if policies or regulations of the university at any time conflict with information contained in the catalog, the policies and regulations will govern, unless expressly determined otherwise by the CWU Board of Trustees.

Central Washington University's policies and practices affirm and actively promote the rights of all individuals to equal opportunity in education and employment without regard to their race, color, creed, religion, national origin, sex, sexual orientation, gender identity and gender expression, age, marital status, disability, or status as protected veterans. Central Washington University complies with all applicable federal, state, and local laws, regulations, and executive orders. Direct related inquiries to Staci Sleigh-Layman, Office for Equal Opportunity, Bouillon Hall, room 205, Central Washington University, Ellensburg, WA 98926-7497. Telephone 509-963-2205; TDD 509-963-2207, www.cwu.edu/~oeo.

Persons of disability may request this material in alternative format by contacting the Center for Disability Services at 509-963-2171 or CDSrecept@cwu.edu.

A file containing documents describing the university's accreditation and approval by accrediting agencies is maintained in the Office of the Provost and Vice President for Academic Affairs and may be viewed by any current or prospective student upon request.

**Central Washington University
June, 2011**

Registrar Services
Mitchell Hall
Central Washington University
400 East University Way
Ellensburg, Washington 98926-7465

509-963-3001
www.cwu.edu/~regi



CENTRAL WASHINGTON UNIVERSITY
2011-2012
UNDERGRADUATE/
GRADUATE CATALOG

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ONLINE ELECTRONIC CATALOG

www.cwu.edu/~catalogs

The Online Electronic Catalog (OEC) is the university's official compilation for all curriculum. The OEC serves as the basis for major, minor, and program requirements for the academic year. For current policy and curriculum requirements, refer to the CWU online catalog.

This catalog provides a general guideline of courses offered by the university. The classes and programs described herein are implemented at the sole discretion of the college and are subject to change at any time without notice. Information contained on classes and programs are illustrative only and are not intended to create any contractual obligation or covenant with the university.

LIMITATION OF LIABILITY

The university's total liability for claims arising from a contractual relationship with the student in any way related to classes or programs shall be limited to the tuition and expenses paid by the student to the university for those classes or programs. In no event shall the university be liable for any special, indirect, incidental, or consequential damages, including but not limited to, loss of earnings or profits.

INFORMATION DIRECTORY

Academic Advising Center, Hertz Hall, room 107.....	509-963-3523
Office of Admissions, Mitchell Hall, first floor.....	963-1211
Associated Students of Central Washington University (ASCWU), Student Union and Recreation Center, second floor.....	963-1693
Career Services, Barge Hall, room 204.....	963-1921
Cashiers Office, Barge Hall, room 104.....	963-2224
Catering Services, Tunstall Hall.....	963-1302
Center for Disability Services, Bouillon Hall, room 205.....	963-2171
Conference Services, Vantage Room.....	963-1141
Continuing Education Office, Bouillon Hall, room 206.....	963-1504
Central Switchboard.....	963-1111
Financial Aid, Barge Hall, room 115.....	963-1611
Graduate Studies and Research, Barge Hall, room 305.....	963-3103
University Housing and New Student Programs, Button Hall, second floor.....	963-1831
International Studies and Programs, International Center.....	963-3612
James E. Brooks Library.....	963-1021
President's Office, Barge Hall, room 314.....	963-2111
Provost, Barge Hall, room 302.....	963-1401
Public Safety and Police Services, Public Safety Building.....	963-2959
Registrar, Mitchell Hall, first floor.....	963-3001
Student Employment, Barge Hall, room 103.....	963-3008
Student Financial Services, Barge Hall, room 104.....	963-3546
Student Life, Bouillon Hall, room 204.....	963-1515
Student Medical Clinic.....	963-1881
Student Counseling Clinic.....	963-1391
Transcript Line.....	963-1227
Veterans Center, Psychology Building, room 463.....	963-3028

AVAILABILITY OF SAFETY AWARENESS INFORMATION

The Department of Public Safety and Police Services is responsible for reporting crime statistics in compliance with the Jeanne Clery Disclosure of Campus Security Policy and Campus Crime Statistics Act. Central's annual security report is available at www.cwu.edu/~police. It contains information regarding crime prevention programs, the law enforcement authority of the university police, policies concerning the reporting of crime, crime statistics for the most recent three-year period, and other information about security that is required by law. A paper copy of the information is also available upon request by writing to: Central Washington University, Department of Public Safety and Police Services, 400 East University Way, Ellensburg, WA 98926-7527.

FALL QUARTER

Open registration for fall
Classes begin
Change of class schedule
Deadline to apply for baccalaureate degree for winter
Advising week
Uncontested withdrawal deadline for fall
Registration for winter
Veterans Day holiday (observed)
Thanksgiving recess
Faculty development/study day
Final exam week
Days of instruction

2011

September 19-20
September 21
September 21-27
September 30
October 31-November 4
November 4
November 7-23
November 11
November 23-25
December 5
December 6-9
(54)

2012

September 17-18
September 19
September 19-25
September 28
Oct. 29-Nov. 2
November 2
November 5-21
November 12
November 21-23
December 3
December 4-7
(54)

WINTER QUARTER

New Year holiday (observed)
Open registration for winter
Classes begin
Change of class schedule
Deadline to apply for baccalaureate degree for spring
Martin Luther King Jr. holiday
Advising week
Registration for spring
Uncontested withdrawal deadline for winter
Presidents' Day holiday
Faculty development/study day
Final exam week
Days of instruction

2012

January 2
January 3
January 4
January 4-10
January 13
January 16
February 6-10
February 13-March 2
February 17
February 20
March 12
March 13-16
(51)

2013

January 1
January 2
January 3
January 3-9
January 11
January 21
February 4-8
Feb 11-March 1
February 15
February 18
March 11
March 12-15
(50)

SPRING QUARTER

Open registration for spring
Classes begin
Change of class schedule
Deadline to apply for baccalaureate degree for summer
Advising week
Registration for summer (all students)
Uncontested withdrawal deadline for spring
Registration for fall (continuing students)
Memorial Day holiday
Faculty development/study day
Final exam week
Commencement (Ellensburg)
Commencement (Kent)
Days of instruction

2012

March 26
March 27
March 27-April 2
April 6
May 7-11
May 7-June 18
May 11
May 14-June 1
May 28
June 4
June 5-8
June 9
June 10
(53)

2013

March 25
March 26
March 26-April 1
April 5
May 6-10
May 6-June 17
May 10
May 13-31
May 27
June 3
June 4-7
June 8
June 9
(53)

NOTE: Days of instruction (includes finals week)

SUMMER SESSION

Open registration (all sessions)
 Classes begin (six weeks - full)
 Change of schedule (six weeks - full)
 Deadline to apply for baccalaureate degree for fall
 Independence Day holiday
 Six-week session closes
 Full term closes

2012

May 7-June 17
 June 18
 June 18-20
 June 29
 July 4
 July 27
 August 17

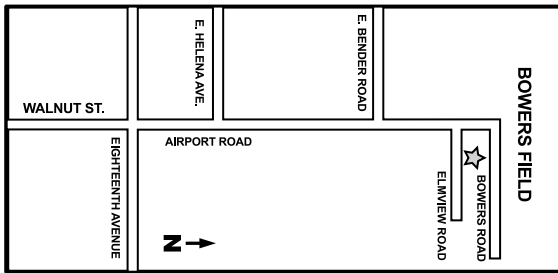
2013

May 6-June 16
 June 17
 June 17-19
 June 28
 July 4
 July 26
 August 16



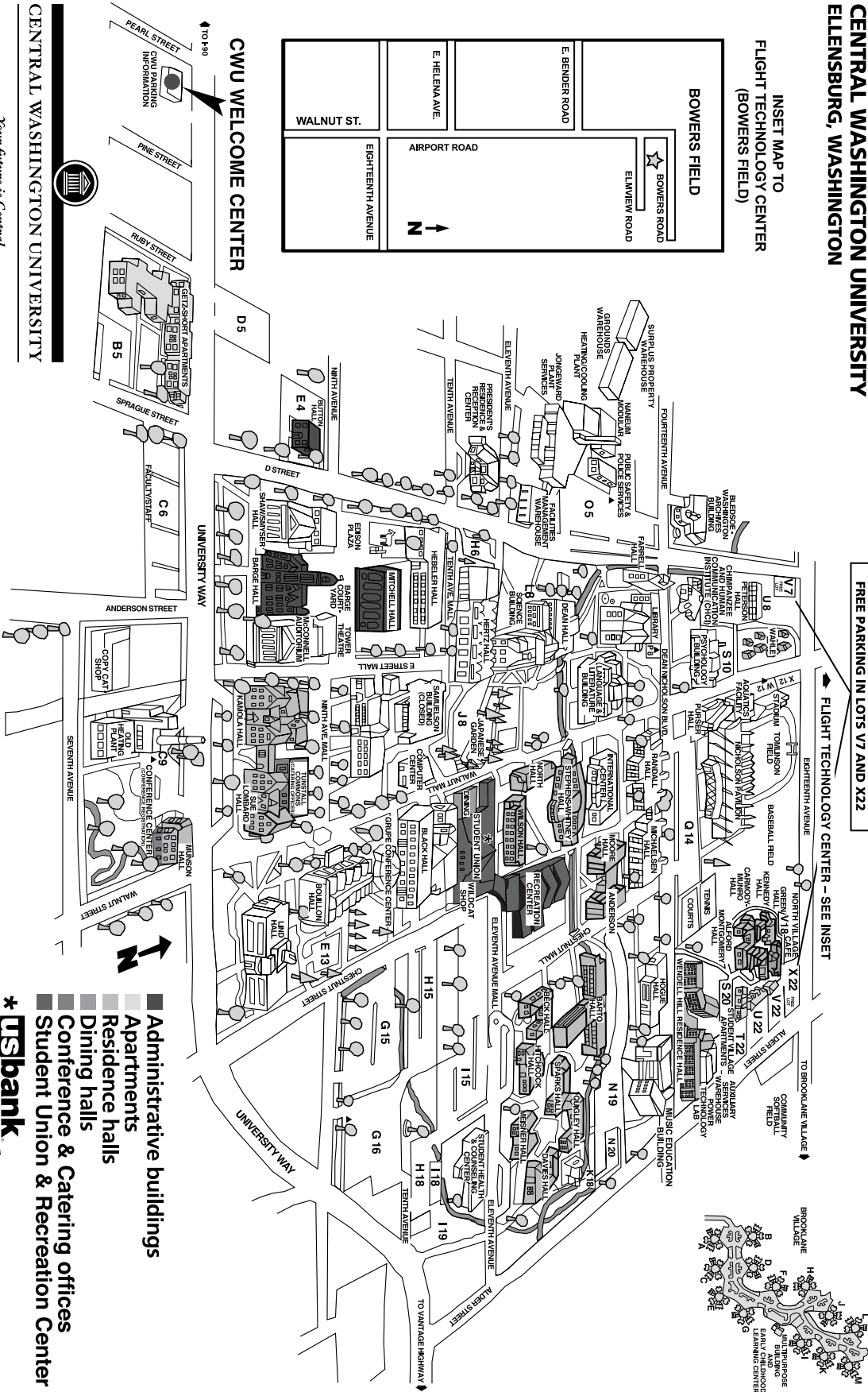
CENTRAL WASHINGTON UNIVERSITY ELLENSBURG, WASHINGTON

INSET MAP TO FLIGHT TECHNOLOGY CENTER (BOWERS FIELD)



FREE PARKING IN LOTS V7 AND X22

FLIGHT TECHNOLOGY CENTER - SEE INSET



CENTRAL WASHINGTON UNIVERSITY

Your future is Central.

EEO/AA/TITLE IX INSTITUTION, TDD 509-963-2143

▲ DAILY PARKING PERMIT DISPENSERS

LAST REVISED 02/10.



Docendo Discimus
"By Teaching, We Learn"

HISTORY, MISSION, SHARED VALUES, AND STRATEGIC EMPHASES

Central Washington University is one of six state-supported institutions offering baccalaureate and graduate degrees. The university has its own governing board, the board of trustees, with eight members, seven of whom are appointed for six-year terms by Washington's governor with consent of the state Senate, and one student trustee, appointed annually. Central was established in 1890 as Washington State Normal School by the first legislature to fulfill the intent of the 1889 Enabling Act for Statehood. In 1891, doors opened for classes. Ellensburg Normal School became Central Washington College of Education in 1937, Central Washington State College in 1961, and Central Washington University in 1977.

Mission Statement

Central Washington University's mission is to prepare students for responsible citizenship, responsible stewardship of the earth, and enlightened and productive lives. Faculty, staff, students, and alumni serve as an intellectual resource to assist central Washington, the region, and the state in solving human and environmental problems.

Qualified faculty and staff create a community that encourages and supports the emotional, personal, and professional growth of students from a variety of backgrounds. The university works with community colleges through university centers across the state and employs technology to extend the reach of its educational programs.

The university community values teaching as the vehicle to inspire intellectual depth and breadth, to encourage lifelong

learning, and to enhance the opportunities of its students. The faculty develop and strengthen bachelor's and master's degree programs in the arts, sciences, and humanities; teacher education; business; social services; and related specializations. A strong liberal arts foundation, applied emphases, opportunities for undergraduate research, creative expression and international study, and close working relationships between students and faculty are hallmarks of the undergraduate experience. Graduate programs develop partnerships between faculty and students to extend scholarship to important areas of research and practice.

Vision

Central Washington University is becoming respected nationally for outstanding academic programs, global sensitivity and engagement, and a stimulating intellectual community that prepares students for lifelong learning in a diverse and changing world.

Core Values

As a community of scholars, we are committed to:

- Each student's greatest good
- Excellence achieved through a diversity of ideas and people
- A rigorous curriculum and outstanding teaching
- Intellectual inquiry, exploration, and application
- A supportive university community

Strategic Goals

- Goal I. Maintain and strengthen an outstanding academic and student life on the Ellensburg campus
- Goal II. Provide for an outstanding academic and student life at the university centers
- Goal III. Diversify the funding base and strengthen infrastructure to support academic and student programs
- Goal IV. Build mutually beneficial partnerships with the public sector, industry, professional groups, institutions, and the communities surrounding our campuses
- Goal V. Achieve regional and national prominence for the university
- Goal VI. Build inclusive and diverse campus communities that promote intellectual inquiry and encourage civility, mutual respect, and cooperation

EQUAL OPPORTUNITY POLICIES

CWU's policies and practices affirm and actively promote the rights of all individuals to equal opportunity in education and employment without regard to their race, color, creed, religion, national origin, sex, sexual orientation, gender identity and gender expression, age, marital status, disability, genetic information, or status as protected veterans. The university administers an affirmative action program for employment purposes and complies with applicable federal, state, and local laws, regulations, and executive orders. Policy statements on affirmative action, gender equity, and sexual harassment, as well as discrimination complaint and resolution policy and procedures located in Appendix A or at www.cwu.edu/~oeo. The person responsible for institutional compliance with most federal and state laws and institutional policies dealing with discrimination is Staci Sleigh-Layman, Office for Equal Opportunity, Bouillon Hall, room 205, 509-963-2205 or oeo@cwu.edu. She also serves as the university's Title IX coordinator. Robert Harden, Center for Disability Services Director and ADA compliance officer, is responsible for compliance with state and federal disability-related laws and institutional policies. He is located in Bouillon Hall, room 205, and can be contacted at 509-963-2171.

ACCREDITATION AND MEMBERSHIP

The university is accredited by the Northwest Commission on Colleges and Universities (NWCCU). Some programs have been accredited by specialized accrediting associations, including the Technology Accreditation Commission of the Accreditation Board for Engineering and Technology (TAC/ABET) (111 Market Place, Suite 1050, Baltimore, MD 21202-4012, Telephone 410-347-7700); American Chemical Society (ACS) Committee on Professional Training; American Council for Construction Education (ACCE); American Dietetic Association Commission on Accreditation for Dietetics Education (CADE-ADA); Association to Advance Collegiate Schools of Business (AACSB); the Committee on Accreditation of Educational Programs for the EMS-Professions (CoAEMSP); National Association of School Psychologists (NASP); National Association of Schools of Music (NASM); National Collegiate Athletic Association (NCAA); National Council for Accreditation of Teacher Education (NCATE); and U.S. Government Printing Office Federal Depository Library Program (U.S. GPOFDLP).

The university holds membership in all of the major international, national, regional, and state academic associations. Contact the Office of the Provost/Vice President for Academic and Student Life for a complete list.

STUDENT ACADEMIC SUPPORT

Academic Advising Center

The university's Academic Advising Center is located in Hertz Hall, room 107. It provides entering freshmen, continuing students, and transfer students with general advising information and help. This includes information on the general education program, graduation requirements, transferability of credits, interpreting Central Academic Progress System (CAPS) reports, pre-major advising, and counseling students who are in academic difficulty. The center also offers special program advisors, advising seminars, college survival skills classes, and advising publications.

The Academic Advising Center manages UNIV 101, a required course for entering freshmen, that assists students with learning about the university's policies and procedures, selecting a major, advising for general education, and other forms of support. For more information visit the Academic Advising website at www.cwu.edu/~acadadv/.

College Assistance Migrant Program (CAMP)

The College Assistance Migrant Program (CAMP) provides financial and academic support services to freshman students from migrant and seasonal farmworking backgrounds. It is funded by a grant from the Department of Education's Office of Migrant Education.

CAMP is designed to help students succeed as they begin their college careers by recruiting and assisting them through the CWU admissions process, and by providing them support during their freshman year. Eligible students receive a variety of services including scholarships, stipends, tutoring, study skills training, mentoring, career planning services, and cultural enrichment opportunities.

To qualify for the CAMP program the student must meet the following requirements:

- Be a U.S. citizen, permanent resident, or eligible non-citizen
- Have freshman standing (fewer than 44 quarter credits)
- Meet criteria to determine migrant or seasonal farmworker status:
- Parent (or student, if independent) has worked for at least 75 days in the last 24 months in farmwork, such as production of crops, dairy products, poultry, livestock, tree harvesting, or fish farming. Farmwork must be primary form of employment and be performed on a temporary or seasonal basis

- OR student has participated in the Chapter 1 Migrant Education Program
- OR student or parent qualifies for the WIA167 program

To apply for the CAMP Program, call 509-963-1729 (toll free 866-298-4968 x1729) or download an application off the website at www.cwu.edu/~camp.

Career Services

Career Services is a comprehensive career counseling and resource center designed to engage students as active participants in their career development from freshman year through alumni status. The central purpose of Career Services is to help students prepare for academic and career success. The office strives to serve the needs of individuals through these career-related programs and services.

UNIV 103: For those who are not certain which major or career path is right for them, Career Services offers a two-credit course, Career Exploration, on the Ellensburg campus. It is offered each quarter. One-on-one counseling can achieve similar results over time if a student cannot take the class.

UNIV 301: This two-credit Career Management class helps students prepare for the transition from the classroom to the workplace. The focus of the course is on job search skills in pursuit of fulfilling employment.

Job Search Preparation: On-campus interviews take place in Barge Hall, room 204M, between students and a variety of businesses, government agencies, non-profit organizations, school districts, and the military. Educational placement files are managed through Career Services as well. Career events are offered throughout the year to bring together graduating seniors and organizations that are seeking well-trained graduates.

Career Counseling: Career counselors help students to make major and career decisions through a variety of online assessments and determining skills, strengths, values, and interests. To prepare the students for internship and career opportunities, career counselors provide information on developing strong resumes and cover letters, practicing effective interviewing skills, learning successful internship and career job search strategies, and how to negotiate salary. Focus is on becoming a professional. Those experiencing career transitions are also welcome to meet with a career counselor.

Students and alumni seeking assistance at Career Services are strongly encouraged to open an account on the Wildcat Career Network's job search engine at www.cwu.edu/~career. Registration opens up the database of job and internship opportunities, and allows students to sign up for on-campus interviews and career events. There is no fee for this service.

Counselors are available from 8 a.m. to 5 p.m. in Barge Hall, rooms 202 and 204M in Ellensburg, and at CWU-Lynnwood and CWU-Des Moines as well.

Cooperative Education: Cooperative Education offers assistance to students wanting to take advantage of real-life work experience while they are in school. Many departments require an internship as part of the major; others accept a limited number of hours toward graduation. An internship is an opportunity to combine career, social, and personal growth with the educational process. The student works with their department advisor and the Career Services Co-op office in Barge Hall, room 204M to prepare the process that leads to a successful academic/work experience.

Career Fairs and Events: The department organizes career fairs throughout the year as an opportunity to network with employers, learn dining etiquette, interview with businesses, meet with faculty, review graduate school opportunities, and more. Check information on career fairs, workshops and events on www.cwu.edu/~career.

Graduate School Preparation: Career Services assists students with the graduate school application process, including refining the CV or resume, providing feedback on the Statement of Purpose, information on the graduation school interview, and references.

CWU Testing Services

CWU Testing Services provides support to CWU students, faculty, and staff, as well as the central Washington community. Information, including a list of exams and dates, is available from its offices in Bouillon Hall, room 125, at www.cwu.edu/~testing, or by phoning 509-963-1847.

CWU Testing Services administers over 25 exams, scans exams for faculty, and processes Student Evaluations of Instruction. CWU Testing Services is a ETS/Prometric test center.

Exams offered include:

1. Placement into CWU courses or programs (COMPASS and the Communication test)
2. College Level Examination Program (CLEP) tests for challenging certain courses
3. English proficiency tests for non-native speakers, e.g., Test of English as a Foreign Language (TOEFL), and Test of English for International Communication (TOEIC)
4. Various certification and professional development exams including CASTLE, KRYTERION and ETS.
5. Tests for other topics including the General Education Development (GED), Graduate Record Examination (GRE), Medical College Admissions Test (MCAT), Law School Admission Test (LSAT), etc.

Don and Verna Duncan Civic Engagement Center

Taking action, it's how you improve the world and yourself at the same time. The Don and Verna Duncan Civic Engagement Center (CEC) provides professional, major-oriented experiences through community service initiatives. From short-term volunteering to intense capstone service programs, the CEC encourages individuals to use their discipline-specific knowledge in order to address community-based social, political, environmental, and economic justice issues. Join the CEC in supporting important issues while building your resume and your competencies in the process. To discover what opportunities are currently available, visit www.takeactioncwu.com or stop by room 256B in the SURC.

Educational Opportunity Center

Deciding where to go to college, figuring out how to pay for it, and completing all the necessary forms is complicated. The Educational Opportunity Center (EOC) is set up to help students gather the necessary information to make good decisions about their future educational plans and think clearly through the available options. EOC is available, principally, to help low-income adults, who are the first in their family to attend college, work through the admission process. For further information, call 509-574-6895 or e-mail at eoc_program@cwu.edu. The webpage is located at www.cwu.edu/~eoc.

Educational Technology Center

The Educational Technology Center (ETC), located in Black Hall, provides instructional technology services, support, training and curriculum resources to all faculty, staff, and students in the Center for Teaching and Learning (CTL). The ETC library houses various library collections, computers, and a Multimedia Production Lab. The ETC is intended to serve as an exemplary model of educational technology resources and educational curriculum materials for K-12 pre-service and in-service teachers in the state of Washington. The ETC has wireless Internet access and computer workstations with printing capabilities. For more information call 509-963-3293 or visit the website at www.cwu.edu/~etc.

Honor Societies

Central Washington University maintains memberships in several national honor society chapters. Here is a list of those memberships.

Alpha Epsilon Rho: This is the national honor society for broadcasting. Founded in 1943 for the purpose of emphasizing superior scholarship and creative participation in telecommunication production and activity, it prepares its members for roles as responsible

telecommunicators. Membership in Alpha Epsilon Rho is open to undergraduate and graduate students who are making electronic media studies one of their major academic interests and who meet high standards of scholarship.

Alpha Eta Rho: (AHP) This International Professional Collegiate Aviation fraternity acts as a bridge between aviation colleges and the aviation industry. AHP was established in 1929 by Earl W. Hill, an aviation instructor at the University of Southern California and, with help from students and faculty, was founded on April 10, 1929. It is the oldest professional aviation fraternity in history. AHP members serve the aviation industry in fields such as: Aviation Captains, NASA Engineers, Flight Attendants, Aircraft Mechanics, Aerospace Engineers, Corporate Pilots, and many more.

Alpha Kappa Delta: This is an international sociology honor society. Founded in 1920 and an accredited member of the Association of College Honor Societies, Alpha Kappa Delta is a non-secret, democratic, international society of scholars dedicated to the philosophy of Athropon Katamanthanein Diakonesein or "to investigate humanity for the purpose of service." AKD seeks to acknowledge and promote excellence in scholarship in the study of sociology, the research of social problems, and such other social and intellectual activities that will lead to the improvement of the human condition.

Alpha Lambda Chi: The fundamental purpose of Sigma Lambda Chi is to provide recognition to outstanding students in construction curricula. Sigma Lambda Chi is the society that offers students the opportunity to be recognized locally and internationally for their academic accomplishments as a construction major.

Alpha Phi Sigma: This is the nationally recognized honor society for students in the criminal justice sciences. The society recognizes academic excellence by undergraduates as well as graduate students of criminal justice. The honor society is open to students who have a declared law and justice major or minor, who maintain a minimum of 3.0 overall GPA on a 4.0 scale, and a 3.2 GPA, on a 4.0 scale, in law and justice courses. The student must also rank in the top 35 percent of their classes and have completed a minimum of four courses within the law and justice curriculum.

Alpha Sigma Lambda: This national honor society, established in 1946, provides the opportunity to recognize the special achievements of adult students. Alpha Sigma Lambda acknowledges adult students who accomplish academic excellence while facing competing interests of family, work, and community. Members must have earned a minimum GPA of 3.5 on a 4.0 scale. The CWU chapter of ASL is Psi Delta Omega

and is advised by the Center for Student Empowerment. Invitations to join Psi Delta Omega are sent out at the beginning of each academic year, and induction ceremonies are held both at the Ellensburg campus and at one of the Puget Sound- area centers.

Delta Pi Epsilon: This is a post-baccalaureate honor society for business educators. Its objectives are to improve business education through research, recognize exceptional research achievements, and publicize research in business education. Membership is open to business educators who meet scholastic criteria and exhibit a commitment to research in business education.

Eta Sigma Gamma: Since its inception in 1967, Eta Sigma Gamma, the National Health Education Honorary, has had a rich history of contributions to the profession of health education and health promotion. It was through the commitment of a group of dedicated professors and students at Ball State University that the first chapter of the honorary was established. Today, there are over 80 chapters representing thousands of students in colleges and universities around the United States.

Eta Zeta: This is the Department of Geological Science's chapter in the Earth Sciences national honor society, Sigma Gamma Epsilon. The purpose of the honor society is to recognize exceptional scholarship and professionalism among our geological science majors, and to foster student scholastic, scientific, and professional advancement. To become a member, a student must have completed at least 15 quarter hours in Earth Sciences courses, have a minimum 3.0 GPA in Earth Sciences courses, and have a minimum GPA of 2.67 in all university courses.

Kappa Delta Pi: The honor society in education, **Kappa Delta Pi**, encourages high professional, intellectual, and personal standards, and recognizes and honors outstanding achievement in the study of education. Membership is open to undergraduate students, graduate students, and faculty by invitation. New members are inducted quarterly.

Lambda Pi Eta: This is the national honorary society for undergraduates in communication. As an accredited member of the Association of College Honor Societies (ACHS), Lambda Pi Eta (LPH) has an active chapter at CWU's Department of Communication. LPH represents what Aristotle described in *The Rhetoric* as three ingredients of persuasion: *logos* (lambda) meaning logic, *pathos* (pi) relating to emotion and *ethos* (eta) defined as character credibility and ethics. Lambda Pi Eta recognizes, fosters, and rewards outstanding scholastic achievement while stimulating interest in the communication discipline.

Omicron Gamma: This is the CWU chapter of Beta Beta Beta. Beta Beta Beta (TriBeta) is a society for students, particularly undergraduates, dedicated to improving the understanding and appreciation of biological study and extending boundaries of human knowledge through scientific research. Since its founding in 1922, more than 200,000 persons have been accepted into lifetime membership, and more than 553 chapters have been established throughout the United States and Puerto Rico.

Pi Sigma Alpha: (Mu Lambda chapter) This is CWU's honor society for students of political science. This is a national honorary, first organized in 1920, with more than 300 chapters throughout the country. Membership is based upon scholastic achievement and a genuine interest in the understanding of politics and political issues.

Phi Kappa Phi: The national honor society of *Phi Kappa Phi* recognizes and encourages superior scholarship in all academic disciplines. Membership is open to undergraduate students, graduate students, and faculty members by invitation, with election based on superior scholarship. New members are inducted each spring.

Phi Sigma Tau: This is the international honor society in philosophy. Its purpose is to recognize and encourage excellence in philosophic scholarship among students and faculty. Central's local chapter (Washington Alpha) meets periodically to discuss philosophic issues. Membership is based on scholastic attainments.

Psi Chi: This is the national honor society in psychology, founded in 1929 for the purpose of encouraging, stimulating, and maintaining scholarship in, and advancing the science of, psychology. Membership is open to graduates and undergraduates who are making the study of psychology one of their major interests and who meet the minimum qualifications. Psi Chi is an affiliate of the American Psychological Association and a member of the Association of College Honor Societies.

Sigma Pi Sigma: This is the national physics honor society. It was founded in 1921 and now has over 400 chapters nationwide. It is a member of the Association of College Honor Societies and is affiliated with the American Institute of Physics and with the American Association for the Advancement of Science. Membership is open to undergraduate and graduate students and faculty members. Students elected to membership must maintain high standards of general scholarship and outstanding achievement in physics. Besides providing an incentive for all physics students to rise to excellence, the society also encourages physics interest and science literacy in the general public.

Tau Iota: This is Central's chapter of Phi Alpha Theta, the international honor society in history. Membership is composed of students and professors who have been elected upon the basis of excellence in the study and writing of history. The society's objective is the promotion of the study of history by the encouragement of research, good teaching, publication, and the exchange of learning and thought among historians.

Theta Alpha Kappa: This is the national honor society for religious studies. Central Washington University was granted a Theta Alpha Kappa charter in 2007. Its overall purpose is to provide local and national recognition to students with high scholarship and an academic interest in the field of religious studies. It also, promotes student interest in research and advanced study in the field, provides opportunities for the publication of student research papers of merit through the *Journal of Theta Alpha Kappa*, encourages a professional spirit and friendship among those who have demonstrated an aptitude for excellence within the field, and popularizes interest in religious studies among the general collegiate and local community.

James E. Brooks Library

The Brooks Library provides resources and services to stimulate intellectual curiosity and facilitates learning and research within the academic community. The library's personnel are engaged in the creation of collections of materials that support the curriculum and the provision of access to those materials. More specifically, these activities include the collecting and preservation of materials, user instruction and guidance, information retrieval, analysis and organization, global access to library and information resources, and collaboration with instructional faculty in developing programs, collections, and research.

Students and other library users have 24/7 web-based access to over 1.3 million books, films, government documents, maps, audio recordings, videos, and DVDs on site in the Brooks Library. Additionally, the library provides similar access to more than 25 million information items from the academic libraries of the Northwest that belong to the Orbis Cascade Alliance. Full-text electronic and/or paper subscriptions to over 15,000 periodicals and academic journals are available electronically or on site.

Library staff are available to provide personal service to students for more than 99.5 hours per week. Group study areas and an open computer lab are available to users who visit the main library in Ellensburg. Students at the centers have access through a toll-free phone number or e-mail access to reference librarians. Internet connectivity for personal laptops is available on each floor of the library and laptops are available for checkout by

students. The library's staff, services, and collections support the educational efforts of students, foster intellectual, social and ethical development, and show students how to locate, use, and evaluate information to equip them for independent, lifelong learning.

Student Support Services

Student Support Services (SSS) is a federally funded TRIO program under the auspices of the U.S. Department of Education, as defined by the U.S. Department of Education. SSS provides opportunities for academic development, assists students with basic college requirements, and serves to motivate students toward the successful completion of their post-secondary education. Students who are first generation, low income, or who have a disability are eligible for the program on a space-available basis. The program may also provide grant aid to current, active, SSS participants who are receiving Federal Pell Grants and are of freshman or sophomore status. The goal of SSS is to increase the college retention and graduation rates of its participants and facilitate the process of transition from one level of higher education to the next. SSS is funded 80 percent by a federal grant from the U.S. Department of Education and 20 percent by CWU.

Washington Trio Expansion Program (WaTEP)

Washington TRIO Expansion program is funded by the state of Washington and is designed to serve 250 TRIO-eligible students each year. Students must be first generation, low income, and/or students with disabilities, who are not otherwise served in a regular Student Support Services program. Students will have access to services such as those found in the SSS program with the ultimate goal to help retain and graduate them from the university.

Academic Achievement Programs: Tutoring and Supplemental Instruction

Individual tutorial assistance is provided for students participating in Student Support Services, Washington TRIO Expansion Program, College Assistance Migrant Program, Student Transitions and Academic Resources, Science Talent Expansion Program, and McNair Scholars.

Supplemental Instruction provides student-led, out-of-class study sessions designed to teach students critical thinking, problem-solving, and organizational skills that will enable them to master abstract and complex material. Supplemental Instruction is offered in several historically difficult classes each quarter and is open to any student enrolled in those classes.

Student Transitions and Academic Resources (STAR)

Student Transitions and Academic Resources (STAR) is an intensive academic support program that assists academically-at-risk students complete transitions into, through, and out of the university, develop academic study skills and responsibility for learning, and achieve their educational goals. Students served by STAR are conditionally admitted to CWU, their admission contingent upon their participation in the program and compliance with program policies. To promote the academic success, retention, and graduation of its students, the STAR program provides intensive, individualized academic advising, personal, career, and financial aid counseling, tutoring, peer mentoring, advocacy, and conflict resolution coaching, and appropriate referrals for students needing further assistance in resolving concerns and achieving their academic goals.

University Math Center

The University Math Center provides academic support in quantitative skills for students in courses across the curriculum. There are two main avenues of support. The UMC staffs and operates three levels of developmental math courses to prepare students for college-level mathematics. Advising for appropriate placement is required through the UMC, Hertz Hall, room 101. Individual tutoring is available for these courses.

The University Math Center's second avenue of support is through the Drop-in Help Lab located in Hertz Hall, room 104. Students are encouraged to use the lab for any course with a quantitative component. Trained peer tutors are on staff to guide students through the process of solving problems. No appointment is necessary—students may either stop by with a specific question or use the lab as a place to do homework alone or with classmates. Current lab hours, placement information, and answers to frequently asked questions about the UMC's services are available at www.cwu.edu/~mathcenter.

University Writing Center

Trained peer consultants work with students of all levels and disciplines, guiding them toward written communication that will be effective in a global and diverse environment, during and after their studies at CWU.

Consultants meet one-on-one with students in the center and reach out throughout the university. Consultants lead interactive workshops with small and large groups of students, tailored to the needs of each course; for example, they may discuss thesis development, research, elements of argument, organization, punctuation, citation, or peer review.

The center's services are free and available both in-person and on-line, at the main campus and the University Centers. In Ellensburg, one-on-one consultations are available six days a week, in Hertz Hall, room 103, the library's Fishbowl, and the SURC, room 273. Students may drop by or make appointments.

Live, interactive online consultations are available by appointment, for students of all campuses. For more information, go to the website, www.cwu.edu/~writingcenter, or call 509-963-1296.

STUDENT LIFE

Associated Students of CWU

The Associated Students of Central Washington University (ASCWU) board of directors (BOD) is the student government board elected by the CWU student body to serve as policy-development officers. Executive responsibility is vested in the seven-member ASCWU-BOD with the senior director of Campus Life serving as the primary advisor. As a vehicle from which students may share different views, the ASCWU is an integral part of the shared governance of CWU. The ASCWU-BOD recognizes and approves student clubs, student organizations, and student appointments to committees in order to serve and represent a variety of student needs and interest areas.

Campus Life

The Department of Campus Life is dedicated to enriching students' experiences outside the classroom by providing social, cultural, recreational, and educational programs, services, and apprenticeships. Campus Life is comprised of the functional areas including Campus Activities, Campus Life Administration, Campus Life Publicity Center, KCWU 88.1 the 'Burg Radio Station, SURC Custodial & Maintenance, Student Union Operations & Scheduling, and University Recreation.

Campus Activities offers a variety of events including music, comedy, speakers, concerts, performances, and special events such as Homecoming, Family Weekend, Boo Central, Ware Fair, and Student Appreciation Day.

KCWU 88.1 the 'Burg Radio Station seeks to educate, inform, and entertain the public while teaching students lifelong communication, public speaking, accountability, teamwork, and leadership skills. We seek to develop and present programming that represents a full spectrum of world culture, ethnicity, art, and expression.

The Publicity Center provides comprehensive design, marketing/media, and web service to the Department of Campus Life and the division of Student Affairs, with

particular emphasis on Services & Activities fee-funded areas.

Student Union Operations provides seamless, quality services through centralized scheduling, event coordination, and technical support of university facilities or all university and non-university events.

University Recreation is committed to offering recreation programs that provide personal and professional development for a diverse university community. Our nationally recognized facilities and services support the university mission by promoting an inclusive campus environment. Our programs contribute to the wholeness and wellness of our patrons while providing co-curricular activities that complement other avenues of learning and aid individuals in achieving balance and well roundedness. Through excellent customer service and care for the individual, University Recreation seeks to provide a sense of belonging that enhances retention for students, faculty, and staff.

Campus Life representatives serve on organizing committees for campus events such as Discover! New Student Orientation, Wildcat Welcome Weekend, and Homecoming. Campus Life employs 200-plus students each year in paraprofessional positions, offers internships and practicum experiences, and provides a range of services for university departments, student organizations, and the community.

University Recreation

University Recreation is committed to offering recreation programs that provide personal and professional development for a diverse university community. Our nationally recognized facilities and services support the university mission by promoting an inclusive campus environment. Our programs contribute to the wholeness and wellness of our patrons while providing co-curricular activities that complement other avenues of learning and aid individuals in achieving balance and well roundedness. Through excellent customer service and care for the individual, University Recreation seeks to provide a sense of belonging that enhances retention for students, faculty, and staff. Programs include intramural sports, collegiate sport clubs, personal training, group fitness, outdoor pursuits and rentals, climbing wall, challenge course, summer kids camp, recreation center operations, and a myriad of special events including films, lectures, interactive programs, and instructional courses.

Intramural Sports (IM Sports) offers more than 20 different leagues per quarter ranging from the traditional, such as basketball, flag football, softball, and soccer to the non-traditional such as dodge ball, indoor Nerf football, and table tennis. Sports are offered in different ability levels (competitive or recreational) as well as different gender divisions (coed or open), for participation

by a range of players. Students, staff, and faculty are eligible to participate in intramural programs.

Collegiate Sport Clubs allow opportunities for students, with mutual interests in a sporting activity, to represent CWU in intercollegiate competitive activities that are not available through the Department of Athletics. Each sport club is initiated, maintained, and managed by student members. Although the program is partially funded by student activity fees, fundraising is an essential element of every club.

Personal training packages are available to all recreation center members. For a nominal charge, a personal trainer will develop a challenging workout routine specifically designed to meet an individual's fitness goals.

Group fitness classes are available to all recreation center members for a very small fee. From spinning to ballet, intense abdominal workouts to yoga, there's something for everyone.

Outdoor Pursuits and Rentals provides both guided trips and equipment rentals to support students' outdoor recreation desires. The fully staffed, 50-foot climbing wall in the Recreation Center offers bouldering and roped climbing, and certification courses in top-rope belay and lead climbing.

Challenge Course programming offers the opportunity to participate in team building activities to accomplish individual and group goals on both low-ropes elements and a state-of-the-art high challenge course. Our staff will provide everything your group needs to successfully participate in the challenge course experience, including equipment and instruction, as well as a pre-event meeting to determine your group's specific needs.

Camp C-Woo provides a quality day camp atmosphere for Ellensburg-area youth entering grades 1-5.

Students enrolled in six or more credits on the Ellensburg campus are automatically assessed the quarterly Recreation Center membership fee. Students taking fewer than six credits, and CWU staff and faculty members have the opportunity to purchase a membership in person at the Recreation Center.

Student Union and Recreation Center (SURC)

The SURC is the community center of the university, providing services, conveniences, and amenities for all members of the CWU community and their guests. The Student Union portion of the SURC houses the following offices and departments: ASCWU-BOD student government, Campus Life administration and Club Accounting, Campus Activities, David Wain Coon Center for

Excellence in Leadership, Center for Student Empowerment, Don & Verna Duncan Civic Engagement Center, Connection Card, Dining Services Marketplace, Holmes Dining Room, Diversity Education Center, Information Center, KCWU 88.1 the 'burg radio station, Publicity Center, SURC Operations and Scheduling Services, SURC Box Office, Wildcat Shop, Wildcat Wellness Center, and a U.S. Bank branch. Facilities available for reserved use include a variety of meeting rooms, the SURC pit, a 345-seat theater, a ballroom which can accommodate up to 1,000 people, and all the necessary equipment and technology to support a quality program or meeting.

The Recreation Center portion of the SURC houses University Recreation which includes administrative support for intramural sports, collegiate sport clubs, personal training, group fitness, Outdoor Pursuits & Rentals, climbing wall, challenge course, and summer kids camp. Use of the Recreation Center requires the payment of a quarterly membership fee. Students enrolled in six or more credits on the Ellensburg campus are automatically assessed the quarterly Recreation Center membership fee. Students taking fewer than six credits, or CWU staff and faculty members have the opportunity to purchase a membership in person at the Recreation Center.

Center for Disability Services

The Center for Disability Services (CDS) facilitates access to university programs, activities, and services for students with disabilities. Utilizing documentation of disability and information obtained in consultation with the student, CDS staff assesses the affects of a student's disability on his/her ability to access the educational process and identifies reasonable academic adjustments/accommodations. In addition, DSS works to sensitize university faculty and staff to the needs of students with disabilities and helps students obtain the materials, equipment, and assistance necessary to successfully pursue their education. Students wishing to request disability accommodations are responsible for contacting CDS.

Appropriate accommodations/academic adjustments are determined for each student on an individual basis. Examples of the types of accommodations available include textbooks and other academic materials in accessible formats (Braille, electronic text), alternative examination procedures, sign language interpreters, speech-to-text transcription, permission to record lectures, assistance with note taking, early registration, priority snow removal, special classroom furniture, training in and access to assistive technologies, and temporary disability parking permits.

David Wain Coon Center for Excellence in Leadership

The David Wain Coon Center for Excellence in Leadership (CEL) provides leadership learning opportunities to all CWU students. Training opportunities include leadership retreats, workshops, conferences, and a broad collection of resources.

Over 2,000 students participate in CEL programs each year. Current leadership programs include the Experience Leadership Project (a three-day retreat for first-year students), Cross-cultural Leadership Program, Leadership Quest (mini-retreats for all CWU students), and the annual Winter Quarter Leadership Conferences. Students can also choose to live in the Kennedy Leadership House, join Omicron Delta Kappa (the national leadership honor society), and build their official CWU Leadership Transcript.

In addition to leadership programs and workshops, the CEL collaborates with faculty from multiple departments to offer leadership courses. Currently, the Emerging Leaders course and Cross-Cultural Leadership program are credit-bearing opportunities. Additional leadership courses are currently being developed and proposed. The David Wain Coon Center for Excellence in Leadership recognizes that every student has leadership capacity and will have ample opportunities to demonstrate leadership throughout their lifetime. Through CEL programs, workshops, and resources, CWU students are equipped to make a positive difference within their communities. For more information, please contact CEL by phone at 509-963-5124 or via e-mail at cel@cwu.edu.

Center for Student Empowerment

The Center for Student Empowerment, located on the second floor, of the SURC in room 250, offers programs and services that support the overall development of students. It strives to empower students to reach their full potential, both academically and personally, by facilitating various types of learning opportunities that focus on gender, violence prevention, nontraditional students and veterans.

Some examples of educational programs are: Women's History Month, Manuary (men's activities and discussion groups), Women's Achievement Celebration, National Women and Girls Sports Day, Operation E.L.F. (nontraditional student holiday event), and the Nontraditional Student Welcome Back Events.

The Center for Student Empowerment team includes the Early Childhood Learning Center, Family Resource Center, and Student Affairs (Westside Centers). It can be reached at 509-963-2122 or online at www.cwu.edu/~ecenter.

Central Transit

A student transportation system in its sixth year of operation, Central Transit has been extremely popular. Highly visible mini-busses operate year round, connecting students with the Ellensburg business community. Central Transit boasts 25 signed pick-up and drop-off locations both on and off campus. Central Transit experienced significant growth with more than 35,000 student rides annually. Students have enjoyed the convenient stops at shopping areas, restaurants, and movie theaters.

Central Transit operates two routes, seven days a week, from 7:30 a.m. until midnight, during the academic school year. Summer hours vary, for additional information or a map of the routes please visit the website at www.cwu.edu/~police/transit_map.html.

Early Childhood Learning Center

The Early Childhood Learning Center (ECLC) provides early learning to the campus community serving children aged one month to eight years of age. There are two sites; 1900 Brook Lane Village, suite 100, serves children aged two years to eight years of age; Michaelsen Hall, room 109, serves children aged one month to 28 months. The program consists of early learning activities specifically designed for young children; including music, language, physical activities, stories, science and math experiences, games, puzzles, blocks, and dramatic play. Nutritious meals and snacks are served throughout the day. Operating hours during the academic year are 7:15 a.m. to 5:30 p.m., Monday through Friday. Summer hours vary slightly according to need. Call 509-963-1744 or e-mail at eclc@cwu.edu for more information.

Dining Services

All students living in CWU residence halls are required to select a meal plan. There are five to choose from, and all are set up as a prepaid dining debit account, which allows for purchase of meals or snacks at any campus dining location. Students living off-campus may also purchase a meal plan for the convenience of dining and buying beverages and snacks on campus.

Dining Services' staff is dedicated to your dining satisfaction. Its mission is to provide exceptional food service and customer service to the campus community. This is evident in fresh, appetizing, and nutritionally balanced menus, along with the hospitality offered at each of its distinctly different dining locations on campus. These include:

- Central Marketplace, located in the SURC, offers a la carte service in six restaurants: Taglianno's Pizza and Pasta, Totally Tossed Salads, Lion's Rock Broiler, El Gato Loco, Pan Asia, and Wrap and Roll Deli Bar
- Holmes Dining room, located in the SURC, offers an a la carte breakfast followed by all-you-can-eat service for brunch and dinner

- North Village Café, located in Green Hall on the north side of campus, offers a la carte service for meals and snacks throughout the day
- Wellington's, a casual waited service open for lunch on the south side of campus in Tunstall Hall. It offers organic options and supports local growers.

You may also use your meal plan at any of CWU Dining Services' espresso bars or convenience stores:

- Backstage Coffee House located on the second floor of the Milo Smith Tower Theatre
- Cat Trax East Espresso and Smoothie Bar, Cat Trax West Espresso, and Cat's Convenience Store in the SURC
- Cat Trax North Espresso in the Brooks Library
- Coach's Coffee House in Wendell Hill Hall
- NVC Espresso Bar and NVC Store in the North Village Café and Store

Dining services are available on campus for breakfast, lunch, dinner, late-night meal service on weekdays, and for brunch and dinner on weekends.

If you have questions about the dining options available at CWU Dining Services, call 509-963-1591, or contact us via its webpage at www.cwu.edu/~dining. Dining also has a Facebook page and can be found on Twitter.

Nutritious Foundations

Dining Services offers nutritious menu selections, based on the U.S. Department of Agriculture's food pyramid, to support your healthy lifestyle. You're encouraged to adopt a diet rich in balance, variety, and moderation by exploring the nutrition foundation that Dining Services provides in all dining arenas.

Special Events

Several special dining events are offered quarterly to enrich your dining experience. Some of these events include the Welcome Back BBQ on the first day of class, a holiday season buffet, a seafood buffet extravaganza, theme and ethnic dinners, the Student Appreciation BBQ, and the commencement luncheon.

Employment Opportunities

Dining Services is the largest employer on campus, hiring between 250-350 students annually for part-time work. Consider joining the team where you will meet new friends and earn money.

Dining Services is a member of the National Association of College and University Food Services, and an active supporter of the academic mission of the university through participation in many out-of-classroom events and activities held throughout campus.

Diversity Education Center

The CWU Diversity Education Center (DEC) takes pride in its diverse student body and offers events, programs, and space that foster greater cross-cultural understanding, that celebrate diversity and inclusion, and honor individual perspectives. Our signature, thematic, and outreach programs include heritage months, Bias Incident response, Safe Space workshops, and much more. We provide resources to students on a variety of topics including diverse populations, LGBT issues, and social justice issues. All students are invited to participate in the center's activities.

Family Resource Center

The Family Resource Center (FRC) serves CWU, Ellensburg, and Kittitas County by utilizing a family perspective to enrich and improve the quality of individual and family life. The FRC offers educational programming to support families throughout their lives, coordinates family related research and civic engagement opportunities, and serves as a clearinghouse of information for resources of interest to families in the region. The FRC can assist students or other members of the community to identify services that can help to meet their family related needs and advocate for the needs of families on campus. The FRC works in close collaboration with the Center for Student Empowerment and the Early Childhood Learning Center, and seeks to partner with academic departments and community agencies to improve the access to information and knowledge that can strengthen families at CWU and the surrounding community. It is located in Michaelsen Hall, room 328, and can be reached at 509-963-2785. It's also online at www.cwu.edu/~frc.

Financial Aid

Each year approximately 80 percent of CWU students receive financial aid. To be eligible for federal aid a student must be a U.S. citizen, a permanent resident, or eligible non-citizen.

Financial aid is available to matriculated students seeking a degree or certification in an eligible program. Most financial aid programs require a minimum of half-time enrollment, which is 6 credits at the undergraduate level and 5 credits at the graduate level. Students who have a first baccalaureate degree and are not admitted to a master's program will be classified as a post-baccalaureate student. Post-baccalaureate students are eligible for federal loans.

Students must apply and be accepted for admission to the university (matriculated) to receive financial aid. Students and their families must complete a Free Application for Federal Financial Aid (FAFSA). Paper copies are available in the Financial Aid Office and at most high schools or libraries. The web version is available at www.fafsa.ed.gov.

The application should be submitted to the federal processor as soon as possible after January 1. March 1 is the cutoff date for priority consideration for limited gift aid. Accurate preparation of the FAFSA and timely response to all requests for additional information or documentation are critical.

Students who have been admitted to the university and have listed Central Washington University Title IV code #003771 on the FAFSA will have a student financial aid file delivered to the university electronically. Once that file has been reviewed and verified, the student will receive an award letter.

The award letter will indicate the estimated student budget, the federally determined expected family contribution, and an offer of aid including the type and amount. You must accept or cancel your aid on Safari. Loans are disbursed quarterly in equal amounts. If you have not already signed a master promissory note, you may sign electronically at www.studentloans.gov.

Students are expected to maintain "good academic standing" while receiving financial aid. A minimum CWU cumulative GPA of 2.0 is required for undergraduates after two years of attendance; post-baccalaureates are required to maintain a 2.0 cumulative GPA; and a minimum cumulative GPA of 3.0 is required for graduate students. Financial aid recipients are required to make reasonable progress toward a degree.

Additional financial aid information is available in the Financial Aid Office, Barge Hall, room 115; the Student Employment Office, Barge Hall, room 103; the Financial Aid Resource room, Barge Hall, room 102; and through the Financial Aid Offices at each University Center, at 509-963-1611, finaid@cwu.edu, or on the CWU Financial Aid home page at www.cwu.edu/~finaid/.

University Housing and New Student Programs

University Housing provides well-maintained housing facilities, with an emphasis on student development, as part of the university's academic environment, and works to augment classroom instruction with a learning environment that is supportive of students' educational goals, personal and interpersonal growth, and cultural awareness. Programs such as Discover! New Student Orientation, Wildcat Welcome Weekend, and Wildcat Connections are part of new student programs.

CWU is a residential university with most students living on or near campus. The residence halls and apartments can house 3,300 students. CWU's residence halls offer students a variety of quality living experiences and options.

The residences are within a few minutes' walk of any classroom, library, or dining hall, which offers considerable convenience and

flexibility to students. Residence hall staff provides crisis intervention and educational, cultural, social, and community services programs, as well as coordinating behavioral problem-solving interventions in cooperation with the Office of the Vice President for Academic Affairs and Student Life.

The residence halls offer a diverse selection of communities and environments. The residence halls, which house between 35 and 476 occupants, offer programs and environments to enhance classroom experiences. Furniture, basic FM-TV cable service, Internet hookup, basic telephone service, utilities, and coin-operated laundry facilities are also provided. Many halls have their own pool table, piano, or ping-pong table. All residence halls are smoke-free.

Living and Learning Communities (LLCs) are available for students interested in the following areas: education, Science Talent Enhancement Program, aviation, music, Casa Latina, Asian Pacific Islander American House, Students for the Dream, International House, Leadership House, or for those participating in the Douglas Honors College. Students may request a residence hall offering a living-learning enrichment opportunity. Hall staff and faculty from these areas of interest collaborate to provide residents with educational and social activities that integrate their field of study, enhancing their residence hall experience.

Since college is a total learning experience, Central requires all freshmen who are single and under 20 years-of-age to live in the residence halls for one academic year. Running Start students under 20 years-of-age, regardless of class standing, must also fulfill the live-in requirement. Students requesting an exception to the policy must apply through University Housing and New Student Programs.

CWU also maintains 398 apartments (studio, one, two or three bedrooms) designed for single students and those with families. The apartment complexes offer activities for residents that focus on their needs and priorities. Single student complexes feature programs and facilities that assist students in developing healthy, independent lifestyles. These programs might include wellness, self-defense, cultural awareness, lifestyle planning, career planning, and recreation. The communities in the family student complexes enjoy programming and activities tailored for the needs and interest of families and older students. Many activities for children and families are presented, such as holiday events, child safety awareness programs, domestic violence programs, and career planning.

At different times of the year, demands for apartments may exceed availability. For this reason, waiting lists are provided. Applications are accepted from students who have not been officially accepted for admission to CWU, but who plan to attend classes during the dates listed on their application forms. To be eligible for apartment

housing, a student must be currently enrolled in and must maintain at least 12 credit hours of coursework.

Students who are required to live in residence halls are not eligible to live in the apartments. Each tenant is required to sign a lease, which provides for renting an apartment on a month-to-month basis. Written notice must be given at least 30 days prior to vacating an apartment. Pets are not allowed in any area of CWU housing. Central Washington University does abide by all state and federal laws pertaining to service animals in on campus housing.

Discover! New Student Orientation: New students with less than 45 credits, and all students who participated in Running Start, are required to attend an on-campus orientation and registration program. For students starting fall quarter, this program takes place on a variety of dates in July. For winter quarter students it is held in December and for spring quarter students it is scheduled in March. New Ellensburg campus students with 45 or more credits are urged to attend the transfer orientation. Orientation for transfer students coming fall quarter are held in July or August. For those students coming for winter or spring quarter, the orientations are held in December and March, respectively. Students attending a campus other than Ellensburg need to contact the appropriate university center for information about their orientation and registration programs.

Central changed its procedure for student alcohol violations involving underage drinking, which is a violation of Washington State law as well as the CWU Student Conduct Code governing the conduct of students. The university has a comprehensive alcohol education and prevention program. Parental notification is one part of CWU's comprehensive sanctioning procedure for underage alcohol use.

Scholarships

Scholarships are gifts of money which do not have to be repaid. Central Washington University's Scholarship Office (Ellensburg Campus, Barge Hall, room 102) makes available the most recent scholarship application information at the website www.cwu.edu/~scholar.

Scholarship eligibility is based on a variety of criteria including, but not limited to, academic proficiency, specialized talent, community service, leadership, and financial need. College and departmental selection committees as well as the Financial Aid Office select scholarship recipients. To be fully considered for all scholarship opportunities students should complete the FAFSA (Free Application for Federal Student Aid, www.fafsa.ed.gov, and any college or departmental scholarship applications for which the student is eligible that are available in the Scholarship Office. In addition, students with talent in athletics, art, music, and/or

theatre should contact the department(s) directly for specific audition or exhibition opportunities. Most institutional merit aid is awarded to meritorious students who submit a FAFSA. Need is not always a criteria.

Community-sponsored scholarships include awards for which the recipients are chosen by organizations outside the university. Each organization establishes its own eligibility criteria and application process. More information can be found at the scholarship website (www.cwu.edu/~scholar) or by contacting the organizations directly. Recipients are to inform the CWU Financial Aid Office if they are receiving an award from a community organization. Checks should be made payable to "Central Washington University." Include student's name and identification number. Send to the CWU Financial Aid Office, 400 East University Way, Ellensburg, WA 98926-7495.

Scholarships are considered an educational funding source and may change a student's eligibility in other state or federal aid programs.

Student Employment

CWU hires more than 3,300 students to work on campus each year. Working allows students to meet a portion of their college expenses and gain valuable work experience. Career-related employment is strongly encouraged. Student Employment posts notices for on- and off-campus job openings on the Student Employment website and on the bulletin board on the first floor of Barge Hall, including summer job opportunities. Visit the Student Employment office home page at www.cwu.edu/~seo for additional information, and to view the online job board. Please see the Student Employment website regarding Work Study opportunities. Students must be eligible for need-based financial aid to be considered for Work Study. See the CWU Financial Aid home page for details on types of aid available at www.cwu.edu/~finaid/.

Student Medical and Counseling Clinic

A staff of licensed and credentialed professionals offers medical and mental health counseling services for CWU students. Students registered for 6 or more credits pay a mandatory health and counseling fee and are thereby eligible for services. There are ancillary charges for some medical services (e.g., labs, x-rays, etc.). All students are encouraged to check with the clinic business office regarding ancillary fees and charges for medical services.

Services are offered at the Medical and Counseling Clinic building. Medical clinic hours are 8 a.m. to 5 p.m. Monday, Wednesday, and Friday and 8 a.m. to 7 p.m. Tuesday and Thursday. Medical services are also available most Saturdays from 9 a.m. to 1 p.m. (except during academic breaks and holidays). Summer hours are 8 a.m. to noon and 1 p.m. to 3 p.m. when classes are in

session. Counseling clinic hours are 8 a.m. to 5 p.m. Monday through Friday. The Medical and Counseling Clinic is closed on holidays and during breaks.

The Student Health Clinic (509-963-1881) is a complete out-patient/primary-care, on-campus facility available to registered students that have paid the medical and counseling fee. The Health Clinic is accredited by the Accreditation Association for Ambulatory Health Care Inc.

The medical staff provides routine and urgent-care services, including care for medical problems such as illnesses, injuries, and infections (e.g., colds, flu, and sexually transmitted diseases). It offers typical primary care services including routine physical examinations, sports physicals, travel exams and counseling, women's health services (e.g., pap smears, pregnancy testing, reproductive counseling), and diagnostic laboratory tests/X-rays. In keeping with the educational mission of the university, emphasis is placed on education regarding the prevention and treatment of illnesses.

Medical appointments are taken by phone from Monday through Friday 7:30 a.m. to 5:00 p.m. (Tuesdays and Thursdays until 7 p.m.) and Saturdays beginning at 9 a.m. Students are encouraged to make their appointments as early as possible in the day in order to accommodate their schedules.

When the medical clinic is not open emergency medical services are available at Kittitas Valley Community Hospital. The cost of hospital care is at the student's expense. A student accident and health insurance plan is available (through an independent vendor) and is recommended to help defray medical costs.

The staff at the Counseling Clinic (509-963-1391) consists of licensed psychologists, licensed counselors, and doctoral interns working under the direct supervision of licensed staff.

The Counseling Clinic operates on the basis of a brief treatment model. Services offered include individual, couple, and group counseling. Common student issues include transitional/adjustment strain, relationship difficulties, eating disorders, stress, anxiety, and/or depression. Group counseling opportunities routinely include coping with anxiety, therapeutic lifestyle change for depression, bipolar support, and relationship difficulties. Special programs for campus groups are available upon request. Counseling services are private and confidential.

The Wildcat Wellness Center is located in SURC 139. Services and programs delivered through the center include: alcohol/drug education, prevention and referrals for assessment and treatment, Prime for Life classes, web-based alcohol and drug curriculum, peer education programs, sexual assault prevention and response coordination, and programs that promote positive health behavior.

Sexual Assault Response Coordinator

Students may call 509-963-3233 and leave a confidential message and/or drop by the Wellness Center at SURC 139. Services include confidential, referral, advocacy, information and crisis response for victims, survivors, and significant others.

There is also a peer education program sponsored by the Wellness Center and advised by the Wellness Center's health educator. It can be reached by phoning 509-963-3213. For additional information please visit www.cwu.edu/~wellness.

Veteran Services and Outreach

The Veterans Center is located in the Psychology Building, rooms 463-465. Students wishing to receive education benefits from the Department of Veterans Affairs (DVA) must contact the Veterans Center office. Notification is NOT automatically sent to the DVA when a veteran or other eligible person enrolls. For more information, call 509-963-3028 or visit the website at www.cwu.edu/~regi/veteran. The Veterans Center provides information and guidance to veterans, dependents, and others regarding questions on Veterans GI Bill Education Benefits. It also provides information on veterans in foreign conflict grants and tuition waivers including police, firefighters, veteran survivors and dependents. Selected programs of study are approved by a Washington State Approving Agency for enrollment of those eligible for benefits under the Title 38 and Title 10 U.S. codes.

Wildcat Shop

The Wildcat Shop has everything you need right here on campus and the selling prices on textbooks are lower than 96 percent of all college stores in the country. It carries:

- Textbooks
- General reading and reference books
- Magazines
- Computer software
- Computer hardware
- Electronics
- Clothing and gifts
- School and art supplies
- Greeting cards
- Novelty gifts
- Health and beauty aids
- Stamps
- Snack foods and more

It also provides laminating, binding, copying (color or black and white), mat board cutting, DVD and CD recording, Apple computer repair, and fax services.

Special order any book, computer, or electronic product, or supply, at no additional cost. For your convenience the Wildcat Shop buys back textbooks throughout the quarter. Contact the Wildcat Shop at 509-963-1311, 800-280-1186, or at www.wildcatshop.net online.

UNIVERSITY SERVICES

Archival Services

The Archives at Central Washington University was established in 2004 to act as the repository for official and unofficial records that document the history of the university. The archives also serve as a regional repository to house, preserve, and promote the history of central Washington. It is located on the fourth floor of the James Brooks Library on the Ellensburg campus.

The primary objectives of the archives are to appraise, collect, organize, describe, preserve, and make available university records and regional collections of permanent historical value. It also aims to support research, teaching, and public awareness of the rich heritage of central Washington and the university.

The archives consist of records, photographs, and artifacts produced by CWU or its predecessors: Washington State Normal School at Ellensburg (1891-1937); Central Washington College of Education (1937-1961); and Central Washington State College (1961-1977). The collection contains documents published by the university as well as materials produced by university administrators, faculty, staff, students, and alumni. The collection includes administrative reports, department and committee records, student publications, photographs, printed records, and the correspondence of former presidents, deans, and other university officials.

The regional manuscript collection, which is part of the archives, consists of historically significant 19th- and 20th-century personal papers, business and organizational records, photograph collections, and other materials produced in central Washington State by individuals, businesses, and organizations that reside, or have resided, in the region. One-of-kind unpublished works from the counties of Benton, Chelan, Douglas, Grant, Kittitas, Klickitat, Okanogan, and Yakima are represented in the collection. The collection includes materials relevant to the history and cultural development of central Washington.

Center for Spatial Information

The Center for Spatial Information (CSI) encourages, supports, and coordinates research projects for students and faculty using hardware and software technologies that gather and analyze "spatial" information to solve problems in the social sciences, natural sciences, and business. Geographic Information Systems (GIS), high-precision Global Positioning System (GPS), ground-penetrating radar, precision conventional laser surveying, and satellite image processing are some of the spatial technologies used by CWU faculty and students. Typical GIS applications include projects in resource geography, archaeology, field biology, geology, and planning. CSI also relies on the Department of Geography's GIS laboratory, where a variety of undergraduate and graduate GIS courses are taught, and numerous large and small research projects are conducted using state-of-the-art computing systems.

CSI is also part of the National Consortium for Geospatial Innovations in America (RGIS) program, which is funded by the USDA's National Institute of Food and Agriculture. As part of eight national RGIS centers, the goal of RGIS-PN is to evaluate emerging geospatial technologies and to develop methods to use geospatial data to solve real problems on the ground. These pilot projects are then used as a foundation on which to build educational materials for training appropriate personnel in rural agencies and communities around the Pacific Northwest, and to disseminate information to a broader rural audience via collaborations with other western universities, journal articles, bulletins, conference presentations, and web-based outreach. Where possible, RGIS-PN attempts to incorporate stakeholders and interest groups in GIS-based community and watershed modeling, and subsequent decision-making processes.

CSI encourages creative, interdisciplinary uses of spatial technology, and actively works with the private and government sectors to identify problems to which CWU personnel and equipment can provide effective solutions. CSI's home page is at www.cwu.edu/~csi.

Central Washington Archaeological Survey

The Central Washington Archaeological Survey (CWAS) is a research and public service office that is part of the Department of Anthropology. CWAS conducts archaeological investigations in the central counties of the state and promotes public involvement in the identification and protection of regional archaeological resources. CWAS involves faculty and students in research projects funded through external grants and contracts. CWAS cooperates with state and federal agencies, Native American tribes and nations, professional archaeologists throughout the state, and state and local archaeological societies in the study and preservation of central Washington's archaeological resources.

Geographic Information Systems Laboratory

The GIS laboratory supports computer hardware/software systems for analysis of spatial data (maps, aerial photos, satellite imagery, digital terrain data, etc.). The laboratory provides an excellent teaching and research facility for faculty and students from a variety of fields, including anthropology, archaeology, biology, geography, geology, land-use planning, resource management, and sociology. In addition, the laboratory offers contract and consultation services to public and private agencies for GIS applications. Additional information can be found at www.cwu.edu/~geograph/.

Information Technology Services

The Department of Information Technology Services (ITS) provides student computer lab management services, telephone services to the Ellensburg campus and university centers, networking and computer operations and services, maintenance and repair of university-owned computers, coordination of new purchases, desktop support, help desk services, and applications development and maintenance. Staff works closely with all segments of the university to ensure that information technology is broadly developed, acquired, used, and available to students, faculty, and staff. ITS information is available on the web at www.cwu.edu/~its or by calling 509-963-2924. The ITS HelpDesk can be contacted at 509-963-2001.

Faculty and students have easy access to computers and software in 30 general-purpose and discipline-specific computer labs spread throughout major academic buildings on campus. Every residence hall room is equipped with an Ethernet connection providing Internet services for those students that bring computers to campus. Students, faculty, and staff who reside off campus can access CWU technology resources (i.e. e-mail, file services, etc.) via the Internet.

Wireless access to the CWU network and the Internet is available across the campus and via laptop checkout in the SURC and library. Information on wireless at CWU is online at www.cwu.edu/~wireless.



Public Safety and Police Services

Central's Police Agency operates 24 hours a day, 365 days a year, and is a general authority state police force. The department employs 14 armed police officers who are fully commissioned by the state of Washington and have the same arrest and investigative authority as other law enforcement officers in the state.

All of the officers are graduates of the Washington State Criminal Justice Training Commission's basic academy, and each has numerous hours of annual specialized police training. The majority of the officers hold bachelor's degrees in law and justice or a related field of study. The department has the primary responsibility for law enforcement on Central's campus and works closely with other law enforcement agencies. Commissioned officers patrol the campus 24-hours-a-day with emphasis on crime prevention and education, including encouraging the reporting of all crimes.

Each year the officers conduct between 60 and 75 crime prevention programs for the university community, with the majority held in the residence halls for the benefit of students. These programs include personal safety, rape awareness and prevention, operation I.D., bicycle registration, drug and alcohol use/abuse, auto theft prevention, guidance for surviving an active shooter situation, rape aggression defense, and related crime prevention techniques.

Outdoor emergency telephones have been installed at the entrances to residence halls, while other strategically located "blue light" emergency telephones are installed throughout campus. Each phone has a direct line to the KITTCOM (Kittitas County 911) dispatch center. University police officers respond to all campus emergency calls placed through KITTCOM.

In addition to the commissioned officers, the department employs two parking enforcement officers, an office manager, a secretarial staff, a switchboard operator, and student employees.

The Department of Public Safety and Police Services employs students in a program called Courtesy Assistance Team (CAT). CAT provides walking companions on campus between buildings, parking lots, or residence halls. The CAT team also checks doors to buildings and conducts a walk-through in buildings that are open. CAT operates nightly from 6 p.m. to midnight, with the exception of holidays, finals week, and breaks.

Central Transit provides transportation from campus to various locations in the city of Ellensburg and other points of interest.

Emergency Phone: 911

Non emergency: 509-925-8534

Business Phone: 509-963-2959 Monday through Friday, 8 a.m.-5 p.m. Fax: 509-963-2750 Courtesy Assistance Team (CAT) 509-963-2950 Central Transit: 509-933-2287 www.cwu.edu/~police/transit map.html

UNIVERSITY CENTERS

Central Washington University operates six university centers and two teaching sites that provide programs on community college campuses across Washington State. The centers offer upper-division (300- and 400-level) and graduate-level coursework leading to baccalaureate and master's degrees. Day and evening classes are offered to accommodate the needs of time- and place-bound students. The centers are designed for students who have completed their Direct Transfer Agreement (DTA) associate degree or most of their general education requirements. Visit the University Centers website at www.cwu.edu/centers.

For more information about the University Centers, contact Margaret Badgley, Assistant Vice President for University Centers and Community College Relations. Phone: 509-963-3958, e-mail: badgley@cwu.edu

CWU-Des Moines

At Highline Community College
Higher Education Center, Building 29
2400 South 240th Street
P. O. Box 13490
Des Moines, WA 98198
206-439-3800

Degree Programs:

BS Accounting
BS Business Administration
BAEd Early Childhood Education/
Elementary Education
BS Electronics Engineering Technology
BAS Industrial Technology
BS Industrial Technology
BAS Information Technology and
Administrative Management
BS Interdisciplinary Studies-Social Sciences
BA Law and Justice
BA Psychology
MS Engineering Technology
MEd Master Teacher
MEd School Administration
MPA Professional Accountancy

Minors:

Business Administration
Economics
Industrial Technology
Law and Justice
Psychology
Sociology

Other:

Community College Teaching
Principal Certification
Professional Certificate in Teaching
Supply Chain Management Certificate

CWU-Lynnwood

At Edmonds Community College
Snoqualmie Hall
20000 68th Avenue West
Lynnwood, WA 98036
425-640-1574

Degree Programs:

BS Accounting
BS Business Administration
BAEd Elementary Education/Psychology
Minor
BS General Science Teaching
BAS Information Technology and
Administrative Management
BS Interdisciplinary Studies-Social
Sciences
BA Law and Justice
BA Mathematics: Teaching Secondary
MPA Professional Accountancy

Minors:

Business Administration
Economics
Law and Justice
Psychology
Sociology

Other:

Certification for Teaching Secondary
Mathematics
Supply Chain Management Certificate

CWU-Moses Lake

At Big Bend Community College
Advanced Technology and Education
Center
7662 Chanute Street, Room 1843
Moses Lake, WA 98837
509-793-2384

Degree Programs:

BS Flight Technology
BS Interdisciplinary Studies-Social Sciences
MEd Master Teacher

Minors:

Sociology

Courses in:

Accounting
Business Administration
Teaching Certification

Other:

Professional Certificate in Teaching



CWU–Pierce County

At Pierce College, Ft. Steilacoom
Olympic Building, Third Floor
9401 Farwest Drive
Lakewood, WA 98498
253-964-6636

Degree Programs:

BAEd Elementary Education/
Literacy Minor
BS Interdisciplinary Studies–Social Sciences
BA Law and Justice
BS Social Services

Minors:

Law and Justice
Psychology
Social Services
Sociology

CWU–Wenatchee

At Wenatchee Valley College
Higher Education Center
1300 Fifth Street
Wenatchee, WA 98801
509-665-2600

Degree Programs:

BAEd Elementary Education/Literacy Minor
BS Interdisciplinary Studies–Social Sciences
MEd Master Teacher

Minors:

Sociology

Courses in:

Accounting
Business Administration
Teaching Certificate

Other:

Professional Certificate in Teaching

CWU–Yakima

At Yakima Valley Community College
Decio Higher Education Center
1000 South 12th Avenue, Room 107
P.O. Box 22520
Yakima, WA 98907
509-574-6894

Degree Programs:

BAEd Early Childhood Education non-
certification
BAEd Elementary Education/TESL Minor
BS Interdisciplinary Studies–Social Sciences
BA Law and Justice

Minors:

Law and Justice
Psychology
Social Services
Sociology

Courses in:

Accounting
Business Administration
Reading Specialist
Master Teacher

Other:

Professional Certificate in Teaching

Teaching Sites

CWU at Everett

Everett Community College
Gray Wolf Hall
2000 Tower Street
Everett, WA 98201
425-259-8900

Degree Programs:

BAS Information Technology and
Administrative Management
BS Interdisciplinary Studies–Social Sciences

CWU at Kent

417 Ramsay Way, Suite 112
Kent, WA 98032
253-856-9595 x5350

Degree Programs:

BAEd Elementary Education/Middle Level
Science
MS Law and Justice

Other:

Endorsement for Teaching Middle School
Math

UNDERGRADUATE ADMISSIONS

General Information

Central offers admission to qualified students as they apply. All applicants must submit a completed CWU online or paper admissions application (the online application is preferred) along with a non-refundable application-processing fee of \$50. To apply online, visit www.cwu.edu and click Apply.

For freshmen applicants that apply for fall quarter prior to November 1 and have a completed admissions file, the Office of Admissions will respond on November 1. Students that apply and have completed application after November 1 will be notified of an admissions decision within four to six weeks. The priority deadline for fall quarter application for freshmen and transfer students is April 1. Applications received after April 1 will be processed on a space-available basis. For the most current information and admissions deadlines for other academic quarters, please visit www.cwu.edu/admissions.

Freshmen Applicants

Freshmen applicants (students currently enrolled in high school or high school graduates who have earned fewer than 40 college credits after high school graduation) must send official copies of all high school and college transcripts, as well as ACT or SAT scores, to the Office of Admissions. Freshmen applicants are offered initial admission if they meet a minimum admissions index, which is determined by a formula that weighs high school GPA and standardized test scores in

a ratio of approximately 3:1. The formula was developed by the Washington Higher Education Coordinating Board (HECB). For the 2009-10 academic year, the minimum admissions index is 28. Freshmen applicants must also complete the following College Academic Distribution Requirements (CADR) courses in high school.

Required

English	4 credits, including study of the English language, literature, and composition
Mathematics	3 credits, including algebra, geometry, advanced algebra/trigonometry (or Integrated 1, 2, 3)
Social Studies	3 credits, including U.S. history, and government
Lab Science	2 credits, including 1 credit of laboratory science and 1 credit in an algebra-based lab science (i.e., chemistry or physics)
Foreign Language	2 credits of the same foreign language, Native American language, or American Sign language
Fine, Visual, and Performing Arts	1 credit of fine, visual, or performing arts or electives from any of the above categories

Central Washington University recommends that students take additional courses beyond the minimum to prepare them for university-level work.

College Credit Earned while in High School

Regardless of the number of college credits completed or if an associate's degree is earned, students earning college credit while in high school, including coursework taken during summer after graduation, will be considered freshmen for admissions purposes. Running Start students and others with college credit are eligible for all freshmen scholarships and must live on campus for their first year. CWU accepts most college credit earned while in high school, including programs such as:

- Advanced Placement (AP)
- College in the High School
- College Level Examination Program (CLEP)
- CWU Cornerstone
- International Baccalaureate (IB)
- Running Start

Home-school Applicants

A home-schooled student is any applicant who will complete their high school coursework at home and will not receive a diploma from an accredited high school. An applicant is qualified for freshman admission if they:

- Present evidence of their completion of the academic CADR courses by submitting an official home-school transcript. Transcripts must be signed by a parent or guardian in order to be official.
- Submit ACT or SAT scores.
- Provide the GED as proof of high school completion. A GED is not required but may be submitted for eligibility for Federal Financial Aid and to participate in varsity athletics.
- Submit any official college transcripts (if applicable). Regardless of the number of college credits completed, students earning college credit in high school will be considered freshmen for admissions purposes as long as they do not take coursework after graduation from high school (excluding summer).

All home-schooled students will be reviewed by the Comprehensive Review Process on an individual basis.

Transfer Applicants

Transfer students who have earned 40 or more college-level credits (27 semester credits) must send official copies of all college transcripts to the Office of Admissions. Generally, transfer students who have completed at least 40 college-level transferable credits with at least a 2.5 cumulative GPA will be admissible. Students who have completed college-level math and English and those who have completed a Direct Transfer Associated degree (DTA) will do better in the comprehensive review process. A current list of DTA degrees is available online at www.cwu.edu/~regi/equivalencies/college_list.html. For current information and application deadlines, visit www.cwu.edu/~admissions.

If your GPA is below 2.5 from any previous college attended, you are required to answer the application essay questions, and your application will go through the comprehensive review process. The admissions review committee takes into account your grade trend, the number of transferable credits you have completed, and type of coursework completed, including college-level English and math completion.

Comprehensive Admissions Review Process

Central recognizes that many factors affect grades and test scores, so the university utilizes a comprehensive admissions review process. Freshmen applicants whose admissions indices are below 28, or who are missing any of the high school core

course requirements, or transfer applicants whose GPA is below 2.5 from any previous college attended, will need to complete the essay portion of the admissions application. The application will go through the comprehensive review process.

The essay questions, included on both the online and printed version of the application, are:

- How have your past experiences influenced your academic record?
- What are you presently doing to ensure your academic success?
- What are your academic goals and how will CWU help you accomplish these goals?

You are encouraged to include your involvement and leadership contributions in your home, school, or community in your essay.

Other students who may be reviewed through the comprehensive review process include those who have not completed high school, earned a General Education Development (GED) certificate, as well as students 25 or older who have poor academic histories and have not attended school recently. Applicants may be required to complete supplemental application forms and/or submit additional information or essays.

International Students

Central welcomes qualified students from other countries. Students demonstrating the greatest potential for success at the university level may be admitted after a thorough review and evaluation of their entire academic background.

Because educational systems vary widely around the world, there is no single, uniform admission requirement for international students. However, they must meet the following minimum requirements for admission purposes:

1. Completion of the academic coursework and national examinations necessary to satisfy admission requirements to colleges and universities in their native country.
2. Competency in English is required before an I-20 can be issued. If English is not their first language, competency in English must be demonstrated through one of the following:
 - English Composition Courses
Receive a 3.0 (B grade) in each of two college-level English composition courses from an accredited United States college or university. Contact the Office of Admissions at international@cwu.edu to find out what courses are acceptable.
 - Undergraduate English as a Second Language (UESL) Program Recommendation
Receive a recommendation from CWU's UESL Program after

successful completion of its highest level. CWU also offers Conditional Admissions to students who meet all of the requirements other than English proficiency. For more information and application materials visit www.cwu.edu/~esl.

- Test of English as a Foreign Language (TOEFL)
Receive a TOEFL score meeting the following criteria:
- A score of 525 or above—Paper-based TOEFL
- A score of 195 or above—Computer-based TOEFL
- A score of 71 or above—Internet-board TOEFL

Students who originate from one of the following countries are considered to have met English Proficiency Standards: Australia, Ireland, New Zealand, United Kingdom, and English-speaking provinces of Canada. These students are exempt from furnishing proof of English proficiency documents.

3. International students transferring from U.S. institutions must have a minimum grade point average of 2.5 in transferable college-level courses and meet the academic requirements for college entrance in their native country.

Please Note: Though not required for admission purposes, adequate financial support, verified by the Confidential Financial Statement form and a current bank letter or scholarship award, is required of all international applicants.

There are three ways of applying to Central Washington University:

1. Apply online.
With this option you will submit your application electronically with the online application form and pay your \$50 application fee electronically using a credit card.
2. Download and print copies of required application forms.
Links to downloadable forms in PDF (Portable Document File) format are found online on the CWU website. Once completed, your forms and supporting documents should be returned to the CWU Office of Admissions in person or through the mail.
3. Request needed forms be sent to your address.
Contact the CWU Office of Admissions at admissions@cwu.edu with your request. Once completed, your forms and supporting documents should be returned to the CWU Office of Admissions in person or through the mail.

All supporting documents should be sent a minimum of 90 days in advance of the quarter for which the applicant seeks admission.

Students who submit international college or university transcripts must have an official course-by-course translation and evaluation done by one of the following foreign credential evaluation companies:

Foundation for International Services (FIS) Inc. at www.fis-web.com/cwu.

AACRAO Foreign Credentials Evaluation Services www.aacrao.org/international/foreignEdCred.cfm.

World Education Services (WES) www.wes.org/students/index.asp.

Re-admission of Former Students

Students who interrupt their CWU studies for one or more quarters (excluding summer) must re-apply for admission to the university and pay the application fee. For more information, check the admissions website at www.cwu.edu/~admissions. If the student has attended any institution during his or her absence from CWU, the student must send official transcripts of all post-CWU coursework to the Office of Admissions at the time they re-apply. Eligibility for re-admission will be based on prior academic performance at the university and any courses completed since last attending CWU. If a student left on academic or disciplinary suspension, they should contact the Office of Student Affairs / Student Life for reapplication instructions 30 days prior to the start of the quarter for which the student is applying.

Confirmation of Admission

Students who are offered admission to the university must confirm their intention to enroll by paying a non-refundable \$100 confirmation deposit before they can begin the orientation, registration, and advising process. The confirmation deposit is credited toward the student's first quarter's tuition. If the student does not enroll, the deposit is forfeited. The university will not withdraw an offer of admission for fall quarter until after May 1. Students who have not confirmed may be denied admission after that time if enrollment limits have been reached. Students who choose not to accept offers of admission must notify the Office of Admissions in writing. An offer of admission is only valid for the academic quarter indicated in the acceptance letter. A student who chooses not to accept an offer of admission may reapply for a subsequent quarter.

Withdrawal of Offer of Admission

Offers of admission may be withdrawn by the Office of Admissions if a student's academic work between the time of application and the quarter for which the student has applied results in the student not meeting the admissions criteria.

Non-matriculated Student Application

Students who are not seeking degrees or certificates may be allowed to enroll in courses as non-matriculated students. These students do not need to go through the regular admissions process but should apply through Registrar Services and may be allowed to register on a space-available basis. Credits earned as a non-matriculated student may not be used to satisfy degree or certificate requirements unless the student applies and is accepted as a matriculated student, in which case a maximum of 45 credits may be applied. Exceptions may be made for non-matriculants in collaborative certificate programs.

Students who have previously attended Central as matriculated students and have not obtained a degree, and students who have applied and been rejected for undergraduate matriculated status will not be allowed to enroll as non-matriculated students. Non-matriculated students are not eligible for most financial aid, veteran's benefits, or other services regularly provided for matriculated students.

High School Enrichment Program

Students who have not yet graduated from high school may be allowed to enroll as non-matriculated students for courses that they need to advance academically, provided that such academic opportunities are not readily available to them elsewhere.

To be eligible for the High School Enrichment Program, students must have demonstrated superior academic performance or preparation in the area of study for which they are applying. High School Enrichment Program applicants must submit official copies of their high school transcript. Some courses may require that the student submit ACT, SAT, or COMPASS scores in order to qualify for placement into those courses. In addition, they must complete the High School Enrichment application. They must also meet with the registrar and have the approval of their high school principal and the course professor.

Central Visitation Program

The Central Visitation program is a student-run program designed to give prospective students an insight into campus life from a student's perspective. Our staff is trained to know all aspects of CWU. The staff understands that visiting campus is one of the most important steps in the college decision-making process.

The Central Visitation program offers a variety of programs to help you explore CWU:

- **Campus Tour:** Campus walking tours are offered Monday through Friday at 10 a.m. and 2 p.m. Weekend tours are offered Saturday at 11 a.m. by appointment only. Check the website for a list of

available dates. Tours check in at the CWU Welcome Center, are shown where to park, and given a full campus tour. Tours are expected to last at least one hour and 15 minutes depending on the size of the group. Please remember to wear appropriate shoes and clothing for the time of year.

- **Cat Tracks:** Cat Tracks is a day-long, comprehensive visit to CWU. This student-run program is a great way to experience campus life firsthand while learning about a specific program. Space is limited so be sure to sign up early.

For current information, dates, and times, visit www.cwu.edu/~admissions/index.php?page=visit-cwu or call 509-963-1262.

TRANSFER CREDIT

Equivalency Guides and Policies

Central Washington University accepts a maximum of 135 total transfer credits from regionally accredited four-year schools, including a maximum of 105 total credits from regionally accredited community colleges. Credits are evaluated by Registrar Services based on official transcripts. Credits earned in courses numbered 100 and above are generally accepted toward total transfer credits provided the courses require university-level study.

Transfer courses equivalent to CWU courses will apply toward the baccalaureate degree exactly as do the CWU courses for which they are being substituted. Equivalency is established by a course review from the appropriate academic department. Other transfer courses that have not been established as exact equivalents may transfer as general electives and may also be allowed in the degree program with approval from the appropriate academic department chair and, as appropriate, college dean.

Credits earned at institutions which are not fully accredited by a regional accrediting association are not accepted. Consideration for exception to this policy may be made by written petition to the dean of the appropriate college after earning a minimum of 45 credits at Central with a cumulative GPA of at least 2.5.

The university recognizes college credit from a number of sources, including Advanced Placement (AP), College Level Examination Program (CLEP), International Baccalaureate (IB), and military educational experience or correspondence credit. Up to 45 quarter credits from these programs may be counted toward graduation.

The university endorses the Policy on Inter-College Transfer and Articulation among Washington public colleges and universities published by the Higher Education Coordinating Board. The policy deals with the

rights and responsibilities of transfer students, and the review and appeal process in transfer credit disputes. Contact Registrar Services for more detailed information.

Academic associate degrees which are part of the Direct Transfer Agreements (DTA) between the university and Washington community colleges will meet the general education requirement of a bachelor's degree. Community colleges offer several kinds of associate degrees, therefore, students who plan to transfer to the university should check with their counselors to make sure they are

enrolled in the appropriate direct transfer degree program. Students who earned the AA degree prior to the date of the DTA between the university and individual community colleges may petition the provost or his designee for acceptance of their degree to meet general education requirements.

Associate of science degrees with transfer agreements between the university and Washington community colleges will meet the general education requirements of a bachelor's degree when students complete additional courses at CWU. Transfer students

without a transferable associate degree from a Washington State community college wishing to complete such a degree must complete it by the time they have completed 45 credits or within one calendar year, whichever comes later, after initial enrollment at Central in order for the AA degree to satisfy the general education requirements at Central. A student cannot earn an associate degree and bachelor's degree in the same quarter.

Academic associate of art degrees from a public community college outside of Washington State, accredited by the Northwest Commission on Colleges and Universities (NWCCU), will meet the general education requirements of a bachelor's degree.

Students transferring to CWU from another Washington State public baccalaureate institution, whose General University Requirements or General Education Requirements were complete at the sending institution, will also satisfy all of the CWU General Education Requirements, provided official documentation is received from the sending institute and certified by CWU.

College-level Examination Program

Students will be awarded college-level quarter credits for each score at the 50th percentile on the College Level Examination Program (CLEP) humanities, social science / history, and natural sciences examinations. These credits will meet the general education requirements in the appropriate areas. Students may also be awarded credit for subject examinations as determined by appropriate academic departments at the time of application for credit.

No more than 45 total quarter credits through CLEP or other sources of nontraditional credit may apply to graduation requirements. CLEP credit is not awarded for English.

International Baccalaureate

Central recognizes the International Baccalaureate (IB) program as a coherent, challenging course of study and responds individually to each participant's IB transcript for award of college credit. Students may be awarded credit for completing individual areas of study within the program. IB students should submit official transcripts to Registrar Services, which will review the program of study and examination scores with the appropriate department chair.

Credit for Military Service

Upon submission of the DD214 or DD295, matriculated students may receive up to 30 lower-division elective credits for completion of military educational experience as recommended by the American Council on Education.

Advanced Placement Credit

Students may receive credit for advanced placement, depending upon the scores achieved on the College Entrance Examination Board Advanced Placement Test (AP). Students must request that their AP test scores be sent to the Registrar's Office at Central. Scores of 3 or better on Advanced Placement Examination will be awarded as free electives for departments without specific policy.

Department	AP Score	CWU Credit
Art	3, 4, 5	Department Electives
Biology	3	Credit for BIOL 101
	4, 5	Credit for any two of BIOL 101, 181, 182, 183
Chemistry	3	Exempt from CHEM 181, 181LAB; credit awarded upon successful completion of CHEM 182
	4	Exempt from CHEM 181, 181LAB, 182, 182LAB credit for both courses awarded upon successful completion of CHEM 183 and CHEM 183LAB
	5	Credit for CHEM 181, 181LAB, 182, 182LAB, 183, 183LAB
Computer Science A	3, 4	Credit for CS 110
Computer Science A	5	Credit for CS 110, 111
Computer Science AB	3, 4	Credit for CS 110, 111
Computer Science AB	5	Credit for CS 110, 111, 301
Economics		
Micro Economics	3	Credit for ECON 201
Macro Economics	3	Credit for ECON 202
English		
Lang and Comp	3, 4, 5	Credit for ENG 101
Lit and Comp	3, 4, 5	Credit for ENG 105
Environmental Science	3, 4, 5	Environmental Science elective
Foreign Languages All	3	Credit for 251
Maximum 15 total cr.	4	Credit for 251, 252
	5	Credit for 251, 252, 253
U.S. History	3	Credit for either HIST 143 or 144
	4	Credit for either HIST 143 or HIST 144, with exemption for majors in the other (Majors will be required to take an additional 5 credits of upper-division U.S. History.)
	5	Credit for HIST 143 and HIST 144
European History	3	Credit for either HIST 102 or 103
	4, 5	Credit for either HIST 102 or HIST 103 with exemption for majors in the other (Majors will be required to take 5 additional credits in upper division non-Western history.)
Calculus AB	3, 4, 5	Credit for MATH 172
Calculus BC	3, 4, 5	Credit for MATH 172 and 173
Math Statistics	3, 4, or 5	Credit for MATH 311
Music	3, 4, 5	Department Electives
Physics B	4, 5	Exemption from PHYS 111, 111LAB, 112, 112LAB, 113, 113LAB
Physics C		
Mechanics	4, 5	Exemption from PHYS 181, 181LAB, 3 Dept. Electives.
Electricity and Magnetism	4, 5	Exemption from PHYS 182, 182LAB.
Political Science		
American Govt.	5	Credit for POSC 210
Comparative Politics	5	Credit for POSC 260
Psychology	4	Credit for PSY 101

Non-U.S. College/University Credit

Credit will be accepted from non-U.S. institutions of higher education when (1) it has been earned at an institution linked to CWU either by a bilateral or consortial, e.g., International Student Exchange Program (ISEP) agreement, or when an institution has been certified by the CWU Office of International Studies and Programs as a legitimate, recognized institution of higher education (tertiary level) within a particular country; (2) the student has received a passing grade recognized by the institution; and (3) an official record or transcript has been received by the university.

Degrees Offered

Central Washington University offers the following undergraduate degrees:

Bachelor of Arts
Bachelor of Arts in Education
Bachelor of Fine Arts
Bachelor of Music
Bachelor of Science
Bachelor of Applied Science

Students wishing to earn a BA, BAS, BFA, BM, or BS degree must complete (1) the general education program; (2) a concentration of at least 60 credits which may be satisfied by a specified major, or a specified major and minor, or a specified major and courses in other fields as prescribed by the major department; (3) electives in sufficient quantity to bring the total quarter credits to 180; and (4) other degree requirements as specified. Department fields of study are

listed by major, minor, or specialization by college, on the undergraduate programs offered. Minor concentrations are offered in many fields.

Students wishing to earn a BAEd degree must complete (1) the general education program; (2) a major in Early Childhood Education, Elementary Education, or Special Education and minors, when appropriate; (3) the professional education program courses; (4) 180 total quarter credits; and (5) other general degree requirements as listed under the College of Education and Professional Studies section in this catalog. Students may select any university minor; however, students are strongly encouraged to select an endorsable teaching minor.

TUITION AND FEES

General Tuition and Fees

General tuition and fee rates are established by the state Legislature and miscellaneous fees are set by the CWU Board of Trustees. Tuition for 2011-2012 is not available at this time. Tuition rates shown below are an estimate. Refer to the online version of the catalog for updates. **Tuition and fees are subject to change without notice.**

Undergraduate and post-baccalaureate students registering for 10-18 credits:

Quarterly tuition fees for residents of the state of Washington, \$2,253

Quarterly tuition fees for nonresidents of the state of Washington, \$6,119

Undergraduate and post-baccalaureate students registering for nine credits or less:

Resident: Each credit, \$225.30

Minimum of \$450.60

Nonresident: Each credit, \$611.90

Minimum of \$1,223.80

Graduate (Master's Degree) students registering for 10-18 credits:

Resident graduate: \$2,794

Nonresident graduate: \$6,239

Graduate (Master's Degree) students registering for nine credits or less:

Resident graduate: Each credit, \$279.40

Minimum of \$558.80

Nonresident graduate: Each credit, \$623.90

Minimum of \$1,247.80

Students registering for more than 18 credits:

Undergraduate and post-baccalaureate,

Resident: Each credit over 18, \$202.63

Nonresident: Each credit over 18, \$589.20

Resident graduate: Each credit over 18, \$256.70

Nonresident graduate: Each credit over 18, \$601.20

Continuing Education Tuition and Fees

All courses taught through the Office of Continuing Education are self-supporting. The waiver for veterans, university staff, and senior citizens does not apply. Full fee-paying students must make additional payments at the rate established for each continuing education course in which they enroll.

College-level Examination Program

CLEP Test Scores for Central Washington University at the 50th Percentile or Above

	Percentile	Score	CWU Area of Credits Awarded
Calculus w/Elem. Funct.	50th	50	Math 172 and Math 173
Chemistry	80th	63	Chemistry 181, 181LAB
College Mathematics	50th	50	Basic Skills Math
Economics	50th	50	Economics Lower Division
or Macroeconomics			
or Microeconomics			
Human Growth and Development	50th	50	Psychology 314
Humanities	50th	50	Literature and the Humanities
Info Systems and	50th	50	Computer Science 101
Computer Applications			
Intro to Psychology	50th	50	Psychology 101
Intro Ed. Psychology	50th	50	Psychology 315
Intro to Sociology	50th	50	Sociology 107
Natural Sciences	50th	50	Fundamental Disciplines of Physical and Biological Sciences
Social Science and History	50th	50	Perspectives on the Cultures and Experiences of the US
Western Civilization I	50th	50	History 101
Western Civilization II	50th	50	History 102 or 103
US History I	50th	57	History 143
US History II	50th	54	History 144
Foreign Languages		Level I	Level II
French Language	50	151, 152, and 153	62 French 251, 252, and 253
German Language	50	151, 152, and 153	63 German 251, 252, and 253
Spanish Language	50	151, 152, and 153	63 Spanish 251, 252, and 253

Resident and Nonresident Status

Washington State law concerning resident classification for tuition and fee purposes, RCW 28B.15.012 et seq., requires that a student "(a)(i) have established a bona fide domicile in the state of Washington, primarily for purposes other than educational, for at least one year immediately prior to the beginning of the quarter for which he or she registers at the university, and (ii) be financially independent, or (b) be a dependent student, one or both of whose parents or legal guardians have maintained a bona fide domicile in the state of Washington for at least one year prior to the beginning of the quarter for which the student registers at the university." The term "domicile" denotes a person's true, fixed, and permanent home and place of habitation. It is the place where he or she intends to remain, and to which he or she expects to return when he or she leaves without intending to establish a new domicile elsewhere.

Any change of residency status for a given quarter must be based on written evidence provided by the student on a residency classification questionnaire on or before the first class day of the quarter for which a change of residency is sought. Questionnaires are available through the Office of Admissions. The burden of proof in all cases rests with the student.

In accordance with RCW 28B.15.014, certain nonresidents are exempted from paying nonresident tuition and fees. To be eligible for such an exemption, a nonresident student must provide documented evidence that he or she resides in the state of Washington, and (a) holds a graduate service appointment, designated as such by the university, involving not less than 20 hours per week; (b) is employed for an academic department in support of the instructional or research programs involving not less than 20 hours per week; or (c) is a faculty member, classified staff member, administratively exempt employee holding not less than a half-time appointment, or dependent child of such a person.

Out-of-state Applicants

To qualify as a Washington State resident, a student must be a US citizen or have permanent resident (resident alien) status. A student must also be independent and have established a permanent home in the state of Washington for purposes other than education at least 12 months prior to enrollment. Verification will be requested.

The spouse or dependent of a person who is on active military duty stationed in Washington can be classified as a resident by submitting proof of military assignment. A student cannot qualify as a Washington resident if she or he (or parent, in the case of a dependent) has attended college as a resident of another state within a year prior to enrollment; has received financial

assistance from another state, including reciprocity awards, within a year prior to enrollment; or possesses a current out-of-state driver's license, vehicle registration, or other document which gives evidence of being domiciled in another state. For further information, contact the Office of Admissions at 509-963-1211.

Residency questions should be directed to the Office of Admissions. Residency requirements are subject to legislative change.

Senior Citizens

Non-Matriculated Student Application

Senior citizens are encouraged to take advantage of the large variety of courses offered at the university. Persons 60 years of age or older may register as an auditor the first day of class on a space-available basis with permission of instructor. The fee is \$5 for a maximum of two courses, not to exceed six credits. Any person utilizing this provision taking more than six credits must pay an additional \$25 tuition charge. Credits may not be applied toward meeting requirements for any degree or for increments on any wage or salary scale. Waivers are not available for summer.

Veterans Conflict Grant

An eligible veteran means an active duty or reserve military member or a National Guard member called to active duty, whose permanent home state is Washington, and who served in active federal service in a war or conflict fought on foreign soil, or in international waters, or who served in support of those serving on foreign soil or in international waters. This grant replaces all other military conflict waivers awarded in the past by CWU and is not available in summer. For further information, contact the Veterans Center at 509-963-3028 or e-mail va@cwu.edu.

Children and Spouse of Totally (100%) Disabled or POW/MIA or Deceased Eligible Veterans or National Guard Members

Tuition Waiver: The legislature established this waiver to honor active and reserve veterans, National Guard members and their dependents. This is a mandatory tuition waiver for the children and spouse of totally disabled or POW/MIA or deceased eligible veterans or National Guard Members.

- Child and spouse of an eligible veteran or National Guard member who became totally disabled;
- Child and spouse of an eligible veteran or National Guard member determined to be a prisoner of war or missing in action;
- Child and spouse of an eligible veteran or National Guard member who lost his or her life;
- Child is defined as a biological child, adopted child, or stepchild.

Tuition Waiver

Educating the citizens of Washington State is integral to Central Washington University's mission. CWU encourages and supports its employees, as well as non-CWU state employees, and others as allowed by law, to continue their education as prescribed through this educational benefits policy. Central Washington University provides educational benefits for Central Washington University faculty, exempt, and classified staff, non-CWU state employees, members of the Washington National Guard, and veterans (as defined by 41.04.005 RCW) who are not eligible for educational benefits from the Veteran's Administration. Eligible employees (CWU and state) must hold appointment to a half-time or more position. In addition, civil service employees must have permanent status (i.e., passed their probationary period). Faculty and exempt employees who are employed half time or more and are expected to be employed for more than six months, are eligible on the first day of employment. Eligible CWU employees may take up to eight (8) credit hours of course work per quarter. Washington National Guard, veterans, and non-CWU state employees may take up to six (6) credit hours of course work per quarter. Faculty who are hired on a quarter-to-quarter basis will become eligible beginning with the second consecutive quarter of half-time or more employment. For the purposes of this section, employment of faculty in spring quarter and the following fall quarter may constitute consecutive employment.

Employees who are not eligible for the tuition and fee waiver are: faculty on courtesy appointments; retired faculty, staff, and exempt personnel; and undergraduate and graduate assistants, associates, or others holding positions with student status. An employee who has met university admission requirements and filed proof of eligibility with the Office of the Registrar no less than 15 working days prior to the beginning of each academic term may take up to eight credit hours of coursework for a nominal fee each quarter (summer excluded). Enrollment is subject to space availability only. Enrollment in a closed or wait-listed course under this waiver is prohibited. Refer to CWU academic policy 2-2.15 for further information.

Tuition Refund Schedule

A continuing student will receive a 100 percent refund of tuition and fees if a complete withdrawal from the university occurs prior to the sixth day of the quarter.

A student will receive a 50 percent refund of tuition and fees if a complete withdrawal from the university occurs on or after the sixth day of the quarter and within 30 calendar days of the beginning of the quarter.

There is no refund of tuition and fees if withdrawal from the university occurs after the 30th calendar day of the quarter.

There is no refund for individual class withdrawals after the change of schedule period.

Tuition and fees may be refunded to students unable to complete coursework as a result of being called to active duty in the Armed Forces of the United States.

Miscellaneous Fee Schedule

Fees are subject to change for the 2011-2012 academic year.

Application for Admission Fee: \$50, plus a \$100 non-refundable confirmation fee will be assessed and applied toward your tuition.

Athletic Fee: \$42 mandatory fee per quarter for all students. Students with less than 10 credits will be assessed \$4.20 per credit.

Audit Fee (without credit): A student enrolling in a course as an auditor is charged regular fees.

Background Check Fee: In order to participate in certain programs/majors, a student must arrange for and obtain a criminal background check from the appropriate law enforcement agency. Information regarding the process, requirements, and costs can be obtained through the department offering the program/major.

Breakage Fee: Students enrolled in certain courses are required to pay for any equipment they break. Fees are variable according to the item broken.

Credit by Examination Fee: Students applying to challenge a course will be assessed a nonrefundable fee of \$15 per credit, with a minimum of \$30 per course challenge.

Graduation Fees: The fee for a non-teaching baccalaureate degree is \$30. The fee for a teaching baccalaureate degree is \$72. An additional \$12 will be assessed for concurrent degrees. The fee for degree reapplication is \$20. Cost for regalia is updated each year on the Wildcat Shop website located at www.wildcatshop.net.

Health and Accident Insurance: Group insurance is optional. An additional premium will allow student dependents to be covered by medical facilities other than the student health center, which is reserved for student use only. For further information, inquire at the Cashiers Office.

Health and Counseling Fee: \$72 per quarter for all campus-based students enrolled for six or more credit hours. Fees will vary during summer session; review the Summer Session handbook for current fee.

International Studies Application Fee: A fee of \$50 per student per quarter for students participating in study abroad or exchange programs.

Late Fee: Students failing to pay their tuition in full by the published deadline are assessed a \$50 late fee.

Late Registration Fee: Students will be charged a \$25 per course fee for registration from the sixth through the 10th day of instruction; a \$50 fee per course for the 11th day through the 30th day of instruction; and \$75 per course after the 30th day. Permission to add courses will still require signature of the instructor or department chair and dean after the 10th day of classes.

Master's Thesis Binding Fee: Students submitting a thesis as part of the requirements for the master's degree pay a fee of \$75 for the binding of three copies of their thesis. Two copies are deposited in the library and one copy is given to the student. Students not needing a copy for themselves will be assessed \$50. Any students wanting more than one copy for themselves must make their own binding arrangements for the extra copies.

Parking: Students using the university's parking facilities must purchase a campus parking permit.

Recreation Center Fee: \$95 per quarter for all Ellensburg campus-based students enrolled for six credits or more.

Registration Cancellation Fee: \$50. Students who register and do not drop their classes prior to the change of schedule period, and have extenuating circumstances that result in a refund of tuition, will be assessed a \$50 cancellation fee.

Safe Ride Fee: \$3 per quarter. No fee for Summer Session.

Student-in-Training (Liability) Insurance:

In order to register for certain courses, a student must arrange for individual student-in-training (liability) insurance purchased either through the CWU business office or through some other agency. Information regarding types of coverage available may be obtained from the department chair or program director.

Supply and Equipment Fees: Students enrolling in certain courses are charged for supplies and equipment not furnished as part of the course.

SURC Building Fee: \$64 per quarter for all Ellensburg campus-based students enrolled for 10 credits or more. Students with less than 10 credits will be assessed \$6.40 per credit. Students with one credit will be assessed the same as the two credit fee, \$12.80.

Technology Fee: \$25 mandatory fee for all students. Students with less than 10 credits will be assessed \$2.50 per credit.

Transcript Fee: \$7 for each copy. \$15 for on-demand, express mail, or FAX copies. All fees are due in advance. A \$2.25 credit card fee may apply if ordering through the clearinghouse.

Tuition Nonpayment Fee: Students who have not paid full tuition by the 30th calendar day of the quarter will be assessed a \$75 tuition nonpayment fee. A hold will be placed on their student record and they will be liable for 100 percent of tuition and fees. Students will receive notification to their CWU e-mail account. Students must have their student account cleared prior to registering for future quarters.

Web-based Course Fee: \$40 per class will be assessed for all web-centric (WC) and web (WW) courses.

Financial Obligation

Admission to or registration with the university, conferring of degrees, and issuance of academic transcripts may be withheld for failure to meet financial obligations to the university. Payment received from students will be applied in the following priority: 1) oldest charge; 2) tuition and course fees; 3) housing and dining charges; 4) other charges.

Registration, by telephone or in person, obligates students for payment of all tuition and fees. If tuition is not paid by the due date, students will be assessed a \$50 late fee and be liable for any other reasonable collection costs and charges.



ACADEMIC AND GENERAL REGULATIONS

Academic Advising

All students are expected to seek, and the university is expected to provide, appropriate advising resources. These resources may include (but are not limited to) general university advisors, specific faculty advisors, special program advisors, career development counselors, advising seminars, advising workshops, and advising publications. General advising is available at the Academic Advising Center located in Hertz Hall, room 107. Faculty advisors are responsible for providing general education, as well as major program advising. Students are also encouraged to seek advice from various faculty concerning specific areas of interest or from faculty who serve as general advisors.

Continuing freshmen are required to meet with their general academic advisor located in Hertz Hall or departmental advisor during Advising Week, which takes place the week prior to registration. During this meeting the student and advisor will discuss the appropriateness of the student's schedule in obtaining their career and academic goals. Students are required to meet with their advisor the quarters after they have obtained their 75th and 115th credits. During this meeting the student and advisor will discuss the students' academic plan for either being admitted into the major or for completing the major and university requirements needed to graduate. It is strongly suggested that all other continuing students also meet with their advisors during Advising Week.

Admission to Major

As a student progresses, identification with a major or pre-major program of study becomes necessary for effective advising. Students are required to apply for admission to the program in which they want to major. Application forms are available in department offices. After completing the form, students should submit it to the department office which administers the major. A major or pre-major advisor will be assigned by the major department at the time a student is admitted into a major or pre-major program.

Students who have earned 100 or more credits and who have not applied and been admitted to a major or pre-major will not be permitted to register for classes until they submit a completed report of pre-major advising to Registrar Services indicating that they have discussed a major with a faculty advisor. Otherwise, students who have not been admitted to a major or pre-major prior to 100 credits will be given last priority during early registration.

Students are bound by the major requirements which became effective with the fall quarter Online Electronic Catalog (OEC) for the academic year in which they are accepted into their major.

If a student does not enroll for two or more consecutive quarters at Central (excluding summer), he or she will be required to reactivate his or her major status. Unless a student applies for an official leave of absence from the school. Reactivation must be done with the concurrence of the department and in accordance with department and the OEC requirements current at the time of readmission. A leave of absence should be requested, if a student is going to opt-out for a quarter (excluding summer) at Central. Leave of absence forms are due by the end of the quarter prior to the quarter they are requesting their leave. This will allow the student to be eligible for registration, maintain status in their major, and the student will not have to re-apply for admissions.

Registration

Currently enrolled students may register for courses by using Safari, the web registration system. Registration for new and readmitted students will take place during new student orientation.

Registration for new or readmitted students that did not register during the new student orientation or continuing students that did not register during their designated enrollment appointment, can register during the open enrollment period designated in the annual registration handbook.

Students may change their schedule during the designated change of schedule period. Students are encouraged to use the Safari web registration system to complete all registration transactions.

Registration, in-person, by telephone, or web, obligates students for payment of all tuition and fees. If tuition is not paid by the due date, students will be liable for a late fee and for any other reasonable collection costs and charges.

Consult the annual registration handbook that is available at Registrar Services or the university center administration office to determine exact dates for early registration, open enrollment, tuition deadlines, and the change-of-schedule period. The registration handbook is also available on the web at www.cwu.edu/~regi.

Academic Credit

The rule for determining academic credit is: one credit represents a total time commitment of three hours each week of the quarter. A regular load of 15 credits requires 45 hours of work per week. The total time includes class time, studying, conferring with the instructor, writing, performing laboratory work, exercising, or performing any other activity required of students. A minimum of 180 credits is required for a degree.

CWU operates on a quarter system and gives quarter credit. Other colleges operate on a semester basis (i.e., divide the academic year into two parts, exclusive of summer) and give semester credits. In order to calculate credit multiply the quarterly credits by two-thirds to equal semester credits, or multiply semester credits by one-and-one-half to equal quarter credits.

Course Numbering and Class Standing

Courses are numbered sequentially from 100 through 700. Those numbered 100 are pre-collegiate and credits earned in such courses are not accepted toward meeting degree requirements. Undergraduate courses are numbered 101 through 499 and graduate courses are numbered 501 and above. Courses numbered 500 are professional development courses and are not accepted toward meeting degree requirements.

Lower Division

Freshman	101 through 199
Sophomore	200 through 299

Upper Division

Junior	300 through 399
Senior	400 through 499

Students may enroll in courses one year ahead of their present status except when otherwise specified in the course description. A student's class standing is determined by the number of credits earned and/or accepted upon transfer. The following table lists the credits required for each class:

Freshman	0-44.9
Sophomore	45-89.9
Junior	90-134.9
Senior	135 or more

Students holding bachelor's degrees are considered post-baccalaureate if the student is pursuing a second degree or CWU certification program. Students that are admitted to a master's degree program are considered graduate students. Satisfying graduation requirements depends not only on the number of credits completed (a minimum of 180) but also on completion of all other degree requirements.



Student Study Load

Full-time and part-time students are determined by the number of credits for which they register. Full-time undergraduate is 12 credits or more. Three-quarter time undergraduate is 9-11 credits. One-half time undergraduate is 6-8 credits. Full-time graduate is 10 or more credits. One-half time graduate is 5-6 credits.

Undergraduate:

15 credits - Standard undergraduate load
 18 credits or fewer - No permission required
 19-20 credits - Major advisor and major department chair approval required, or Advising Center for undeclared majors.
 Over 21 credits - Major advisor and major department chair approval as well as the appropriate college dean.
 A 2.8 or higher cumulative GPA is recommended for students seeking an overload.

Graduate:

15 credits - Normal graduate load
 16 credits or less - No permission required
 17-19 credits - Major department chair or dean approval required
 20 or more credits - Dean of Graduate Studies and Research approval required

Proficiency Requirements

Students will be assessed for placement into ENG 101 and MATH 101 and above upon entering CWU. Students with deficiencies in English usage/reading or mathematical computation must correct them prior to enrolling in ENG 101 or MATH 101 and above. Students should review requisites for courses listed in the catalog. Not having the appropriate pre- or corequisite may result in being disenrolled.

Seniors in Graduate Courses

Seniors may enroll in graduate-level courses (501 and above) with the approval of both the instructor of the course and the department chair. Credit earned in these courses may meet undergraduate or graduate program requirements, but not both. Students wishing to designate the course for graduate credit must obtain approval from the dean of Graduate Studies and Research.



Auditing a Course

Students eligible to enroll in a course for credit may enroll as an auditor provided space is available and permission is secured from the instructor prior to registration. To receive credit for an audited class, students must enroll for credit in and repeat the same course in a subsequent quarter. Students are assessed full tuition for audited courses. Instructors may not compel auditors to write papers or take examinations, but may insist upon other course requirements. Instructors may request that the college dean withdraw the auditor from the course if these requirements are not met. Students receive neither credit nor grades for audited courses. Course participation requirements are set by the faculty member responsible for the course.

Concurrent Enrollment

Credit for work taken while simultaneously enrolled at CWU and other educational institutions may be transferred to Central. Any student who has obtained an F-1 visa from CWU must obtain permission from the executive director of the Office of International Studies and Programs (or designee) prior to enrolling in any other institution.

University Catalog Choices and Limitations

The official Online Electronic Catalog (OEC) is the university's compilation for all curriculum. Undergraduate catalogs are valid for five years, and may be found at www.cwu.edu. A student should expect to complete general education requirements as listed in the OEC current at the time of first enrollment at either Central or a community college in the state of Washington (provided he or she transfers directly to CWU from the community college and has not attended another four-year institution). The student should also expect to meet the specific requirements of the departments for majors and minors in the OEC current at the time he or she is accepted by the department into the major or minor program.

Graduate students admitted to the master's degree program may use the catalog they are admitted under or the current one.

Leave of Absence

Students who do not enroll for consecutive academic quarters (exclusive of summer) must reapply for admission. However, if students meet the criteria below, they may be granted a leave of absence, which means that they do not have to reapply for the following quarter and that they may register early for classes as continuing students at the designated time.

1. The application for leave of absence must be submitted to Registrar Services on or before the last day of the quarter

(including summer) prior to the quarter for which the student is seeking leave.

2. Leaves will be approved only if attending consecutive quarters would present an exceptional hardship or loss of opportunity.
3. Students seeking leave for more than one quarter must re-apply each quarter for the following quarter.

Withdrawal from a Course

Peremptory (uncontested) withdrawals will not be permitted after the first six weeks of instruction. Students who withdraw after the change of schedule period from 25 percent or more of the coursework for which they have registered for two or more quarters each academic year are subject to dismissal. Students who have been dismissed under this policy may not enroll for courses without submitting an approved plan of study signed by an academic advisor to the Office of the Provost/Senior Vice President for Academic Affairs. To continue enrollment, the student must satisfactorily complete all credits enrolled during the first quarter of readmission. Students who do not meet this requirement will not be allowed to register for one calendar year.

Peremptory withdrawals will be noted on the student's transcript with "+W." Class rosters will reflect the +W for students who have used their peremptory withdrawal.

Withdrawals after the sixth week of instruction will be granted only for reasons of hardship and then only upon written petition to and written approval by the registrar. The student must contact the course instructor and obtain the faculty member's signature on the hardship withdrawal petition. The signature serves merely to acknowledge the petition and implies neither support nor rejection of the request. The registrar may consult with affected faculty when evaluating a petition and will notify the instructor if the hardship withdrawal has been approved. Hardship withdrawals will be noted on the student's transcript with an "HW" (hardship withdrawal). Hardship withdrawals from individual courses will not be permitted during or after the final examination period.

Conversions of incompletes to withdrawals must be petitioned as if they were hardship withdrawals. They may be changed only upon petition to the registrar. Withdrawals will not be included in calculating grade point averages. There are no tuition refunds in cases of withdrawal from individual courses.

Withdrawal from the University

A student may withdraw from the university for reasons of illness or other extenuating circumstances at any time prior to finals week. An official withdrawal form is available at Registrar Services or university center offices. A student may not withdraw from the university during finals week except

with approval of the registrar. A complete withdrawal from the university will be noted on the student's transcript with a "W." The registrar will notify affected faculty members when a student has withdrawn from the university. Students who plan to leave the university must complete the official withdrawal form, and may need to have an exit interview. Failure to do so may result in failing grades. There is no refund of tuition and fees if total withdrawal occurs after the 30th calendar day of the beginning of the quarter. See refund policy for specific details.

Military Exigency Withdrawal

Students who have been called into military service of the United States due to a national emergency will be eligible for withdrawal from the university or the granting of credit. The policy does not apply to regular National Guard or Reserve duty or to annual active-duty requirements.

- Students who must withdraw from the university during the first third of the quarter will be granted a total university withdrawal (W).
- Students who must withdraw from the university during the second third of the quarter may request either an uncontested withdrawal (+W) or an incomplete (I) in each course with specified deadline for completion to be determined by the dean in consultation with the instructor or a total university withdrawal from all courses (W).
- Students who must withdraw from the university during the last third of the quarter may request an uncontested withdrawal (+W) or an incomplete (I) or credit if the coursework is satisfactory, to be determined by the dean in consultation with the instructor or a total university withdrawal from all courses (W). If credit is awarded, the instructors must report either a letter grade or a satisfactory (S) for each course depending upon the quality of the student's work. If credit is received and the course(s) complete(s) all requirements for the baccalaureate degree, the degree will be awarded.
- Students being called to active duty will be placed on a leave of absence until their return, at which time they will be reactivated, so they will not need to re-apply to the university. Students should contact Registrar Services when they are ready to return to Central to ensure a smooth transition.
- In all circumstances, students will be expected to attend classes up to fifteen (15) calendar days prior to induction.
- Students need to contact Registrar Services or their university center office as soon as possible to complete the appropriate paperwork, and to submit a copy of the Federal Activation Orders

Grading Policies and Regulations

"Grade Points" are assigned to each grade as follows:

Grade	Grade Points per Credit
A	4.0
A-	3.7
B+	3.3
B	3.0
B-	2.7
C+	2.3
C	2.0
C-	1.7
D+	1.3
D	1.0
D-	0.7
F	0.0

The following symbols are also used. No "grade points" are assigned.

CR	Credit
NC	No Credit
S	Satisfactory
U	Unsatisfactory
AU	Audit
W	Complete withdrawal from the university
+W	Uncontested withdrawal from a course
HW	Hardship withdrawal from a course
I	Incomplete
IP	In Progress
NR	No grade reported
NS	No show

All grades are frozen upon award of degree.

Financial aid may be affected by certain grades and/or grading symbols. It is incumbent upon students to be aware of the impact of all grades on their financial aid. Financial aid information policies are available from the Financial Aid Office.

Incomplete Grade

The "I" grade is used when the student was not able to complete the course by the end of the term, but has satisfactorily completed a sufficient portion of it and can be expected to finish without having to re-enroll in it. The instructor will designate what a student must do to complete the course and set a specific date up to one calendar year for the completion of the coursework.

Registrar Services will send notification of the incomplete grade to the student based on the information provided by the instructor. If the work is not completed within one (1) calendar year from the last day of the quarter in which the "I" was received, the registrar will automatically convert the "I" to an "F." However, instructors may require the work to be completed prior to the end of the calendar year. In these cases the registrar will convert the grade according to the date indicated by the instructor. It is the student's responsibility to contact the professor and make arrangements to complete the course.

To earn a grade, a student must complete the work for the course as prescribed by the instructor by the indicated date on the incomplete. Students may not re-register for a course in which they receive a grade of incomplete.

All incomplete changes exceeding the one calendar year limit, including extensions, must be submitted by the instructor to Registrar Services for approval.

In-progress Grade

For undergraduate students, the "IP" grade is used when the student was not able to be evaluated by the end of the term, usually because instruction is not yet completed. "IP" is used for special circumstances within programs such as flight technology, international studies, and cooperative education.

For graduate students, "IP" is used for thesis, and project study, that normally extend beyond a single term.

All uses of the "IP" grade must be submitted to and approved by the registrar. A letter grade is issued when the course is completed and recorded by the registrar, upon receipt of the Change of Grade form submitted by the instructor. If a grade is not submitted to the registrar within one calendar year, the "IP" will automatically be changed to "F" by the registrar.

Grade Point Average

Grade point averages will be calculated by dividing grade points earned by the credit hours attempted. Here is a typical example:

Course	Credit Hours	Grade	Grade Points Earned
MUS 104	3	C+	(2.3 x 3) 6.9
HIST 143	5	B-	(2.7 x 5) 13.5
PSY 300	5	C	(2.0 x 5) 10.0
COM 207	4	B	(3.0 x 4) 12.0
Totals	17		42.4

Dividing 42.4 by 17 gives a grade point average of 2.49. In computing cumulative grade point averages, only work attempted at Central will be included in the computation, with the following exception: cumulative grade point average for students in the Teacher Preparation Program will include all coursework from all colleges attended. Within the major, minor, and professional education option, grades earned in all allowed courses are used. Credits earned at other institutions are accepted in meeting degree requirements according to the limits described under bachelor's degree requirements.

Credit/No Credit Option

Students are urged to use the credit/no credit option as a way to explore academic areas of interest. All students except first-quarter freshmen and students on academic probation may select one class per quarter under this option. A maximum of 15 credits

earned in credit/no credit courses may be allowed toward the 180 required for the bachelor's degree.

The courses must be selected from free electives; they must not be courses in general education, major or minor concentrations, or the professional education sequence. Students may designate the course as credit/no credit until the end of the change of schedule period. Courses may not be repeated on a credit/no credit option.

Credits earned under the credit/no credit option are not included in computing the grade point average. The grade recorded on the student's transcript will be "CR" if the course grade is C- or above; if below C-, the entry will be "NC."

Statute of Limitation on Grade Changes

Grade changes may be filed until the end of the quarter following the one in which they were recorded. Spring quarter grades may be changed until the end of the fall quarter.

Grade Reports

A report of the final grades assigned in courses will be available on Safari at the end of each quarter. Students may request a hard copy be mailed by contacting Registrar Services or their university center office.

Honor Roll

Undergraduates who achieve a grade point average of 3.5 or higher will be named to the honor roll. To be eligible, a student must complete a minimum of 12 graded credits in the quarter earned. Central will provide honor roll recipient names to student's hometown based on the student's permanent address listed on Safari at the end of the quarter. If a student has placed a directory restriction on their record through Safari, the hometown newspaper will not be notified of his/her honor roll status. Post-baccalaureate and master students are not eligible for the honor roll. The honor roll status is listed on your unofficial transcript and is posted two to three weeks after grades on the web located at www.cwu.edu/honor-roll.

Grade Appeal Procedure

Students who believe they have been improperly graded should first attempt to resolve the matter with the instructor. If resolution is not achieved, the student may appeal the grievance to the department chair. Failing resolution at that level, the grievance may be submitted to the college dean. Finally, if the grievance is not resolved at the dean level, the student may petition for a hearing with the board of academic appeals. For details, contact the Office of Student Affairs in Bouillon Hall, room 204 or by calling 509-963-1515.

Repetition of Courses

Some CWU courses are approved for repetition with credit awarded each time the course is taken and passed. Such approval is indicated in the course description in the university catalog. Full tuition is assessed for all repeated courses. Other courses may be repeated under the following conditions:

- Students are allowed to take a course a second time. Students attempting to take the same course a third time may do so only with permission of the course instructor and the department chair. Unless otherwise designated as repeatable, courses may not be taken more than three times without permission of the dean of the college and department chair.
- Credit will be awarded only once, including credit for transfer courses that are repeated at Central.
- When a course is repeated, only the last grade earned will be used in the computation of the cumulative and major grade point averages. All grades will remain in the student's official record.

Any CWU course repeated at another institution is subject to the following requirements:

- May be transferred in for CWU credit
- Will be used in calculating both the CWU and the transfer GPA

Scholastic Standards

Academic standards are established by the faculty. The associate vice president for student affairs has responsibility for implementing these standards. A student's academic standing appears on the quarterly grade report or unofficial transcript located on Safari. Questions about academic standing should be directed to the Office of Student Affairs (Bouillon Hall, room 204).

Good Standing: A student is in good standing when both the quarterly and cumulative grade point averages (GPA) are 2.0 or higher.

Academic Warning: A student who has been in good standing will be placed on academic warning when the GPA for the previous quarter is below 2.0.

Academic Probation: A student who has been on academic warning will be placed on academic probation if either the quarterly or cumulative GPA is below 2.0.

Academic Suspension: A student who has been on academic probation will be placed on academic suspension if the GPA for the previous quarter is below 2.0. If the GPA for the previous quarter is 2.0 or above, but the cumulative GPA remains below 2.0, the student will remain on academic probation.

Immediately after grades are submitted, the associate vice president for student affairs

or designee(s) reviews the academic files of all suspended students and makes one of three decisions:

- The student may be allowed to register for one more quarter with an academic standing of probation.
- The student may be allowed to submit a petition presenting evidence of circumstances beyond the student's control which adversely affected the student's performance during the preceding quarter(s). If the petition presents convincing evidence of such extenuating circumstances, the student may be referred to the academic standing committee. The committee will hear the student's case and may decide to allow the student to enroll for one more quarter on academic probation.
- The student may be denied enrollment for one year, following which a written petition for readmission must be presented to the associate vice president for student affairs; however, readmission is not guaranteed.

A letter will be sent to the student informing him or her of the associate vice president's decision.

Academic Forgiveness

An undergraduate student may petition the registrar in writing for academic forgiveness if all of the following criteria are met:

1. The student returned to CWU after an absence of at least five years;
2. The student's CWU cumulative GPA at the time of leaving was below 2.0; and
3. The student has earned at least a 3.0 GPA in at least 45 credits since returning to CWU.

If academic forgiveness is granted, the previous credits and grades at CWU will remain on the student's transcript but will not be used in the calculation of the cumulative GPA, and the student will be in good standing. Only the grades earned since returning to CWU will be used in computing the CWU cumulative GPA.

The student may request a review of the registrar's decision by the board of academic appeals and academic standing. A petition for academic forgiveness may be granted only once. Unless academic forgiveness is granted, the GPA at CWU will include all CWU grades for all courses. The forgiveness policy does not extend to calculating GPA of major or to honors.

Class Attendance and Participation

Instructors may require regular class attendance. The first day of the quarter is the first day of instruction listed in the university calendar. An instructor may drop a student

from the class by notifying the registrar if the student has failed to attend the class by the end of the third day of the quarter or the first class meeting if the class does not meet during the first three days of the quarter. Students enrolled in web courses should make a post on blackboard within the first three days of classes to endure they are not dropped for non-attendance. Students are responsible for checking their schedules by the fifth day of class to ensure their class schedule is correct.

A student who does not meet course prerequisites may be required to drop the course. Instructors are not required to offer makeup work for missed classes, including those missed during the change of class schedule period, regardless of student course enrollment status.

Sponsors of university-approved activities requiring absence from campus will prepare and sign an official list of the names of those students who plan to be absent. It is each student's responsibility to present a copy of the official list to the appropriate instructors and make arrangements prior to the absence(s). Instructors are encouraged to make accommodations.

Members of the university community directing or arranging such activities must adhere to the following guidelines:

1. Scheduling of such activities shall not overlap with official final examination periods.
2. Scheduling of such activities shall not require an absence of more than three consecutive class days.
3. Scheduling of such activities shall be announced to the students far enough in advance for them to plan to fulfill course requirements.
4. Seeking permission for an exception lies with the sponsor and not with the student(s).

Athletic Participation

Central Washington University athletics is governed by the rules of the NCAA Division II and the Great Northwest Athletic Conference. Further information on those rules is available through the Athletic Office, or the office of the faculty athletics representative. University academic requirements for participation require the student athlete to meet the requirements of those athletics organizations as well as:

- Maintain a 2.0 accumulative grade point average at all times
- Not be in probation status
- All incoming freshmen and transfer students must complete HED 205 - Drugs and Sport by the end of their third year (or junior status) in order to remain eligible for participation in varsity sports.

Course Challenge (Credit by Examination)

Under certain circumstances, the university may award credit or waive requirements based on course challenges or prior learning experience. Matriculated students enrolled on a full-time basis may challenge any course which appears on the current course challenge list. The following rules apply:

- A course challenge application form, available in Registrar Services, must be completed.
- A fee of \$15 per credit, with a minimum of \$30 per course, must be paid.
- The challenge is conducted according to procedures established by the appropriate department.
- The result of the course challenge is recorded as "S" or "U" on the transcript and is not used in computing GPA.
- The application to challenge a course will be denied if credit for the course has been received previously at this or another college, the course was previously failed, the student previously withdrew from the course, the course was previously unsatisfactorily challenged, audited, or if registration was canceled.
- Credit by examination will not be allowed toward meeting the residence study requirements by the university (see Graduation Requirements section).
- Graduate students who have been admitted to a graduate program must obtain permission from the dean of Graduate Studies and Research, their advisor, and the course instructor to challenge it.

Course Challenge List

Special courses such as Individual Study, Special Topics, Cooperative Education, Workshops, and Seminars may not be challenged for credit.

Accounting: no courses are offered for challenge

Aerospace Studies: no courses are offered for challenge

Administrative Management: 201 and 271

Anthropology: all undergraduate courses with chair's approval

Art: all undergraduate courses with chair's approval, except 101

Biological Sciences: no courses are offered for challenge

Chemistry: all undergraduate courses, except laboratory courses

Communication: 101, 250, 252, 340, 350, and 445

Computer Sciences: all undergraduate courses with chair's approval

Early Childhood Education: no courses are offered for challenge

Economics: no courses are offered for challenge

Education: all undergraduate courses with chair's approval

English: no courses are offered for challenge

Environmental Studies: no courses are offered for challenge

Ethnic Studies: all 100 and 200 level courses with the director's approval

Family and Consumer Sciences: FCSA 150

Finance: no courses are offered for challenge

Flight Technology: all courses with departmental approval

Foreign Languages: all undergraduate courses with chair's approval

Geography: no courses are offered for challenge

Geology: no courses are offered for challenge

Health Education: HED 101

History: 101, 102, 103, 143, and 144

Humanities: 101, 102, and 103

Industrial and Engineering Technology: all undergraduate courses with chair's approval

Information Technology: 101, 204, 228, 248, 258, 268, and 288

Law and Justice: no undergraduate courses

Management: no courses are offered for challenge

Mathematics: all undergraduate courses numbered above 170

Military Science: all 100 and 200 level courses.

Music: all undergraduate courses except applied lessons, class lessons, and performing groups

Nutrition: NUTR 101, 240, 240LAB, 340, 340LAB, 341, 345, 348, 440, 440LAB, 441, 442, 443, 444, 445, 446, 447, and 448

Paramedics: EMS 245, 319, and 345

Philosophy: all undergraduate courses

Physics: no courses are offered for challenge

Political Science: no courses are offered for challenge

Psychology: all undergraduate courses with the chair's approval

Recreation and Tourism: no courses are offered for challenge

Religious Studies: all undergraduate courses

Safety Education: no courses are offered for challenge

Social Science: no courses are offered for challenge

Sociology: all 100 and 200 level courses with the chair's approval

Theatre Arts: 107, 166, 363, 364, 365, 371, 373, 381, and 383

Course Substitutions

Students may petition the appropriate department chair if they wish to substitute courses within degree requirements. The course used for substitution must be similar in content to the required course. The substituted course(s) credits may not reduce the total required credits. Permit to Substitute form can be obtained from the Office of the Registrar.

Academic Appeal

The student should be aware that procedures have been established to hear complaints regarding academic matters. The board of academic appeals exists to guarantee due process for academic grievances involving students, faculty, staff, and administrators. The academic appeals policy is established by the faculty senate and is administered by the associate vice president for student affairs.

Required Participation in Assessment Activities

Students are required to participate in assessment activities at several points during their academic careers. They will be assessed for placement into English 101, Math 101, and above upon entering CWU as freshmen. Students with deficiencies in English usage/reading or computation must correct them prior to enrolling in ENG 101 or MATH 101 and above, respectively.

Unless otherwise stated, all courses at CWU are taught in English.

Once accepted, international students may be evaluated by the ESL staff to determine whether additional English-as-a-Second-Language coursework will be required during attendance at CWU.

Students will be tested for proficiency in English usage, reading, and computation after the student has completed 90 credits but prior to accumulating 110 credits. Departments may establish their own requirements as long as they meet or exceed university standards. Departments may also require students with deficiencies to correct them before being accepted into their major.

Students will participate in an assessment of intended student outcomes of the general education program. End-of-major assessments are required prior to graduation.



GRADUATION REQUIREMENTS

Students are eligible for awarding of a bachelor's degree when they fulfill the following requirements.

Credits

- A minimum of 180 quarter credits is required for a baccalaureate degree; students should note however, that some bachelor's degrees have requirements in excess of 180 credits. Central allows a maximum of 135 quarter (90 semester) credits to transfer from regionally accredited four-year institutions, including no more than 105 quarter (70 semester) credits of lower-division (100-200 level) coursework from a regionally accredited community college. Additional coursework that exceeds this amount may be used to meet specific requirements, but additional credits will not be allowed to count toward the 180 credit requirement for graduation.
- A minimum of 60 credits of upper-division study is required. Upper-division courses are numbered 300 and 400. Credits earned in study at the lower-division (courses numbered 100-299) will not be allowed toward meeting this requirement unless the coursework is a direct equivalency for an upper-division course at Central.
- Students must study on the university campus or at an established university center at least three quarters and earn a minimum of 45 credits. Credits earned through industrial experience, military experience, or through credit by examination may not be used to meet residency requirements.
- No more than 45 total quarter credits through CLEP or other sources of non-traditional credit may apply to graduation.
- Transfer students must earn from CWU a minimum of 10 credits in the major and, if a minor is declared, 10 credits in the minor.
- Cooperative education courses will apply toward graduation requirements, but in no case will a student be allowed to count more than 10 credits at the 290 level nor more than 20 total cooperative education credits toward graduation requirements. No more than 10 credits are accepted in transfer. No more than eight credits may be applied to a graduate degree. Cooperative education courses may be repeated if field experience learning objectives and activities are distinctly different from previous work or field experience.

Degree Components

- The general education program must be completed as defined in the university catalog.

- Students transferring from Washington State community colleges holding the appropriate academic direct transfer associate degree will have met the general education program requirements.
- Completion of all requirements for a major as specified by the appropriate department, as defined in the university catalog, is required.
- Completion of a minor is required when the major is less than 60 credits. In that case the total credits of the major and minor must total a minimum of 60 credits.
- Foreign language requirement: students seeking the Bachelor of Arts (BA) degree must complete one year of college/university study of a single foreign language or have completed two years high school study of a single foreign language.
- All professional education programs require completion of professional education courses in addition to completion of the major requirements.
- Before a degree is awarded students must be in good standing and cannot be on academic suspension.
- Students may not use more than 12 credits in both the major and minor plan(s).
- Students cannot receive two majors from the same department (such as a BA and BS) or a major and minor from the same department.
- Students will not be awarded a degree if any coursework is Incomplete (INC), no grade reported (NR) or listed as In-Progress (IP).
- No degree will be posted when a balance remains unpaid.

Scholastic Requirements

Graduation and graduation with honors are based on credits and grade point averages (GPA) earned at the time the degree is awarded. When a degree is awarded the academic record is frozen. Changes in grades made after the award of the degree have no effect on the degree. Final responsibility for meeting graduation requirements resides with the student.

- In order to graduate, students must have achieved a cumulative grade point average of at least 2.0 in courses taken at Central.
- Students must also have achieved a cumulative grade point average of at least 2.25 in the major and 2.0 in the minor field of study. All courses fulfilling the major and minor requirements, including courses accepted in transfer, are used in computing the major and minor GPA.
- Specific degree and professional certification programs may have more stringent degree requirements than those specified above.

Teacher Preparation Program

- Cumulative grade point average of at least 3.0 for the last 45 graded credits, OR an overall (all colleges attended) cumulative grade point average of 3.0.
- Grade point average of at least 2.5 for major, minor, and professional education sequence.

Application for Degree

Degrees are not automatically awarded when requirements are completed. It is the responsibility of the student to apply for the degree in Registrar Services. Application for the bachelor's degree must be submitted by the second Friday of the quarter preceding the quarter in which the degree is to be completed. Complete instructions and deadlines are available in Registrar Services and through university center offices. Step-by-step instructions may be found at www.cwu.edu/~regi/graduation_information2.html.

Final responsibility for meeting graduation requirements and deadline dates resides with the student. Exceptions to university graduation requirements must be petitioned to the registrar. An exception approval may be obtained from the general education committee, department, or program chair and college dean where appropriate. Exceptions to majors or minors and teacher preparation programs must be approved by the appropriate department chair, and college dean or designee.

Commencement Participation

Students who have met graduation requirements during the current academic year, summer through winter quarters, and those expecting to meet the requirements during the current spring quarter or upcoming summer session, may participate in the spring graduation ceremony.

Application for graduation or receipt of a degree does not automatically qualify a student for commencement participation. Students must complete the online commencement registration form located on the Wildcat Shop's home page at www.wildcatshop.net prior to the published commencement participation deadline. Students should also review the information on the commencement website located at www.cwu.edu/~commencement for the most current information on the commencement activities and procedures.

Students participating in commencement exercises must wear commencement regalia approved by the registrar. Exceptions to commencement procedures are approved by the registrar.

Students anticipating graduation the summer quarter following commencement exercises may participate in the graduation ceremony on a space-available basis. Candidates for summer graduation who wish

to participate in the spring commencement ceremony prior to issuance of a degree must submit an application for graduation prior to the spring quarter deadline and complete degree requirements by the end of summer quarter. Candidates who have applied for their degree the summer following the June commencement ceremony are not eligible for honors distinction nor will their degree be published in the commencement book until the following academic year.

Graduation with Distinction

The following conditions must be met in order to be considered for graduation with distinction:

- At least 75 of the credits required for the degree must be earned at Central with a minimum of 60 credits in courses taken on the A-F grading scale.
- Credits earned by course challenge, CLEP, and other national examinations, military experiences or courses, non-college courses, and industrial experience will not be allowed toward the 75-credit eligibility requirement.
- Honors shall be based on the GPA of all credits earned at Central and all transfer credits accepted by CWU.

Baccalaureate honors are awarded to recipients of a first bachelor's degree according to the following standards:

- 3.5 to 3.69 - cum laude
- 3.7 to 3.89 - magna cum laude
- 3.9 to 4.00 - summa cum laude

Cum laude, magna cum laude, and summa cum laude will be noted on the recipient's diploma and university transcript.

For spring quarter degree candidates, the registrar will calculate the top percentage for the declared spring degree candidates based on the end of winter quarter data. Final determination of honors will be made after the spring quarter graduation ceremony when all grades are recorded.

Students completing degree requirements during the summer will not be eligible for honors recognition until the following spring commencement ceremony.

Other Distinctions

President's Scholars are those students who have cumulative GPAs in the top 1 percent of their respective college class. That GPA is calculated by existing university policy.

Dean's Scholars are those students who, in the current academic year, have cumulative GPAs in the top 5 percent of their respective college class (but not including the top 1 percent). GPA is calculated by existing university policy.

NOTE: Individual study majors will be computed with the College of Arts and Humanities majors.

Concurrent Baccalaureate Degrees

A student may be awarded more than one baccalaureate degree (BA, BFA, BAEd, BAS, BM, BS) at the same time provided that requirements of both degree programs have been completed. Double majors within the same baccalaureate program do not constitute separate baccalaureate degrees.

In disciplines offering multiple baccalaureate degrees with identical or similar names, such as BA and BS in biology, only one degree will be awarded. Exceptions to this policy require approval by the department chair and appropriate dean.

Second Baccalaureate Degree

Qualified students seeking second baccalaureate degrees are admitted to graduate status; this does not mean, however, that they are enrolled in an "advanced degree program." To receive a second baccalaureate degree, students must complete: (1) all degree requirements not satisfied by the previous degree, and (2) a minimum of 45 quarter credits from Central.

Second baccalaureate students must be accepted into a degree or certificate program by the time they have earned 25 credits beyond their last degree. Once a degree objective has been declared, second baccalaureate students must develop graduation plans with academic advisors. Academic department chairs may grant extensions beyond the 25-credit limit. Second baccalaureate degree students follow regulations applicable to undergraduates.

Second baccalaureate degree students may request from the department that any requirement of a minor be satisfied by the initial bachelor's degree earned provided that the requirements of the minor were completed in prior course work.

CWU reserves the right to review a post-baccalaureate student's transfer work to determine fulfillment of requirements.



2011-2012 GENERAL EDUCATION PROGRAM

MISSION, RATIONALE, AND STUDENT OUTCOMES

The general education program offers undergraduate students a liberal arts education in order to cultivate thoughtful and responsible persons and citizens, to prepare them for the world of work, and to teach them to pursue knowledge for its own sake. In order to accomplish those broad goals, the general education program seeks to promote effective reasoning, broad and deep learning, and the inclination to inquire.

Effective Reasoning

A comprehensive liberal education helps students to develop their abilities to recognize and to think clearly about important issues and questions. The ability to think clearly involves fluency in reading, writing, and oral communication, as well as mastery of the basic principles of logical, mathematical, and scientific reasoning.

Broad and Deep Learning

A liberally educated person should possess a rich and broad fund of meaningful knowledge as well as the ability to compare and integrate new or different areas of knowledge in fruitful ways. To that end, the general education curriculum imparts a broad understanding of the various liberal arts and sciences and the ways that those arts and sciences evolve. In much the same way, the curriculum aims to foster an appreciation of diversity as a rich source of new ideas and opportunities for learning. Through such studies, students may comprehend the inter-connectedness of knowledge and the importance of integrating knowledge gained from disparate parts of the curriculum.

The Inclination to Inquire

An education in the liberal arts fosters a student's commitment to seek out and acquire important knowledge and skills, both for their intrinsic value and for the good they contribute to our common and individual lives. For this reason, a disposition to ask incisive and insightful questions is perhaps the surest sign of a liberally educated mind.

The general education requirement offers a basic knowledge of mathematics and the natural sciences, including laboratory experience, intermediate knowledge of at least one foreign language, the study of the humanities, the political, philosophical and cultural history of world civilizations, and the foundations and principles of American society.

This mission statement reflects the standards promulgated by the American Academy for Liberal Education and CWU's Mission Statement.

General Education Program Goals

1. Students will become thoughtful and responsible members of society and stewards of the Earth.
2. Students will respect diversity of background, experience and belief, and will value the different perspectives that this diversity brings.
3. Students will achieve fluency in reading, writing, oral communication, and information technology.
4. Students will master the basic principles of logical, mathematical, and scientific reasoning.
5. Students will develop an appreciation of the breadth and depth of scientific and humanistic knowledge.
6. Students will develop a sense of the inter-connectedness of knowledge.
7. Students will integrate knowledge from diverse fields of study in order to solve real-world problems.
8. Students will become aware of the manifold ways that knowledge evolves.
9. Students will develop a disposition to ask incisive and insightful questions.

Assessment of the General Education Program

1. Students will be surveyed as to how well they think their courses addressed the mission of the general education program.
2. Instructors will be surveyed as to how well they think the course addressed the mission of general education.
3. Student achievement in general education classes will be evaluated regularly by means of examinations.

All courses taken to satisfy general education requirements must be taken for a letter grade.

BASIC SKILLS REQUIREMENT

All students must satisfy the following requirements in basic academic and intellectual skills:

1. UNIV 101, General Education Colloquium (1), or MUS 104, Introduction to Musical Studies (3). Only required of students who enter Central with fewer than 45 credits
2. ENG 101 (4) and ENG 102 (4). A grade of C- or better is required in ENG 101 before ENG 102 may be taken
3. Either MATH 101 (5), MATH 153 (5), MATH 154 (5), MATH 164 (5), MATH 170 (5), or MATH 172 (5);
4. Either MATH 102 (5), MATH 130 (5), PHIL 201 (5), or CS 105 (4);
5. One year of college or university study of a single foreign language or two years of high school study of a single foreign language. Courses used to satisfy this foreign language basic skills requirement may not be used to satisfy the Philosophies and Cultures of the World breadth requirement;
6. Either CS 101 Computer Basics (4) or IT 101 Computer Applications (3).

All students must have met these basic education requirements by the end of the quarter in which they complete 75 credits. (This does not include the foreign language basic skills requirement, which may require more time to complete.) Students who do not meet this standard will have a hold placed on further course registration. To remove the hold, the student must meet with an advisor and submit a program of study to plan successful completion of this requirement. The student's progress will then be monitored by an assigned academic advisor.

WRITING REQUIREMENT

Four of the courses taken to fulfill the breadth requirement must have the writing designation in the list below. These are courses which include at least seven pages of assigned writing that is assessed for content and mechanics (grammar, spelling, punctuation, and organization).

WILLIAM O. DOUGLAS HONORS

Students in the William O. Douglas Honors program should check with their advisor regarding the General Education requirements.

BREADTH REQUIREMENT

I. ARTS AND HUMANITIES

Students must take at least one course from each of the three groups. No more than one class from a single department may be counted toward this requirement.

Literature and Humanities

A grade of C- or better is required in ENG 101 before taking any of the courses in this category.

- ABS 110 Expressive African American Culture (5)
- ENG 105(W) The Literary Imagination: An Introduction to Literature (5)
- ENG 247(W) Multicultural Literature (5)
- ENG 347(W) Global Perspectives in Literature (5)
- HUM 101(W) Exploring Cultures in the Ancient World (5)
- HUM 102(W) Exploring Cultures from 16th Through 19th Centuries (5)
- HUM 103(W) Exploring Cultures in Modern and Contemporary Societies (5)

The Aesthetic Experience

- ART 101 Introduction to Western Art (5)
- ART 102 Introduction to Non-Western Art (5)
- FVS 250 (W) Introduction to Film and Video Studies (5)
- MUS 101 History of Jazz (5)
- MUS 102 Introduction to Music (5)
- PED 161 Cultural History of Dance (4)
- TH 101 Apprec. of Theatre and Film (4)
- TH 107(W) Introduction to Theatre (4)
- TH 375(W) Asian Drama (4)
- TH 382(W) Ethnic Drama (4)

Philosophies and Cultures of the World

- Foreign Languages 251 or 252 or 253. Second-year foreign language (same as studied in high school) (5), or
- Foreign Languages 151 or 152 or 153, or CHIN 141 or 142 or 143. First-year foreign language (different than the one used to meet basic skills requirement) (5)
- PHIL 101(W) Introduction to Philosophy (5)
- PHIL 115(W) The Meaning of Life (5)
- PHIL 202(W) Introduction to Ethics (5)
- PHIL 210(W) Current Ethical Issues (5)
- PHIL 306(W) Environmental Ethics (5)
- PHIL 378(W) The Philosophy of Love (5)
- RELS 101(W) World Religions (5)
- RELS 201(W) Sacred Books of the World (5)

II. SOCIAL AND BEHAVIORAL SCIENCES

Students must take at least one course from each of the three groups. No more than one class from a single department may be counted toward this requirement.

Perspectives on the Cultures and Experiences of the United States

An introduction to the institutions, cultures, and traditions of the United States intended to encourage a critical and analytical understanding of how the past affects the present and the future. An introduction to the complexities of social, economic, and political processes, issues, and events in the United States intended to provide a context for informed decision-making and citizenship.

- AIS 101(W) Pre-contact Period of American Indians (5)
- AIS 102(W) Contact Period of American Indians (5)
- AIS 103(W) Emergence of Contemporary American Indians (5)
- ECON 101 Economic Issues (5)
- ECON 201 Principles of Economics Micro (5)
- ETS 101(W) Ethnic Awareness (4)
- HIST 143(W) US History to 1865 (5)
- HIST 144(W) US History Since 1865 (5)
- POSC 210 American Politics (5)
- SOC 101(W) Social Problems (5)
- SOC 305(W) American Society (5)
- WS 201(W) Introduction to Women's Studies (5)

Perspectives on World Cultures

An introduction to institutions, cultures, and traditions of nations, groups, and societies outside the United States intended to encourage an understanding and appreciation of the dimensions of human diversity as well as similarities. An introduction to contemporary international and transnational issues intended to provide a broader perspective of the individual's relationship to other cultures and to common human concerns.

- ANTH 130 Introduction to Cultural Anthropology (5)

- AST 102(W) Introduction to Asian Studies (3)
- COM 302(W) Intercultural Communication (4)
- ECON 102(W) World Economic Issues (5)
- GEOG 101 World Regional Geography (5)
- HIST 101(W) World Civilization to 1500 (5)
- HIST 102(W) World Civilization: 1500-1815 (5)
- HIST 103(W) World Civilization Since 1815 (5)
- LLAS 102(W) Introduction to Latino and Latin American Studies (5)
- POSC 270(W) International Politics (5)

Foundations of Human Adaptations and Behavior

An introduction to and analysis of the fundamental principles underlying human interaction intended to foster a better understanding of the human condition. An introduction to the fundamental patterns and understandings of human interaction with natural and man-made environments is intended to help students make informed judgments concerning broad environmental issues.

- ANTH 107 General Anthropology (5)
- ANTH 120 Introduction to Archaeology (5)
- FS 310 (W) Contemporary Family Issues (4)
- FS 337 Human Sexuality (4)
- GEOG 108 Introduction to Human Geography (5)
- HED 101 Health Essentials (4)
- POSC 101(W) Introduction to Politics (5)
- PSY 101 General Psychology (5)
- PSY 205(W) Psychology of Adjustment (5)
- SOC 107(W) Principles of Sociology (5)

III. THE NATURAL SCIENCES

The natural sciences provide basic methods for rigorously describing and comprehending the natural world. Inquiry-driven laboratory and field observations are an essential mode of teaching, learning, and practicing natural science. Students must take at least one course from each of the three groups. No more than one class from a single department may be counted toward this requirement. It may be advantageous for students to take courses from groups in the order they appear below.

Fundamental Disciplines of Physical and Biological Sciences

An introduction to those sciences that study the fundamentals of physical and life systems.

- BIOL 101 Fundamentals of Biology and Lab (5)
- CHEM 111 / 111LAB Introduction to Chemistry and Introductory Chemistry Laboratory (5)
- CHEM 181 / 181LAB General Chemistry I and General Chemistry Laboratory I (5)
- GEOL 101 / 101LAB Physical Geology and Lab (5)

- PHYS 106 Physics by Inquiry / Lab (5)
- PHYS 111 / 111LAB Introductory Physics and Lab (5)
- PHYS 181 / 181LAB General Physics and Lab (5)

Patterns and Connections in the Natural World

Those sciences that use a knowledge of basic scientific disciplines to examine large and complex physical and life systems.

- ANTH 110 Introduction to Biological Anthropology (5) (ANTH 110LAB is optional)
- BIOL 200(W) Plants in the Modern World and Lab (5)
- BIOL 201 Human Physiology (5)
- BIOL 300 Introduction to Evolution (5)
- ENST 201 Earth as an Ecosystem (5)
- GEOG 107 Introduction to Physical Geography (5)
- GEOL 103 / 101LAB Geology of Washington and Lab (5)
- GEOL 107 Earthquakes, Volcanoes, and Civilization (5)
- GEOL 302 Oceans and Atmosphere (4)
- PHYS 101 Introductory Astronomy I / Lab (5)
- PHYS 102 Introductory Astronomy II / Lab (4)

Applications of Natural Science

These courses explicitly treat social, economic, technological, ethical, or other implications of natural phenomena, of human influence on natural systems, or of responsive scientific inquiry.

- ANTH 314 Human Variation and Adaptation in Living Populations (4)
- BIOL 302 Human Ecology (5)
- CHEM 101 Contemporary Chemistry and Lab (5)
- ENST 202 Ecosystems, Resources, Population, and Culture (5)
- ENST 310(W) Energy and Society (5)
- GEOG 273 Geography of Rivers (5)
- GEOL 108 Introduction to Environmental Geology (5)
- IET 101 Modern Technology and Energy (5)
- NUTR 101 Introduction to Human Nutrition (5)
- PHYS 103 / 103LAB(W) Physics of Musical Sound and Lab (5)
- PHYS 108 Light and Color / Lab (4)
- STEP 101(W) Science Seminar I: Research Experience (2)*
- STEP 102(W) Science Seminar II: Interdisciplinary Research Theme (2)*
- STEP 103(W) Science Seminar III: Current Topics (1)*

*Only open to freshmen students enrolled in the STEP program, and all three courses must be completed with a passing grade to receive credit for Applications of Natural Science breadth area.

COLLEGE OF ARTS AND HUMANITIES

Administration and Organization

Dean

Marji Morgan, PhD (Hebeler Hall, room 202)

Associate Dean

Michael Chinn, MFA (Hebeler Hall, room 202)

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www.cwu.edu/~cah/

Overview

The College of Arts and Humanities (CAH) is comprised of 12 departments and programs, which represent the disciplines of the arts and humanities. All of the departments and some of the programs of CAH offer undergraduate degrees as well as minors which supplement other degree programs. Five departments offer Master's degrees. In addition to its role in providing degree programs, CAH is responsible for many of the course offerings of the general education programs as well as extensive service coursework for the entire university. The college also plays a major role in Central's teacher education programs, offering bachelor's and master's degrees for students preparing to be secondary teachers and providing coursework in educational foundations and discipline-specific methods for teacher education majors. Building on a legacy of teaching excellence, college faculty are engaged in research, creative activities and service, involving students in the scholarship and practical applications of their various academic specializations, while making important contributions to the intellectual tradition and to society at large. There are no special requirements for admission to the college, but some departments have requirements that are described under the respective department and program headings in the catalog.

Mission

The College of Arts and Humanities advances knowledge, promotes intellectual inquiry, and cultivates creative endeavor among students and faculty through teaching informed by scholarship, creative activity, and public and professional involvement. We are committed to helping students develop intellectual and practical skills for responsible citizenship and the challenges of contemporary life in a global society. The college offers disciplinary and

interdisciplinary programs of the highest quality, acts as a steward of the foundational disciplines upon which all inquiry is based, and serves as a cultural center for arts and humanities for the university and the region.

Vision

The College of Arts and Humanities will be recognized as a distinguished learning community known regionally for scholarly and creative excellence, innovative, and rigorous foundational liberal arts education, and undergraduate and graduate programs that are outstanding and unique in the state.

Departments and Programs

Africana and Black Studies: Bobby Cummings, PhD/Paulus Pimono, PhD (Michaelsen Hall, room 104/Language and Literature Bldg., room 408F)

Art: Liahna Armstrong, PhD (Randall Hall, room 100)

Asia/Pacific Studies Program: James Cook, PhD (Language and Literature Bldg., room 100)

Communication: Phil Backlund, PhD (Bouillon Hall, room 232A)

English: George Drake, PhD (Language and Literature Bldg., room 423)

Film and Video Studies Program: Michael Ogden, PhD (Bouillon Hall, room 225)

Foreign Languages: Joshua Nelson, PhD (Language and Literature Bldg., room 102S)

History: Karen Blair, PhD (Language and Literature Bldg., room 100)

Latino and Latin American Studies

Program: Stella Moreno, PhD (Language and Literature Bldg., room 102J) and Christopher Schedler, PhD (Language and Literature Bldg., room 416E)

Music: Todd Shiver, DMA (Jerilyn S. McIntyre Music Building, room 144)

Philosophy and Religious Studies: Heidi Szpek, PhD (Language and Literature Bldg., room 337)

Theatre Arts: Scott Robinson, MFA (McConnell Hall, room 106)

Affiliated Programs

American Indian Studies

Toni Culjak, PhD

Language and Literature Building, room 408A
509-963-1531

Environmental Studies

Anne Johansen, PhD

Science, room 207A
509-963-2164

Ethnic Studies

Nelson Pichardo, PhD

Farrell, room 440
509-963-1348

Women's Studies

Cynthia Coe, PhD

Language and Literature Building, room 318
509-963-2488

COLLEGE OF BUSINESS

Administration and Organization

Dean

Roy Savoian, PhD (Shaw-Smyser Hall, room 129)

Associate Dean

Laura Milner, PhD (Shaw-Smyser Hall, room 126)

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www.cwu.edu/~cb

Vision

CWU's College of Business will be recognized as a premier learning community creating an environment in which students, faculty, and staff reach their full potential.

Mission

CWU's College of Business faculty and staff create value and opportunity for our students by focusing on quality in undergraduate education at the Ellensburg campus and university centers in the Puget Sound and central regions of Washington State. We accomplish this through emphasis on excellence in teaching, strengthened by faculty research and supported by professional service.

Our Shared Values

The faculty and staff of the CB share a set of core beliefs and commitments.

We believe in:

- Student success
- Lifelong learning
- Integrity and ethical behavior
- Excellence

We commit ourselves to:

- Prepare students for the future
- Impart knowledge on which students can build
- Treat everyone with respect and fairness
- Exemplify our values by serving as teachers and role models
- Maintain currency in our academic disciplines and professional fields
- Engage in scholarly activities that contribute to the body of knowledge in our disciplines

Statement of Conduct

The College of Business is a learning community committed to a set of core values based on integrity, respect, and responsibility that guide our interactions.

Integrity: The quality of possessing and steadfastly adhering to high moral principles or professional standards.



Respect: To show consideration or thoughtfulness in relation to others.

Responsibility: The state, fact, or position of being accountable and responsible.

Code of Honor

As College of Business students we pledge to uphold these standards of professionalism and conduct ourselves in accordance with them. We will not lie, cheat, or steal, and will not tolerate those who do. Our behavior defines who we are and what we will become.

Programs

The College of Business offers programs leading to the bachelor of science degree in the following areas:

- Bachelor of Science, Accounting
- Bachelor of Science, Business Administration with specializations in:
 - Finance
 - General Business
 - Human Resource Management
 - Management and Organization
 - Marketing Management
 - Supply Chain Management
- Bachelor of Science, Economics with specializations in:
 - Economic and Business Forecasting
 - General Economics
 - Managerial Economics

The college also offers a Master of Professional Accountancy degree through the graduate school. Students may take their junior and senior years of the accounting and business administration programs at two Puget sound-area centers: Lynnwood and Des Moines. In addition, upper-division coursework in support of major programs is offered at three Eastern Washington centers: Wenatchee, Moses Lake, and Yakima. Please refer to departmental listings in this catalog for more information about each major.

Admission Requirements

Admission requirements to major programs within the College of Business are identical regardless of the location of the program. Students must first be accepted by the university and, if applicable, the university center which they plan to attend. Then, students must formally apply to the College of Business and be admitted to a major program prior to enrolling in 300- and 400-level courses within the college. Application forms are available on-line as well as at CWU Centers and at the Ellensburg main campus department offices. The application form must be completed and returned to the appropriate office along with copies of current transcripts. Applications are accepted at new student orientations. The applicant must be in good academic standing.

If a student has met the requirements of admission but has struggled to do so, the College of Business reserves the right to offer probationary admission status for up to 2 quarters and/or 30 credits in order for the student to demonstrate she/he will be successful. Final admission to the College of Business under these circumstances is not guaranteed. Business courses taken to fulfill the requirements for an undergraduate or graduate degree from the CWU College of Business must have been taken within the last 10 years at the time of graduation. Exceptions may be made, but must be approved prior to acceptance into the College of Business by the department chair and dean or designee. Students wishing to have credits from non-United States institutions considered for transfer into the College of Business for any major or minor must have their transcripts evaluated through outside credential evaluators who are members of the National Association of Credential Evaluation Services (NACES), such as the Foundation for International Services (FIS), the World Education Service (WES), or Educational Perspectives with those endorsed by the Washington Society of CPAs preferred. Credits for current students participating in a CWU study abroad program will be evaluated by the Study Abroad office.

Transfer Credits

Equivalent lower-division (100-200 level) courses may be transferred toward meeting the pre-admission requirements for any BS degree in the college. Upper-division (300-400 level) courses may be transferred toward meeting the major requirements only with the approval of the department chair and the college dean (or designee).

Separation Policy

If a student that has been admitted to the College of Business is placed on academic probation, suspension, received multiple academic warnings, or has repeat academic course withdrawals, then the student's admission into the College of Business may be rescinded. Once rescinded, the student will be denied readmission to the College of Business for one year following which a written petition for readmission must be presented. The decision to readmit will be based on meeting current admission standards, analysis of the entire academic record, as well as any other sources of information deemed appropriate. Readmission is not guaranteed.

Service to Other Majors

Students majoring in programs outside CB who are required to take courses in this college for either their major or minor will be eligible to enroll on a space-available basis. These students will be given priority over other non-college majors wishing to enroll in courses. All students must have taken prerequisites for courses prior to enrollment.

Departments and Programs

Accounting: Marvin Bouillon (Shaw-Smyser Hall, room 340)
 Economics: Robert Carbaugh and Koushik Ghosh (Shaw-Smyser Hall, room 428)
 Finance and SCM: Eldon Johnson (Lynnwood Center, Snoqualmie Hall, room 302S)
 Management: Mark Pritchard (Shaw-Smyser Hall, room 333)

COLLEGE OF EDUCATION AND PROFESSIONAL STUDIES

Administration and Organization

Interim Dean

Connie Lambert, PhD (Black Hall, room 228)

Associate Dean

Ethan Bergman, PhD (Black Hall, room 228)

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www.cwu.edu/~ceps/

The primary role of the College of Education and Professional Studies (CEPS) is to support the mission of the university by offering and supporting educational opportunities of the highest quality for students. The mission of the college is to prepare enlightened leaders for the professions and for society-leaders who will commit themselves to socially responsible citizenship in a global society.

From the college's perspective, its role is fulfilled by creating and nurturing an academic environment where quality and excellence are synonymous with achievement. Each academic unit of the college has developed specific goals and objectives to complement this mission.

Departments

Advanced Programs: Henry Williams, EdD (Black Hall, room 241-25)
 Aerospace Studies (AFROTC): John Armour, Lt. Colonel, USAF (Peterson Hall, room 203)
 Aviation: Amy Hoover, PhD (Black Hall, room 225-1)
 Education Foundations & Curriculum: Barry Donahue, EdD (Black Hall, room 101)
 Family and Consumer Sciences: Jan S. Bowers, PhD (Michaelsen Hall, room 100)
 Industrial and Engineering Technology: Michael Whelan, PhD (Hogue Hall, room 107)
 Information Technology and Administrative Management: Robert Lupton, PhD (Shaw-Smyser Hall, room 203)
 Language, Literacy, and Special Education: Craig Hughes, PhD (Black Hall, room 205)

Military Science (ROTC): Karl Neal, Lt. Colonel (Peterson Hall, room 202G)
 Physical Education, School and Public Health: Kenneth Briggs, EdD (Physical Education Bldg., room 114)
 Nutrition, Exercise and Health Sciences: Vincent Nethery, PhD (Physical Education Bldg., room 114)
 Teaching Elementary, Adolescent and Young Children: Virginia Erion, PhD (Black Hall, room 101)

Center for Teaching and Learning

The Center for Teaching and Learning (CTL) is the National Council for Accreditation of Teacher Education (NCATE) accredited unit that provides oversight for all CWU school personnel preparation programs. The CTL is intended to facilitate communication between and among the respective disciplines that contribute to the preparation of educators. CTL programs include the preparation of teachers, school administrators, school counselors, and school psychologists.

The mission of the center is played out through its theme: Preparing Facilitators of Learning in a Diverse World. To accomplish this mission, private and public school teachers, administrators, counselors, and psychologists from around the state join university faculty who represent the three colleges mentioned above, to establish a professional community. This professional community reaches all corners of CWU and extends to the world of schooling.

Representatives of this professional education community merge under the aegis of the CTL to: (1) design, deliver, and renew candidate recruitment, admission, and retention policies, and procedures; (2) to assess, as an aggregate, candidate knowledge, skills, and dispositions; and (3) to evaluate the efficacy of the CTL for the purpose of maintaining a state approval and national accreditation status.

Conceptual Framework

Supporting the mission, purpose, and governance structure of the CTL is the constructivist philosophy. This philosophy asserts that:

- Knowledge is actively created by the learner
- Knowledge is constructed or made meaningful when learners relate new information to prior knowledge or existing structures of knowledge
- Knowledge constructs are shaped by experience and social interaction
- Members of a culture collaboratively establish knowledge.

The CTL director is Connie Lambert. For information about the School Administrator

program, contact the Department of Advanced Programs. For information about the school counselor and school psychologist programs, contact the Department of Psychology.

Teacher Preparation Program General Information

The Teacher Preparation Program is administered through CEPS and the CTL executive board. The provost/senior vice president for academic affairs in collaboration with the CEPS dean appoints faculty to serve on the advisory council, which advises the CTL executive board on program policies.

Admission Requirements

Admission to the university does not guarantee a student admission into the Teacher Preparation Program. Students must be at least conditionally admitted to the Teacher Preparation Program prior to enrolling in any of the Block I courses in the professional education foundation program.

The processing of applications takes time. To insure the thorough review of transcripts, recommendation forms, etc., it is required that all application materials for admission to the Teacher Preparation Program be submitted by the following dates: For Ellensburg campus programs-winter, October 1; spring, January 1; summer, April 1; fall, April 1; for university center programs-fall, April 1. For university center programs-please contact the university center.

(All application forms are available online at www.cwu.edu/~cert.)

- A 3.0 grade point average (GPA) for at least the last 45 graded quarter credits (the total may exceed 45 if an entire quarter is needed to achieve the minimum 45) is required for full admittance into the Teacher Preparation Program. A 2.8 GPA for at least the last 45 graded quarter credits will be considered for conditional admittance into the Teacher Preparation Program. A 3.0 GPA for at least the last 45 graded quarter credits is required prior to making application to student teaching. Official or unofficial transcripts for all college/university coursework must be submitted directly to the Teacher Certification office. These transcripts are in addition to transcripts submitted to Registrar Services.
- Completed APPLICATION FOR ADMISSION TO TEACHER EDUCATION.
- Completed Character and Fitness supplement. Answering "YES" to any question on the form will require that you meet with the Certification Officer prior to a decision regarding admission. All court documents should be submitted prior to that meeting. False answers to the questions on the form may result in denial of program admission and/or certification

- Minimum score of 24 on each of two RECOMMENDATION FORMS completed by teachers, employers, or professors (one must be from a professor or teacher). Forms may not be completed by a relative.
- Signed FINGERPRINTING/CERTIFICATION REQUIREMENT form.
- Pass the WEST-B examination.

Completion of one of the following:

Prerequisite Courses: ENG 101 and 102, and MATH 101, 153, 154, 164, 170, or 172 (with a grade of C or higher in each of the three prerequisite courses.)

- Bachelor's degree from an accredited institution
- A Direct Transfer Agreement (DTA) associate degree
- Proof of purchase of the College Live Text Edu Solutions software program (i.e., copy of receipt).
- Software can be purchased directly from livetext.com or from the Wildcat Shop. For those students applying to one of the University Centers, you will not be required to purchase the LiveText software until you have been accepted into the cohort program.
- Current WSP and FBI fingerprint clearance is required for at least conditional admittance to the program. Please call 509-963-2662 to schedule an appointment of you may contact your local Educational Service District (ESD) to schedule an appointment.
- Submission of the Dispositional Survey. Once you activate your LiveText account, you are automatically sent the Dispositional Survey. It is located in your Forms box which is under the Tools section of LiveText. Once you complete the survey, click the submit button. Please call 509-963-2660 if you have any questions.

WEST-B Test

All individuals applying for admission to CWU's Teacher Preparation Program are required to meet the minimum passing score on the WEST-B (Washington Educator Skill Test - Basic). This exam is administered statewide seven times each year. Registration information and test dates can be found online at www.west.nesinc.com.

Note: Failure to begin the program within one year from date of acceptance may result in cancellation of admission.

The completed application packet needs to be submitted to the following address by the appropriate deadline date: Teacher Certification Office, College of Education and Professional Studies, Central Washington University, 400 East University Way, Ellensburg, WA 98926-7414.

Please be aware that:

No grade lower than a C in major or minor, required English composition courses, and foundation coursework, and no grade lower than a C- in basic and breadth coursework will be accepted for certification.

To remain in the program, students must maintain a 3.0 GPA for the last 45 graded credits earned.

Each applicant for admission to the Teacher Preparation Program will be notified in writing of the status of his or her application.

Completion of the Teacher Preparation Program does not guarantee certification by the state of Washington. In order to be certified, the candidate must demonstrate good moral character and personal fitness as defined by WAC 180-79A-155. Fingerprint clearance from the Washington State Patrol and FBI will be required prior to application for the Teacher Preparation Program, practicum, pre-autumn, and / or student teaching. If you have anything from your past that you think may compromise your certification, please seek advisement from the Certification Officer at 509-963-2660 prior to submitting your application.

Teacher Preparation Program admission regulations are administered by the CTL. Personal folders are maintained in the Teacher Certification office for each student enrolled in a teaching program at Central.

Transfer Students

Students entering the university with a transferable associate of arts (AA) degree from an accredited Washington community college will need to meet the admission requirements for the Teacher Preparation Program prior to enrolling in any education courses. These students are frequently surprised to find that, after finishing two years of community college, they have more than two years left to complete an education degree. This is because the AA degree required 90 credits and, when transferred to CWU, satisfies only the Basic and Breadth requirements, which can generally be completed in 60 credits at CWU. Community college students can make good use of the additional 30 credits required by the AA by selecting courses at the community college which may meet major, minor, or, in some cases, courses in teacher preparation. Check your community college's equivalency sheet to make certain your courses are equivalent to CWU's courses for these particular requirements.

WEST-E Test

All teachers wishing to obtain certification must take the WEST-E test in each content area for which they seek endorsement prior to student teaching. Documentation (i.e., registration confirmation, test scores) that the student has registered for a test date that occurs prior to student teaching must be submitted to the teacher Certification

Office prior to applying for student teaching. Final certification will not be awarded until successful completion of the WEST-E is earned. Test information and registration is online at www.west.nesinc.com.

Alternative Admissions Procedures to Teacher Preparation

Students who do not have the required grade point average, or who do not pass portions of the WEST-B test may apply for provisional admission to the Teacher Preparation Program by alternative means.

PROCEDURE

1. Applications will be made in writing to the candidate admissions, recruitment, and retention committee in care of the Certification Officer. The deadline for application will be the first Friday of the quarter preceding the quarter admission is desired (fall quarter applicants deadline will be the first Friday of spring quarter.). The written application will include the following:
 - a. A letter from the applicant's major advisor that supports the following:
 - Applicant's academic ability, service experience, growth, commitment, and motivation
 - Potential for graduate study (following graduation from the undergraduate program)
 - Potential for success in working with diverse groups
 - Other criteria appropriate to the applicant's potential as a teacher
 - Other extenuating circumstances that may have affected the applicant's grades and test scores
 - b. One supporting letter from a former employer, supervisor, or other individual knowledgeable of the applicant's experiences in working with young people
 - c. A personal essay by the applicant that describes his or her educational goals and objectives
2. An interview with the Candidate Admissions, Recruitment, and Retention committee (CARR) may be required.
3. Those admitted will be monitored on a quarterly basis by the CARR committee, and will meet all admission requirements prior to student teaching.
4. Students who have been admitted to the Teacher Preparation Program via the CARR committee will receive personal guidance to facilitate completion of their undergraduate degrees and receipt of their certificates.
5. For further information, contact the Certification Officer at 509-963-2660.

Graduation/Certification Requirements for Teacher Preparation Program

- No grade lower than a C in major, minor, composition courses, and professional education foundation courses
- Minimum GPA of 2.5 in major, minor, and professional education foundation courses
- Minimum GPA of 3.0 for last 45 graded quarter credits (the total may exceed 45 if an entire quarter is needed to achieve the minimum 45)

Major and Minor Concentrations

To achieve certification, students must select a major, which leads to a university endorsement for teaching in schools in Washington.

The following majors are endorsements offered at CWU. Students should contact the departments to request information about major requirements.

Endorsable Majors

Biology: Teaching Major
 Chemistry: Teaching Major
 Early Childhood Education Major
 Earth Science Teaching Major
 Elementary Education Major
 English / Language Arts: Teaching Major
 Family and Consumer Sciences Career and Technical Education Teaching Major
 Foreign Languages: Teaching Foreign Languages: Teaching Broad Area: Chinese, French, German, Japanese, and Russian Major
 General Science Teaching Major
 History: Social Studies Teaching Major
 Mathematics: Teaching Secondary Major
 Middle Level Math and Science Teaching Major
 Music: Broad Area Specialization
 Music: Choral Music Specialization
 Music: Instrumental Music Specialization
 Physical Education and School Health
 Physics Major (BA)
 Spanish Teaching Major
 Spanish Teaching Broad Area Major
 Special Education P-12 Broad Area Major
 Theatre Arts: Teaching K-12 Major
 Visual Art: Teaching Major

A major endorsement will be required to obtain a teaching certificate. Minor endorsements are optional. The following minors are endorsements offered at CWU. Students should contact the departments to request information about requirements.



Endorsable Minors

Bilingual Education/Teaching English as a Second Language Minor
 Biology Teaching Secondary Minor
 Chemistry Teaching Minor
 Dance Teaching Minor
 Early Childhood Education Minor
 Earth Science Teaching Minor
 Mathematics: Teaching Secondary Minor
 *(Math minor will not be endorsed if combined with Elementary Education major, unless student teaching is also done in the math area.)
 Middle Level Mathematics Minor
 Middle Level Science Teaching Minor
 Physics Minor
 Science Education: Broad Area Science Teaching Minor
 Teaching English as a Second Language Minor

Certification

Central is in compliance with the No Child Left Behind federal legislation. It is a public institution that is accredited both regionally and nationally.

CWU is accredited by the Northwest Commission on Colleges and Universities (NWCCU). NWCCU is recognized by the U.S. Department of Education and the Council for Higher Education Accreditation (CHEA) as the regional authority on educational quality and institutional effectiveness of higher education institutions in the seven-state Northwest region of Alaska, Idaho, Montana, Nevada, Oregon, Utah, and Washington.

Additionally, CTL, the unit that oversees all CWU teacher preparation programs, is accredited by the National Council for the Accreditation of Teacher Education (NCATE). NCATE accreditation recognizes CTL as meeting national standards for the content and operation of the unit and ensures performance of a teacher candidate in the program has been thoroughly assessed before he or she is recommended for licensure. It also ensures that programs meet standards set by the teaching profession at large.

CWU's Teacher Preparation Program is approved by the Washington State Board of Education to offer programs, which lead to teacher certification. To be awarded Washington certificates, candidates must be at least 18 years of age.

Graduates of the Teacher Preparation Program are legally qualified for certification in states, which are party to the interstate certification compact.

Residency Certificate

The residency-teaching certificate is normally awarded simultaneously with the bachelor's degree. Individuals who hold, or have held a residency-teaching certificate and are enrolled in a professional certificate program, may have the certificate renewed for an additional two years upon verification the individual is enrolled in a professional certificate program.

Professional Certificate

Candidates for the Professional Certificate must meet the following requirements:

- Complete provisional status as a teacher in a public school pursuant to RCW 28A.405.220 or the equivalent in a state board of education approved private school
- Complete an approved professional certificate program
- Demonstrate competency in three standards (i.e., effective teaching, professional development, and professional contributions) and the 12 criteria relevant to the three standards

To maintain the continuing (professional) certificate, each person must complete 150 clock hours of approved in-service education and/or 15 college or university credits every five years.

Information regarding the Professional Certificate Program can be found online at www.cwu.edu/~cert or you may contact the teacher Certification Office for more information regarding this program.

Endorsement-only Program

CWU's endorsement-only program is available to certified teachers who hold the Washington State initial, residency, or continuing teaching certificate and who wish to add a teaching endorsement to their certificate. Teachers interested in obtaining an endorsement from CWU should obtain an application online at www.cwu.edu/~cert. Once an application and transcripts are submitted, a credit evaluation will be completed.

To qualify for an endorsement to teach in more than one specialization, students must meet the requirements for each specialization. Experienced teachers may petition the Director of Field Experiences for permission to student teach for less than the normal 16 credits.

Certification Only

Candidates with a bachelor's degree who desire certification must follow the guidelines for admission to teacher preparation. Certification-only students may earn the residency-teaching certificate by satisfactorily completing the professional foundation courses and at least one college endorsement program. Final approval of the college endorsement program lies with the individual's content area. The certification-only program can usually be completed within five to six quarters.

Alternative Pathway to Teaching Regional Consortia Program

Yakima
 Deccio Higher Education Bldg.
 1000 S. 12th Ave.
 509-963-3709

Director

Rexton Lynn

General Information

CWU is the lead/recommending institution for this program, which includes Pacific Lutheran University, Heritage University, and Western Washington University as partners. The goal of the consortia program is to prepare teachers in state-identified shortage areas for jobs in communities where they currently live. The minimum number of interns accepted into the program shall be 10; the maximum to be accepted shall be 25.

All courses, regardless of offering institution, will be completed, in-person, at CWU-Yakima, which is located at Yakima Valley Community College, Deccio Higher Education Building, 1000 S. 12th Avenue, Yakima, WA 98902. Distance education, K-20, or internet/hybrid classes will not be available for this program.

Admission Requirements

Students with a baccalaureate degree from an accredited institution in subject matter shortage areas (special education, mathematics, general science, middle school mathematics and science, chemistry, physics, biology, English as a Second Language, bilingual, Manarin and/or Japanese) and/or areas of shortage due to geographic location as documented by the partnership districts, AND

- District validation of qualifications, including one year of successful student interaction and leadership as classified staff; and
- Who meet the age, good moral character, and personal fitness requirements for teachers (all candidates must have fingerprint clearance prior to assignment to a classroom); and
- Who have a minimum GPA of 2.5 on the most recent degree conferred.
- Who have successfully passed the statewide basic skills exam (WEST-B*) and content area test (WEST-E*) for the endorsement area(s) for which certification is sought. Information about the tests and testing schedules may be accessed at www.pesb.wa.gov/.

OR

Mid-career professionals with a baccalaureate degree or higher from a regionally accredited institution who are not employed in the district, or who hold

an emergency substitute certificate. Priority shall be given to individuals with degrees that qualify them for endorsements in the subject matter shortage areas noted above or identified by partnership districts within the consortia programs, AND

- Who have, at a minimum, one-year career work experience;
- Who provide external validation of qualifications, including demonstrated successful experience with students or children, such as reference letters and letters of support from previous employers;
- Who meet the age, good moral character, and personal fitness requirements for all teachers (all candidates must have fingerprint clearance prior to assignment to a classroom); and
- Who have a minimum GPA of 2.5 on the most recent degree conferred.
- Who have successfully passed the statewide basic skills exam (WEST-B) and content area test (WEST-E*) for the endorsement area(s) for which certification is sought. Information about the tests and testing schedules can be accessed at www.pesb.wa.gov/.

OR

Mid-career professionals with a baccalaureate degree or higher from a regionally accredited institution who are employed in a school district under an emergency substitute certificate in a content shortage area and who meet the qualifications listed immediately above.

For additional admission requirements, please contact program director.

Program Requirements:

The total number of credits for successful completion of the program is 24.5, with 8 of these being completed through CWU. The courses to be completed at CWU are:

- ECTL 470 - Alternative Pathways to Teaching: Seminar Series (2)
 ECTL 480 - Alternative Pathways to Teaching: Curriculum Planning (3)
 ECTL 490 - Alternative Pathways to Teaching: Internship (3)

The remaining 16.5 credits will be completed through the three partner universities.

Full descriptions can be reviewed in the Undergraduate course section under Center for Teaching and Learning.

Recency of Coursework

Education courses may not be older than 10 years at the time of graduation/certification.

COLLEGE OF THE SCIENCES

Administration and Organization

Dean

Kirk A. Johnson, PhD (Dean Hall, room 130)

Associate Dean

David M. Darda, PhD (Dean Hall, room 130)

509-963-1866

Fax: 509-963-1977

www.cwu.edu/~cots/

The College of the Sciences (COTS) is comprised of 13 departments and 12 interdisciplinary programs representing disciplines in the behavioral, natural, and social sciences, and mathematics. The departments and programs of the college offer undergraduate baccalaureate degrees, master's degrees, and coursework at the graduate level, minors that supplement other degree programs, and a comprehensive range of service coursework. As an essential part of its mission, the college offers an extensive general education curriculum. The departments play a major role in Central's teacher preparation programs, offering bachelor's and master's degrees for students preparing to be secondary teachers and providing coursework in educational foundations and discipline-specific content and methods.

Departments within the college are committed to teaching excellence, active engagement by faculty in research, scholarship and professional service activities, student involvement in research, community service, and employing practical applications of academic specializations.

Departments

All departments offer baccalaureate degree programs and, in some cases, minors and master's degrees. In addition to consulting department/program headings in this catalog, students are encouraged to contact individual departments and program offices directly.

Anthropology and Museum Studies:

Kathleen Barlow, PhD
 Dean Hall, room 357
 509-963-3201

Biological Sciences:

Paul James, PhD
 Science Building, room 338
 509-963-2731

Chemistry:

JoAnn Peters, PhD
 Science Building, room 302
 509-963-2811

Computer Science:

James Schwing, PhD
 Hebel Hall, room 219
 509-963-1495

Geography:

James Huckabay, PhD
 Dean Hall, room 301
 509-963-1188

Geological Sciences:

Wendy Bohrsen, PhD
 Lind Hall, room 220
 509-963-2701

Law and Justice:

Charles Reasons, LLB
 Psychology Building, room 463
 509-963-3208

Mathematics:

Timothy Englund, PhD
 Bouillon Hall, room 108
 509-963-2103

Physics:

Michael Jackson, PhD
 Lind Hall, room 201A
 509-963-2727

Political Science:

Todd Schaefer, PhD
 Psychology Building, room 414
 509-963-2408

Psychology:

Stephanie Stein, PhD
 Psychology Building, room 421
 509-963-2381

Science Education:

Martha Kurtz, PhD
 Science Building, room 107
 509-963-2929

Sociology:

Delores Cleary, PhD
 Farrell Hall, room 409
 509-963-1305

Interdisciplinary Programs

These programs offer specialized coursework, interdisciplinary baccalaureate majors or minors, master's degrees or research, and public service functions.

American Indian Studies:

Toni Culjak, PhD
 Language and Literature, room 408D
 509-963-1531

Center for Excellence in Science and

Mathematics Education:

Martha Kurtz, PhD
 Science Building, room 107
 509-963-2929

Energy Studies:

Holly English
 Dean Hall, room 326
 509-963-1159

Environmental Studies:

Anne Johansen, PhD
 Science, room 207D
 509-963-2164

Ethnic Studies:

Nelson Pichardo, PhD
 Farrell Hall, room 440
 509-963-1348

Museum of Culture and Environment:

Kathleen Barlow, PhD
 Dean Hall, room 357
 509-963-3201

Primate Behavior and Ecology Program:

Lori Sheeran, PhD
 Dean Hall, room 335
 509-963-1434

Public Policy:

Rex Wirth, PhD
Psychology Building, room 482
509-963-2353

Resource Management Program:

Karl Lillquist, PhD
Dean Hall, room 319
509-963-1184
Steve Hackenberger, PhD
Dean Hall, room 349
509-963-3224

Science Honors:

Audrey Huerta, PhD
Lind Hall, room 118-A
509-963-2718

Science Talent Expansion Program (STEP):

Wendy Bohrson, PhD
Lind Hall, room 101
509-963-2835

Women's Studies:

Cynthia Coe, PhD
Language and Literature Bldg., room 318
509-963-2008

Affiliated Centers and Institutes**Center for Spatial Information:**

Anthony Gabriel, PhD
Dean Hall, room 320
509-963-1166

Center for the Environment

Greg Brown, PhD
Dean Hall, room 322
509-963-3699

**Central Washington Archaeological Survey,
Anthropology:**

Patrick McCutcheon, PhD
Dean Hall, room 340
509-963-2075
Steve Hackenberger, PhD
Dean Hall, room 349
509-963-3224

**Chimpanzee and Human Communication
Institute (CHCI):**

Deborah Fouts, MS
Psychology Research Center
509-963-2244

**Community Counseling and Psychological
Assessment Center:**

Jeffrey Penick, PhD
Psychology Building, room 461
509-963-3669

Cultural Resources:

Pat Lubinski, PhD
Dean Hall, room 338
509-963-3601

**Geodesy Laboratory and Pacific
Northwest Geodetic Array (PANGA)****Data Analysis Facility:**

Tim Melbourne, PhD
Hebeler Hall, room 110A
509-963-2799

Health Career Education Resources:

Tracy Andrews, PhD
Dean Hall, room 351
509-963-3220

School Psychology Services:

Eugene Johnson, EdD
Psychology Building, room 121
509-963-2501

OFFICE OF CONTINUING EDUCATION (CE)

The Office of Continuing Education provides lifelong learning opportunities in support of the university mission. The unit offers a variety of credit, non-credit, training, and enrichment courses and programs.

All Continuing Education courses, certificates, degrees, and services are offered on a self-support basis, and may be canceled if adequate enrollment is not reached. Tuition for some Continuing Education courses is higher than regular CWU tuition. Additional course fees may also apply. Credit courses are eligible for financial aid, but no-tuition-waiver programs apply.

Please visit us on the web at www.cwuce.org or call 509-963-1504 for complete information on the following programs:

ACADEMIC DEGREES AND CERTIFICATES

Craft Beer Trade Certificate

**Program Advisor: Steve Wagner, PhD
Department of Biological Sciences**

The Craft Beer Trade Certificate is an in-depth, academic course of study on the science, technology, and business aspects of the craft beer brewing industry. It is for students with an interest in pursuing a career in the beer brewing industry. This four course sequence (16-credits) covers the principles of malting and brewing, brew process technology, brewing microbiology, and principles of merchandising management for the microbrewing industry. Students learn about the trade using a variety of approaches including lab work, hands-on experiences, lectures, field trips, and industry speakers. The program prepares graduates for careers in a wide range of areas in the brewing and business sides of the industry.

Courses

BIOL 312 - Brewing Microbiology
BIOL 317 - Principles and Biochemistry of Brewing
RMT 320 - Principles of Merchandising Management for Micro Brewing
IET 360 - Brew Process Technology

The Craft Beer Trade Certificate is offered by the Office of Continuing Education and the Department of Biological Sciences.

For course information, admission requirements, and application details, see the Biological Sciences section of this catalog, visit www.cwuce.org/beer_education/beer_cert.asp, or call 509-963-1504.

Global Wine Studies

Bachelor of Science Degree**Advisor: Amy Mumma, MBA****Office of Continuing Education**

Global Wine Studies is a bachelor of science degree for anyone who is interested in pursuing a career in the wine industry. This interdisciplinary program provides students with a broad understanding of the global wine industry. The program prepares graduates for careers in winery and vineyard management, wine merchandising, wholesale, retail, e-commerce, distribution, marketing, import/export, hospitality, entrepreneurship, consulting, and more.

In the major, students complete 51 core credits to acquire a broad base of knowledge and skills related to wine, wine business issues, and the global wine industry. Students also complete a minor, 25 to 36 credits, in one of several complementary academic areas (Administrative Management, Communications, Foreign Languages, International Studies, Organizational Communications, Retail Management and Technology, Recreation Management, Spanish, or Tourism). Students gain valuable experience by participating in a required international field experience and an internship with a wine-related business, either in the U.S. or abroad. Students must be 21 years of age or older and must apply for acceptance into the program. Permission of the program advisor is required.

Core Courses

ACCT 301 - Financial Accounting Analysis (5)
GWS 302 - Fundamentals of Viticulture and Enology (4)
GWS 303 - Major Wine Regions of the World (4)
GWS 304 - Wine Marketing and Branding (4)
GWS 402 - Issues in Viticulture and Enology (5)
GWS 403 - The Global Wine Industry (5)
GWS 404 - The International Wine Trade (5)
GWS 406 - Professional Wine Analysis (3)
GWS 408 - Advanced Sensory Analysis (4)
GWS 410 - Wine Faults (3)
GWS 490 - Cooperative Education (Internship) (6)
INTL 410 - Agriculture, Field Experience (3)

The GWS degree is offered through the Office of Continuing Education in collaboration with the Department of Family and Consumer Sciences.

For course information, admission requirements, and application details, see the Family and Consumer Sciences section of this catalog, visit www.cwuce.org/wine-education/degree.asp, or call 509-963-1754.

Wine Trade Professional Certificate

Advisor: Amy Mumma, MBA**Office of Continuing Education**

The Wine Trade Professional Certificate is offered through the Office of Continuing Education in collaboration with the Department of Family and Consumer

Sciences. It is a comprehensive educational program that focuses on the business and trade aspects of the wine industry. Topics covered include viticulture, winemaking, world wine regions, styles and trade structures, the business of wine, wine marketing, merchandising, and professional evaluation techniques. Graduates will be prepared for careers in wine sales and merchandising, wholesale, retail, distribution, marketing, import/export, consulting, hospitality, and more. The certificate is intended for individuals currently in the wine and associated industries or for those who would like to gain the skills and knowledge necessary to enter the wine industry. Students must be 21 years of age or older and must apply for acceptance into the program. Permission of the certificate program advisor is required.

Courses

GWS 302 - Fundamentals of Viticulture and Enology (4)

GWS 303 - Major Wine Regions of the World (4)

GWS 304 - Wine Marketing and Branding (4)

GWS 406 - Professional Wine Analysis (3)

For course information, admission requirements, and application details, see the Family and Consumer Sciences section of this catalog, visit www.cwu.edu/org/wine-education/professional-certificate.asp, or call 509-963-1754.

Wine Trade and Tourism Minor

Department of Family and Consumer Sciences

The Wine Trade and Tourism Minor is offered through the Department of Family and Consumer Sciences in collaboration with the Office of Continuing Education. This cross-disciplinary program prepares individuals for employment in many areas of the wine industry including tourism, hospitality services, retailing, wine sales and marketing, and tasting-room and event management. Admission to the minor requires admission to the Wine Trade Professional Certificate program. Students must be 21 years of age or older and must apply for acceptance into the program. Permission of the certificate program advisor is required.

For course information, admission requirements, and application details, see the Family and Consumer Sciences section of this catalog, or visit www.cwu.edu/org/wine-education/minor.asp.

MS Biology for Teachers

Master of Science Degree

Program Coordinator: Ian Quitadamo, PhD
Department of Biological Sciences

The Master of Science in Biology for Teachers (MSBT) program offers science teachers the advanced content knowledge and skills they need to enhance their performance, improve student learning, and advance

their careers. The MSBT program provides engaging, hands-on experiences with content experts in ways consistent with best-practices research. This intensive program is designed to minimize time out of your summer and maximize knowledge and skills. The program is designed to be completed over 15 weeks (five weeks each for three summers). Courses are taught by faculty members from a variety of life science fields who are committed to working with K-12 teachers to provide experiences that address teacher needs. Hands-on research, field trips, and practical application are highlights. The MSBT program is aligned to the National Science Education Standards for science content, unifying concepts, and science as inquiry. They also align to the latest Washington State standards for life science.

Participants will engage in immersive experiences in a variety of life science fields (e.g. genomics, environmental physiology, using insects in the classroom, cell biology, genetics, infectious diseases, parasitism, and immunological response, and others based on teacher interest); participate in hands-on investigation of integrated life, physical, and Earth science concepts applicable to K-12 classrooms; learn how to integrate knowledge across science disciplines; and learn how to analyze, integrate, and apply topics learned in graduate courses using a collaborative, best-practices framework. Participants will also discuss current topics in biological research; investigate methods, techniques, and procedures used in biological research; generate ideas for how to design and conduct their own research; develop a research proposal; conduct a laboratory and/or field research project under the supervision of a CWU faculty member; and present their research results. Elective courses allow teachers to have some flexibility in the content they choose for their program.

For course information, admission requirements, and application information, see Biological Sciences in the Graduate Studies and Research section of this catalog, visit www.cwu.edu/org/msbt, or call 509-963-2731.

MS Biology – Specialization in Biomedical Sciences

Master of Science Degree

Program Coordinator: James E. Johnson, PhD

Department of Biological Sciences

The MS Biology with specialization in Biomedical Sciences degree is designed for students seeking careers in biomedical research or to help students become stronger applicants to medical school or other professional programs. Students who have already completed their course requirements or admission to medical school can strengthen their candidacy by demonstrating their performance in some of the same courses taken by first-year medical students at the

Pacific Northwest University of Health Sciences (PNWU) Doctor of Osteopathic Medicine Program and broadening their background as scientists by conducting an original research project with faculty at CWU while earning a master of science degree in biology. Preferred admission to the PNWU Doctor of Osteopathic Medicine program may be available to students meeting specific requirements.

The MS Biology with specialization in Biomedical Sciences degree is offered by the Department of Biological Sciences in collaboration with the Office of Continuing Education.

For course information, admission requirements, application information, and PNWU preferred admission details, see Biological Sciences in the Graduate Studies and Research section of this catalog or call 509-963-2731.

CAREER DEVELOPMENT

Career Training Programs (Online Courses)

Program Coordinator: Rachel Gordon
Office of Continuing Education

The Office of Continuing Education, in partnership with Gatlin Education Services, offers online, open enrollment courses and programs designed to provide the skills necessary to acquire professional level positions for many in-demand occupations.

Choose from over 100 programs in Healthcare and Fitness, Sustainable Energy and Going Green, Media and Design, IT and Software Development, Skilled Trades and Industrial Studies, Business and Professional Studies, Management and Corporate Studies, and Hospitality and Gaming.

Programs are designed by teams of professionals who work to provide the most effective web-based learning experiences available today. Instructors are actively involved in your online learning experience. They respond to questions and concerns, as well as encourage and motivate you to succeed.

Each program includes a set of lessons and evaluations. Grades are a combination of the instructor's evaluation of students' work and computer graded tests. Quality and convenience are the goals of anytime, anywhere learning!

For more information, visit www.gatlineducation.com/cwu.

Many of these programs are approved by the Workforce Training Board for the Eligible Training Provider List. For a list of approved courses, visit the Washington Career Bridge website at www.careerbridge.wa.gov and search the Eligible Training Provider List for online programs at Central Washington University, Ellensburg, or call us directly at 509-963-1749.

COLLEGE IN THE HIGH SCHOOL

Cornerstone

Program Coordinator: Sandra Bach
Office of Continuing Education

The Cornerstone Program is designed to offer highly capable students the opportunity to take rigorous college courses while in high school. The courses are taught by qualified high school instructors who have been approved as CWU lecturers. All Cornerstone classes are the same challenging courses offered at the university. Courses are offered in early childhood education, English, family and consumer sciences, foreign languages, humanities, information technology, mathematics, music, physics, psychology, recreation and tourism, sociology, and theater. The credits earned, if applied at CWU or transferred to another institution, can strengthen students' chances of being accepted to their colleges of choice, help them get a head start on their degree, and reduce the cost of college. For more information, visit www.cwu.edu/~cornerstone or call 509-963-1526.

EDUCATION PROGRAMS

Administrator Professional Certification

Henry Williams, PhD
Department of Advanced Programs

The Administrator Professional Certificate Program (APCP) represents the next stage of the state's move toward performance based educator preparation programs. Program requirements, which center on completion of a Professional Growth Plan (PGP), are aligned with state and national standards for administrators. The APCP offers the opportunity for individualized, job-embedded professional development for those who currently hold a Principal Residency Certificate and wish to advance to the Administrator Professional Certificate. This program is offered by the Department of Advanced Programs and the Office of Continuing Education.

For more information and application details visit www.cwu.edu/~ap/adminCert.html or call 509-963-1415.

Career and Technical Education (CTE)

Teacher Certification
Program Coordinator: Jan Bowers, PhD
Department of Family and Consumer Sciences

This two-year, teacher education certificate program is for individuals with business or industry experience who wish to turn their professional experience into a teaching career at a high school or skill center. The Career and Technical Education program provides the tools necessary for success in the

classroom. During the program, participants will complete a mentored teaching experience or practicum each year, which will allow them to take what they have learned and apply it in a classroom setting. Designed for working professionals, classes meet one Saturday per month over the course of two academic years and provide access to course materials via the web.

Year 1

- Introduction to teaching pedagogy
- Classroom management
- Curriculum design and assessment
- Classroom safety
- Application of occupational skills, knowledge, and practice in a vocational setting (occupational analysis)

Year 2

- Advanced teaching pedagogy
- History and philosophy of vocational education
- Personal and student leadership development
- School law and abuse-related issues
- Work-based and work-site learning

Offered by the College of Education and Professional Studies and the Office of Continuing Education.

For more information visit www.cwu.edu/~careertech or call 509-963-2776.

Community College Teaching

Certificate of Completion

Program Coordinator: Marji Morgan, PhD
College of Arts and Humanities

The CWU Community College Teaching certificate program prepares participants for what to expect and how to succeed as a teacher in the community college classroom. The program is geared toward several audiences: 1) high school teachers who might want to teach a course or two in a community college, 2) graduate students who intend to pursue a career teaching in a community college, 3) current community college and university faculty who want to enhance their knowledge in any or all of the workshop topic areas.

The program includes four workshops:

- Becoming a Successful Community College Faculty Candidate
- Instructional Technologies
- Assessment
- Teaching in the Diverse Classroom

The program is offered each summer. Full workshop descriptions are available at www.cwu.edu/~cct. Call 509-963-1504 to register.

MS Biology for Teachers

Master of Science Degree
Program Coordinator: Ian Quitadamo, PhD
Department of Biological Sciences

See MS Biology for Teachers listed in the Academic Degrees and Certificates section above.

National Board Certification

Program Coordinator: Andrea Sledge, PhD
College of Education and Professional Studies

The Office of Continuing Education, in collaboration with the College of Education and Professional Studies, offers a National Board Certification Mentoring program. The Mentoring Program is designed to prepare teachers for National Board portfolio preparation and assessment. Candidates attend a summer orientation session with the CWU National Board for Professional Teaching Standards (NBPTS) facilitator group at CWU, Ellensburg. The candidates then meet with their NBPTS facilitator a minimum of 10 times during the months between the summer orientation session and the spring deadline for submission of the National Board Certification Portfolio. For more information on CWU's National Board Certification Mentoring program, please visit www.cwu.edu/~ectl/NBCT or call 509-963-1504.

ProTeach: Portfolio Preparation Program

The Office of Continuing Education and the Center for Teaching and Learning offer a unique program for teachers to work toward their professional certification. The ProTeach Portfolio Preparation Program provides the Teacher ProCert candidate with maximum flexibility. You enroll in one to four courses, depending on the level of support you desire, from learning the standards, to guidance in evidence gathering and evaluation, to preparation of the portfolio for submission for external assessment. You can take from 2 to 8 credits over 3 or 4 quarters. NBCT facilitators and ETS-trained facilitators are available for mentorship. Courses are offered at all of our CWU Centers, and online. And the coursework is applicable to CWU's Master Teacher degree. For more information visit www.cwu.edu/~prodev/procert.asp or call 509-963-1504.

Professional Development for Educators

Numerous classes are available each quarter through in-service and distance learning. Course topics are timely, taught by experienced instructors, and offer PK-12 teachers convenient, affordable options for professional development (500) credit or clock hours. Course topics include classroom management, special education, bilingual education, health and safety management, teaching strategies, technology in schools,

and more. Please visit our online catalog for current offerings at www.cwu.edu/org/conted/catalog.asp or call 509-963-1504.

Professional development courses are offered through the Office of Continuing Education in the following subjects:

Anthropology and Museum Studies (ANTH)
Art (ART)
Biological Sciences (BIOL)
Center for Teaching and Learning (ECTL)
Chemistry (CHEM)
Education Foundations and Curriculum (EFC)
English (ENG)
Family and Consumer Sciences (FCSG)
Recreation and Tourism (RT)
Foreign Languages (FNLA)
Spanish (SPAN)
Industrial and Engineering Technology (IET)
Mathematics (MATH)
Music (MUS)
Occupational Education (OCED)
Physical Education, School and Public Health (HED) (PE)
Psychology (PSY)
Science Education (SCED)
Sociology (SOC)
Theatre Arts (TH)

Reading Endorsement

Program Coordinator: Sharryn Larsen Walker, PhD

Language, Literacy, and Special Education

The Literacy Program within the College of Education and Professional Studies offers this reading endorsement option for certified teachers. Because assignments in every course are tailored to each certified teacher's current position, the program is appropriate for those who work with students in all grade levels. Supported through the Office of Continuing Education, the program is delivered completely online. With continuous enrollment, a certified teacher can earn the Washington State P-12 Reading Endorsement from Washington's Office of Superintendent of Public Instruction in only five quarters. Teachers from outside the state of Washington will need to verify with their state's department of education if this program meets the guidelines for endorsement in that state. For more information, please contact Sharryn Larsen Walker at swalker@cwu.edu or 509-963-2133.

PERSONAL ENRICHMENT

Career Development and Computer Training

Program Coordinator: Rachel Gordon
Office of Continuing Education

Distance learning provides convenient, computer-based learning opportunities for everyone. Courses are delivered over the web and can be taken in the comfort and convenience of your own home or office. We offer many online open enrollment programs designed to provide the skills necessary to acquire professional level positions for many

in-demand occupations. These non-credit courses are available in many career areas, including information technology, green/sustainable energy, business, travel, legal, graphic design, medical coding, pharmacy technician, education, and others. For current offerings please see our online catalogs at www.cwu.edu/org/distance-learning or call 509-963-1504.

Craft Beer Tasting Series

Program Coordinator: Frank Pangrazi
Office of Continuing Education

The Craft Beer Tasting Series offers fun, informal opportunities for the public to learn about and taste interesting and unique craft beers from around the world. For more information visit www.cwu.edu/org/beer_education/beer_tasting.asp or call 509-963-1504.

Ellensburg Wine Festival

Program Coordinator: Frank Pangrazi
Office of Continuing Education

Each year the CWU World Wine Program and the Ellensburg Chamber of Commerce team up to offer the Ellensburg Wine Festival, the best wine event in central Washington. Held annually on the Saturday of Mother's Day weekend, the glorious spring weather and the best vintages of wine in Washington State set the tone for a terrific festival. The festival was named "One of the top 10 things to do in Northwest wine country" in *Wine Press Northwest* magazine.

For more information about the Ellensburg Wine Festival, please call 509-925-2002, or e-mail the Ellensburg Chamber of Commerce at info@ellensburg-chamber.com.

Wine Tasting Series

Instructor: Amy Mumma, MBA
Office of Continuing Education

Our wine tasting and lecture series offers classes that teach individuals about wine in a fun and non-intimidating way. Courses are social and interactive learning experiences that include tastings. These non-credit, consumer-oriented, short courses cover topics such as wine regions of the world, wine and food pairing, wine faults, and more. Our wine education DVD series, *A Wine Odyssey*, allows wine lovers to learn more about wine in the comfort and convenience of their homes. For more information visit www.cwu.edu/org/wine-education/consumer-courses.asp or call 509-963-1504.

Preparatory Strings Program

Program Coordinator: Bret P. Smith, PhD
Department of Music

The Preparatory Strings Program serves the youth of Kittitas Valley by providing string instruction in group classes and conducted ensembles, from beginning to advanced. It consists of six string ensembles and one full symphony orchestra made up of

students from six years old through college. The majority of students start out in either Early Beginners or Beginning Strings and then progress up through the levels to the Kittitas Valley Youth Orchestra. However students may join the beginning groups or audition for the intermediate and advanced groups during any quarter. With the exception of Early Beginners 1 and 2, the ensembles meet for two hours a week and are taught by Central Washington University students. The program provides a great opportunity for Ellensburg youth not only to improve their technical and musical skills, but also to meet other youth involved with music. The Prep Strings program is offered by the Department of Music and the Office of Continuing Education.

To learn more about the Prep Strings Program, visit www.cwu.edu/~music/prep_strings, contact the program director at prepstrings@cwu.edu, or 509-963-1498.

Yoga

Instructor: Lori Chandler
Office of Continuing Education

Yoga is great for stress reduction, weight loss, toning and firming the body, and achieving inner peace. Special sections are available for beginners, advanced, seniors, and those with other special needs. Open to everyone. Call 509-963-1504 for more information.

SUMMER SESSION

Summer Session

Program Coordinator: Geoff Foy, PhD
Office of Continuing Education

Summer at Central is a great place to spend your time—both inside and outside of the classroom. Enjoy learning in a relaxed atmosphere. Choose from more than 500 courses and workshops taught by experienced and engaging faculty and lecturers. Over 150 courses are taught online, so even students who are away from campus can take classes. Summer session at Central provides excellent course choices for degree-seeking students as well as professional development for K-12 educators, classroom teachers, paraprofessionals, and administrators.

Campus housing and dining are available and affordable as are many other service areas including our health center, world-class library, the student union, and the recreation center.

Formal admission to Central as a degree-seeking student is not required for summer study. Enrollment is open to all students, including non-residents (i.e. out-of-state students). Summer tuition rates for non-resident students are the same as those rates charged to residents, so non-residents save money during summer.

Courses are available in many subject areas, covering general education, lower,

and upper division. You will find courses in administrative management, anthropology, communications, education, English, family and consumer sciences, film and video studies, history, industrial and engineering technology, information technology, law and justice, Latin American studies, music, physical education, philosophy, psychology, sociology, theatre, and more.

A complete list of summer session courses and workshops is available each year in March on Safari for currently enrolled students and as a PDF at www.cwu.edu/~regi/course_information.html. The schedule is updated weekly thereafter. For more information about summer session at Central, see www.cwu.edu/summer or call 509-963-1504.

APPLIED RESEARCH

Central Washington Anthropological Survey (CWAS)

Department of Anthropology Office of Continuing Education

The Central Washington Anthropological Survey (CWAS) conducts archaeological investigations in the central counties of Washington and promotes public involvement in the identification and protection of regional archaeological resources. CWAS cooperates with state and federal agencies, Native American tribes and nations, professional archaeologists throughout the state, and state and local archaeological societies to study and preserve Central Washington's archeological resources.

Not only does CWAS perform a valuable service for Central Washington, but in the process, it provides "real world" archaeological work experiences for CWU students who have demonstrated willingness and an ability to perform cultural resource management activities.

CWAS has the tools, equipment, and staff to equip and manage large crews of up to 25 people. It has lab space to process artifacts as well as geologic and sediment samples. And it has both temporary and permanent storage facilities for the care of artifacts collected in the field. CWAS is capable of performing and subsequently reporting on systematic pedestrian surveys, test/ full-scale excavations, detailed GIS applications including mapping, database management, lithic analysis, lab-processing and curation of artifacts, national register nominations, monitoring, literature reviews, remote sensing, and development of archaeological resource management plans.

CWAS offices are centrally located on the Central Washington University campus in Ellensburg. Knowledgeable staff, faculty members, and graduate students are available to discuss archeology, GIS applications, paleontology, excavation, and other customer needs. For more information, call 509-963-1835.

UNDERGRADUATE PROGRAMS OFFERED

Departments and majors, specializations, and minors are listed by college in alphabetical order in this section. Courses numbered from 101-299 are lower-division courses, primarily for freshmen and sophomores; those numbered from 300-499 are upper-division courses, primarily for juniors and seniors. The numbers 296, 396, 496, and 596 designate individual study courses and are available for registration by prior arrangement with the course instructor and approval of the department chair.

The number in parentheses following the course title indicates the amount of credit each course carries. Variable credit courses include the minimum and maximum number of the credits within parentheses.

Not all of the courses are offered every quarter. Final confirmation of courses to be offered, information on new courses and programs, as well as a list of hours, instructor, titles of courses and places of class meetings, is available online in Safari which can be accessed through the CWU home page at www.cwu.edu. A registration handbook is available at Registrar Services or your university center office. This book will assist you in navigating through Safari.

Accounting Department

Accounting Major, BS

Advanced Programs

See the graduate section of this catalog

Aerospace Studies Department (Air Force ROTC)

Aerospace Studies Minor

Africana and Black Studies Program

Africana and Black Studies Minor

American Indian Studies Program

American Indian Studies Minor

Anthropology and Museum Studies Department

Anthropology Major, BA
Anthropology Major, BS
Anthropology Minor
Museum Studies Minor

Art Department

Art Major, BA
Art Major, BFA
Studio Art Specialization
Graphic Design Specialization
Visual Art: Teaching Major, BA
Art History Minor
Art Studio Minor

Asia/Pacific Studies Programs

Asia/Pacific Studies Major, BA
Asia/Pacific Studies Minor

Aviation Department

Aviation Management Major, BS
Aviation Management Specialization
Aviation Maintenance Management Specialization
Professional Pilot Major, BS
Flight Officer Specialization
Commercial Pilot Specialization
Aviation Management Minor
Professional Pilot Minor

Biological Sciences Department

Biology Major, BA
Biology Major, BS
General Biology
Cell and Molecular Biology Specialization
Ecology Specialization
Organismal Biology Specialization
Biology Teaching Major, BS
Biology Minor
Biology Secondary Teaching Minor

Chemistry Department

Chemistry Major, BS
Biochemistry Specialization
Chemistry Teaching Major, BA
Chemistry Minor
Chemistry Teaching Minor

Communication Department

Communication Studies Major, BA
Journalism Major, BA
Print Specialization
Broadcast Specialization
Convergent Media Specialization
Public Relations Major, BA
Advertising Minor
Organizational Communication Minor
Communication Minor
Non-profit Organization Administration Minor

Computer Science Department

Computer Science Major, BS
Computer Science Minor
Applied Computer Science Minor

Douglas Honors College Program

Douglas Honors Minor

Economics Department

Economics Major, BS
Economic and Business Forecasting Specialization
General Economics Specialization
Managerial Economics Specialization
Economics Minor I
Economics Minor II

Education Foundations and Curriculum Department

Profession Education Program

English Department

English Language and Literature Major, BA
English: Writing Specialization
English/Language Arts Teaching Major, BA
Creative Writing Minor
English Language and Literature Minor
Linguistics Minor

Environmental Studies Programs

Environmental Studies Major, BS
Environmental Studies Minor
Energy Studies Minor

Ethnic Studies Program

Ethnic Studies Minor

Family and Consumer Sciences Department

Family and Consumer Sciences Major, BA
Family Studies Major, BS
Family and Consumer Sciences Career and Technical Education Teaching Major, BS
Fashion Merchandising Major, BS
Global Wine Studies Major, BS
Recreation and Tourism Major, BS
Recreation Management Specialization
Tourism Management Specialization
Apparel Design Minor
Family and Consumer Sciences Minor
Family and Consumer Sciences Education Minor
Fashion Merchandising Minor
Community Recreation Minor
Family Studies Minor
Program Development Minor
Recreation Management Minor
Tourism Management Minor
Wine Trade and Tourism Minor

Film and Video Studies Programs

Film and Video Studies Major, BA
Critical Studies Specialization
Production Specialization
Critical Studies Minor
Visual Literacy Minor

Finance and Supply Chain Management Department

Business Administration Major, BS
Finance Specialization
General Business Specialization
Supply Chain Management Specialization
Business Minor

Foreign Languages Department

Foreign Language Majors with Specializations (Chinese, French, German, Japanese, Russian), BA
Foreign Language Broad Area Major, BA
Foreign Language: Teaching Broad Area Major, BA
Foreign Language: Teaching Major, BA
Spanish Major, BA
Spanish Broad Area Major, BA
Spanish Teaching Broad Area Major, BA
Spanish Teaching Major, BA
Foreign Language Minors (Chinese, French, German, Japanese, Russian)
Spanish Minor

Geography Department

Geography Major, BA
Geography Minor

Geological Sciences Department

Earth Science Teaching Major, BA
Environmental Geological Sciences Major, BS
Geology Major, BA
Geology Major, BS
Earth Science Teaching Minor
Geology Minor

History Department

History Major, BA
History: Social Studies Teaching Major, BA
History Minor

Individual Studies Program

Industrial and Engineering Technology Department

Electronics Engineering Technology Major, BS
Computer Engineering Technology Specialization
Electronic Systems Specialization
Construction Management Major, BS
Construction Safety Minor
Technology Education Broad Area Major, BS
Technology Education Major, BS
Industrial Technology Major, BAS
Industrial Technology Major, BS
Mechanical Technology Major, BS
Manufacturing Technology Specialization, BS
Mechanical Technology Specialization, BS
Occupational Safety and Health Major, BAS
Safety and Health Management Major, BAS
Safety and Health Management Major, BS
Industrial Technology Minor
Occupational Safety Technology Minor
Safety and Health Management Minor
Traffic Safety - Safety Education Minor

Information Technology and Administrative Management Department

Information Technology and Administrative Management Major, BAS
Information Technology Specialization
Administrative Management Specialization
Information Technology and Administration Management Major, BS
Administrative Management Specialization
Retail Management and Technology Specialization
Network Administration and Management Specialization
Web and Database Admin. and Management Specialization
Administrative Management Minor or Certificate
Computer Applications Minor or Certificate
Information Technology Minor or Certificate
Retail Management and Technology Minor or Certificate
Web Design and Management Minor or Certificate

Interdisciplinary Studies Program

Interdisciplinary Studies-Social Sciences Major, BS

International Studies and Programs

International Studies Minor

Language, Literacy, and Special Education Department

Special Education Major (P-12), BAEd
Special Education (P-12) Broad Area Major, BAEd

Literacy Minor

Bilingual Education/Teaching English as a Second Language Minor
Special Education Minor
Teaching English as a Second Language (TESL) Minor

Latino and Latin American Studies Program

Latino and Latin American Studies Minor

Law and Justice Department

Law and Justice Major, BA
Law and Justice Minor

Management Department

Business Administration Major, BS
General Business Specialization
Human Resource Management Specialization
Management and Organizational Specialization
Marketing Management Specialization
Business Minor

Mathematics Department

Mathematics Major, BS
Actuarial Science Major, BS
Mathematics: Secondary Teaching Major, BA
Middle Level Mathematics and Science Teaching Major, BA
Mathematics Minor
Mathematics Secondary Teaching Minor
Middle Level Math Teaching Minor

Military Science Department

Military Science Minor

Music Department

Composition Major, BM
Music Vocal Performance Major, BM
Keyboard Performance Major, BM
Percussion/Wind/String Performance Major, BM
Music Education Major, BM
Broad Area Specialization
Choral Music Specialization
Instrumental Music Specialization
Music Major, BA
Music Jazz Specialization
Music Minor
Non-profit Organization Administration Minor

Nutrition, Exercise, and Health Sciences Department

Exercise Science Major, BS
Clinical Physiology Specialization
Physical Education Exercise Science Minor
Physical Education Athletic Training Minor
Food Science and Nutrition Major, BS
Foods and Nutrition Specialization
Dietetics Specialization
Food Service Management, BAS
Athletic Training Minor
Exercise Science Minor
Nutrition Minor
Food Service Management Minor
Paramedicine Major, BS

Philosophy and Religious Studies Department

Philosophy Major, BA
 Religious Studies Specialization
 Philosophy Minor
 Religious Studies Minor
 Ethics Minor

Physical Education, School and Public Health Department

Physical Education and School Health Major, BS
 Physical Education Dance Minor
 Physical Education Dance: Teaching Minor
 Physical Education Coaching Minor
 Public Health Major, BS
 Community Health Education Specialization
 Pre-Nursing in Public Health Specialization
 Community Health Education Minor

Physics Department

Physics Major, BA
 Physics Major, BS
 Dual-degree Physics/Engineering Program
 Astronomy Minor
 Physics Minor

Political Science Department

Political Science Major, BA
 Political Science Minor

Pre-Professional Programs

Pre-Dentistry
 Pre-Dietetics
 Pre-Engineering
 Pre-Law
 Pre-Medicine
 Pre-Nursing in Public Health
 Pre-Occupational Therapy
 Pre-Optometry
 Pre-Pharmacy
 Pre-Physical Therapy
 Pre-Veterinary

Primate Behavior and Ecology Program

Primate Behavior and Ecology Major, BS

Psychology Department

Psychology Major, BA
 Psychology Minor

Public Policy Program

Public Policy Major, BS

Science Education Department

General Science Teaching Major, BS
 Middle Level Math and Science Teaching Major, BA
 Broad Area Science Teaching Minor
 Elementary Education Minor
 Middle Level Science Teaching Minor

Sociology Department

Social Services Major, BS
 Sociology Major BA
 Sociology Major, BS
 Sociology Minor
 Social Services Minor

STEP (Science Talent Expansion Program)

Teaching Elementary, Adolescent, and Young Children Department

Early Childhood Education Major, BAEd
 Elementary Education Major, BAEd
 Early Childhood Education Minor

Theatre Arts Department

Theater Arts-General Studies Major, BA
 Theatre Arts Major, BFA
 Design and Production Specialization
 Performance Specialization
 Musical Theatre Specialization
 Theatre Arts: Teaching K-12 Major, BA
 Apparel Design Minor
 Theatre Arts Minor
 Non-profit Organization Administration Minor

University English as a Second Language Program (UESL)

Women's Studies Program

Women's Studies Minor

ACCOUNTING DEPARTMENT

College of Business
 Ellensburg (E)
 Shaw-Smyser Hall, room 327
 CWU-Des Moines (D)
 CWU-Lynnwood (L)

509-963-3340

Fax: 509-963-2875

www.cwu.edu/~cb/acct/

See the website for how this program may be used for educational and career purposes.

Faculty and Staff

Chair

Marvin L. Bouillon, PhD, (E)
 Shaw-Smyser Hall, room 340

Director, MPA Program

Ronald R. Tidd, PhD, CPA (E)

Professors

Marvin L. Bouillon, PhD, (E)
 Norman J. Gierlasinski, DBA, CPA, CFE, CIA (D)
 Gary W. Heesacker, MBA, CPA (E)
 Robert E. Holtfreter, PhD (E)
 Karen D. Martinis, MBA, CPA (E)
 Ronald R. Tidd, PhD, CPA (E)

Associate Professors

MaryAnne Atkinson, PhD (L)
 Linda Larson, PhD, DBA, CPA, CIA, CISA, CFE (L)
 Michael Ruble, PhD, CPA (L)
 James H. Thompson, PhD, (D)

Assistant Professors

William Bailey, JD, LL.M (L)
 Scott Leong, PhD (D)
 Ke Zhong, PhD (D)

Staff

Sharon Damm, secretary

Department Information

We help our students learn foundation knowledge and skills in accounting and business that will aid them in private, government, or non-profit careers or prepare them for additional education for public accounting careers.

Bachelor of Science in Accounting Major

Admission Requirements

Students must apply and be admitted to the major before enrolling in 300- and 400-level courses in the College of Business (CB). However, students may enroll in ACCT 305, ACCT 346, and/or ACCT 350 before being admitted to the major if they have completed ACCT 252. At the time of application, all 200-level, pre-admission requirements should be substantially completed. Equivalent lower-division (100- and 200-level) courses may be transferred toward meeting the pre-admission requirements. Application forms are available in the department offices. Applicants must participate in a mandatory orientation activity as part of the application process. The completed application must be accompanied by transcripts that reflect all prior college work. Admission shall be based on grades earned in the pre-admission requirements.

Business courses taken to fulfill the requirements for an undergraduate or graduate degree from the CWU College of Business must have been taken within the last 10 years at the time of graduation. Exceptions may be made, but must be approved prior to acceptance into the College of Business by the department chair and dean or designee.

International students whose native language is not English must meet one of the following English proficiency requirements:

- A score of 71 or above on the Internet-based TOEFL or 525 or above on the paper-based TOEFL

OR

- A score of 6.0 or above on the International English Language Testing System (IELTS) exam.

Students wishing to have credits from non-United States institutions considered for transfer into the College of Business for any major or minor must have their transcripts evaluated through outside credential evaluators who are members of the National Association of Credential Evaluation Services (NACES), such as the Foundation for International Services (FIS), the World Education Services (WES), or Educational Perspectives. Those endorsed by the Washington Society of CPAs are preferred.

A cumulative grade point average of 2.5 in the pre-admission requirements courses must be achieved with a minimum grade of C- (1.7) in each course. The credit/no credit

option will not be accepted for any of these courses and the department will strictly enforce the CWU policy on repeating classes. The applicant also must have completed all university general education requirements. The applicant must have earned a minimum cumulative GPA of 2.50 in all collegiate study. These criteria also apply to equivalent courses transferred from other institutions.

Students who have met all the above requirements will be admitted unless the number of eligible applicants exceeds available space. In that case, acceptance will be competitive, based on a selection index. Post-baccalaureate CWU accounting graduates and accounting graduates from AACSB International-accredited schools may take upper-division accounting courses on a space-available basis.

Students majoring outside CB, who are required to take courses in this college for either their major or minor, will be eligible to enroll on a space-available basis. These students will be given priority over other non-college majors wishing to enroll in courses.

If a student that has been admitted to the College of Business is placed on academic probation, suspension, had repeated academic warnings, or has repeat academic course withdrawals, and then the student's admission into the College of Business may be rescinded. Once rescinded, the student will be denied readmission to the College of Business for one year following which a written petition for readmission must be presented. The decision to readmit will be based on meeting current admission standards, analysis of the entire academic record, as well as any other sources of information deemed appropriate. Readmission is not guaranteed.

Graduation Requirements

To graduate with an accounting degree, the department requires a cumulative grade-point average of at least 2.0 in in-the-major upper-division accounting courses completed at CWU, in addition to the university grade-point average requirements that apply to all CWU major programs. Accounting majors cannot earn a business minor.

NOTE: A student with a GPA less than 2.0 in their upper-level accounting classes will only be allowed to take one upper-level accounting class per quarter. This is also the case for students on academic warning, probation, or suspension.

Upper-division (300-400 level) courses may be transferred toward meeting the major requirements only with the approval of the department chair and the college dean (or designee). Transfer students must earn at least 45 credits at CWU. Transfer students and post-baccalaureate students must complete at least 20 CWU in-the-major upper-division accounting credits to be eligible for the accounting degree. In addition to the 20 CWU in-the-major upper-division credits,

transfer students and post-baccalaureate students must complete an additional 17 CWU in-the-major accounting major required course or elective credits to be eligible for the accounting degree. Lower-division (100-200 level) accounting or business courses cannot be transferred to meet upper-division (300-400 level) course requirements. No accounting courses are offered for challenge by examination. CWU students who desire to study abroad must have the department chair and dean pre-approve credits transferred back to the College of Business using the Credit Transfer Agreement.

Central accounting students who are up to 180 days prior to obtaining a degree and at least 225 quarter credits, or who are completing the Master of Professional Accountancy Program, are qualified to sit for the Uniform Certified Public Accountant (CPA) examination. Washington law requires individuals wishing to sit for the CPA examination to have completed a minimum of 36 quarter credits of study in accounting and a minimum of 36 quarter credits in related business courses. See WAC4-25-710 for educational requirements). Registration for the examination is made through the State Board of Accountancy, Olympia, Washington (www.cpaboard.wa.gov/). Graduates are also prepared to sit for the Certified Management Accounting examination and the Certified Internal Auditor examination. Students should consult with their major advisor for details.

Pre-admission Requirements

ACCT 251 - Financial Accounting	5
ACCT 252 - Managerial Accounting	5
MATH 130 - Finite Mathematics or other college-level math course approved by the accounting department chair	5
BUS 221 - Introductory Business Statistics	5
BUS 241 - Legal Environment of Business	5
ECON 201 - Principles of Economics Micro	5
ECON 202 - Principles of Economics Macro	5
Select one of the following	5
MATH 153 - Pre-Calculus Mathematics I (5)	
MATH 154 - Pre-Calculus Mathematics II (5)	
MATH 170 - Intuitive Calculus (5)	
MATH 172 - Calculus I (5)	
MATH 173 - Calculus (5)	

Pre-admission Total Credits: 40

Required Courses

ACCT 305 - Cost Accounting	5
ACCT 346 - Income Tax Accounting I	5
ACCT 350 - Intermediate Accounting I	5
ACCT 351 - Intermediate Accounting II	5
ACCT 460 - Auditing	5
FIN 370 - Introductory Financial Management	5
MGT 382 - Principles of Management	5
MGT 489 - Strategic Management	5
MKT 362 - Essential Marketing Concepts	5
SCM 310 - Supply Chain Management	5

Select either 5
 ACCT 455 - Accounting Information Systems (5)
 OR
 MIS 386 - Management Information Systems (5)

Select one of the following 4-5
 ADMG 385 - Business Communications and Report Writing (5)
 COM 345 - Business and Professional Speaking (4)
 ENG 310 - Technical Writing (4)

Selected from the following electives 15
 ACCT 405, ACCT 430, ACCT 446, ACCT 450, ACCT 455*, ACCT 461, ACCT 484**, BUS 341

Total Credits: 114-115

*May not be used as an elective if taken in place of MIS 386.

**ACCT 484, if taken, should be completed no later than fall of senior year.

Accounting Courses

ACCT 251. Financial Accounting (5). An introduction to the theory and practice of accounting and financial reporting. Topics include the accounting cycle, financial statements, and corporate accounting for assets, liabilities, equities, revenues and expenses.

ACCT 252. Managerial Accounting (5). An introduction to the use of accounting information by managers. Topics included the use of accounting information for planning and control, performance evaluation, decision making, and the statement of cash flows, along with financial statement analysis. Prerequisite: ACCT 251.

ACCT 296. Individual Study (1-6).

ACCT 301. Financial Accounting Analysis (5). Underlying concepts, preparation, and use of financial statements from the user's viewpoint. Not open to accounting and business administration majors.

ACCT 305. Cost Accounting (5). Economics of cost accounting; industrial analysis, production control through costs, types of cost systems, and burden application. Prerequisites: C- or better in ACCT 251 and ACCT 252.

ACCT 346. Income Tax Accounting I (5). Accounting theory and practices of federal income taxation based on a study of governmental publications—the laws, regulations, and digest of official income tax decisions. Prerequisites: C- or better in ACCT 251 and ACCT 252.

ACCT 350. Intermediate Accounting I (5). Theory underlying the presentation of current and fixed assets, liabilities, and net worth. Prerequisites: C- or better in ACCT 251 and ACCT 252.

ACCT 351. Intermediate Accounting II (5). A continuation of the theory underlying the presentation of assets, liabilities, and net worth. Financial statement analysis, comparative statements, and statement of changes in cash flows. Prerequisites: ACCT 350 with a C- or better and admission to

the accounting or business administration major.

ACCT 405. Advanced Cost Accounting (5). Computation of mix, yield, and variances; value of information theory systems design; and decision models relating to control of costs. Prerequisites: ACCT 305 and admission to the accounting major.

ACCT 430. Accounting for Non-profit Organizations (5). Accounting and budgetary controls for governmental units and non-profit service organizations, including educational institutions (from school districts to universities) and hospitals. Emphasis is on the advantages, uses, disadvantages, and differences in fund accounting. Prerequisites: ACCT 350 and admission to the accounting major.

ACCT 446. Income Tax Accounting II (5). Tax accounting practice, including gross income deductions, depreciation, capital gains and losses, estates and trusts, corporate problems, and administrative procedures. Prerequisites: ACCT 346 and admission to the accounting major.

ACCT 450. Advanced Accounting (5). Accounting theory and practice for business, combinations and consolidated financial statements, foreign currency transactions and translation, partnerships, and advanced special topics. Prerequisites: ACCT 351 and admission to the accounting major.

ACCT 455. Accounting Information Systems (5). Accounting information system development process and related information systems technologies. Includes the application, control, and audit of accounting information systems. Prerequisites: ACCT 350 and admission to either the accounting or business administration major.

ACCT 460. Auditing (5). Auditor's functions and responsibilities. Evaluation of the system of internal control, the determination of appropriate auditing procedures, and the extent of their application. Prerequisites: ACCT 351 and admission to the accounting major.

ACCT 461. Fraud Examination (5). Detection and prevention of financial statement fraud and other forms of business fraud. ACCT 461 and ACCT 561 are equivalent courses; students may not receive credit for both. Prerequisites: ACCT 351 and admission to the accounting major.

ACCT 484. Professional Writing and Speaking for the Accountant (5). Develop written and verbal communications skills for practical application in public, private, and governmental accounting fields. Includes interviewing techniques, preparation and presentation of group and individual reports, and preparation of resumes, letters, memos, and work papers. Prerequisites: ACCT 351, ACCT 460 and admission to the accounting major.

ACCT 490. Cooperative Education (1-12). An individualized, contracted field experience with business, industry, government, or social service agencies. This contractual

arrangement involves a student learning plan, cooperating employer supervision, and faculty coordination. (Student should have an overall GPA greater than a cumulative 2.0 in order to get internship credit.) Note: While ACCT 490 can no longer be used as an accounting elective in the accounting major, it can still be used toward the 20 hours of internship credit allowed by the university and for the 225-hour requirement for the CPA examination. May be repeated for credit. Grade will either be S or U. By permission. Prerequisites: admission to the accounting major.

ACCT 492. Volunteer Income Tax Assistance (2). Preparation of tax returns of low income taxpayers, including tax return preparation training. Grade will either be S or U. Prerequisites: ACCT 346 and admission to the accounting major.

ACCT 493. Applied Accounting Techniques (3). Under direct supervision of the instructor, assist in answering accounting students' questions and aid in completion of homework for a minimum of six hours weekly. Other tasks as assigned. Grade will either be S or U. Prerequisite: admission to the accounting major.

ACCT 496. Individual Study (1-6).

ACCT 498. Special Topics (1-6).

ACCT 499. Seminar (1-5).

ADVANCED PROGRAMS DEPARTMENT

College of Education and Professional Studies
Ellensburg

Black Hall, room 214-25

509-963-1751

Fax: 509-963-1424

www.cwu.edu/~ap/

See the website for how these programs may be used for educational and career purposes.

Faculty and Staff Chair

Henry Williams, EdD

Professors

Henry Williams, EdD

James Pappas, EdD

Associate Professors

Marwin Britto, PhD

Andrea Sledge, PhD

Assistant Professor

Dennis Szal, EdD

Lecturer

Leona Lindvig, MEd, library media

Staff

Stephanie Harris, secretary senior

Education Library Media Courses

EDLM 414. Media Development (3).

Introduction to design and production of various instructional materials from manual to more complex computer techniques. EDLM 414 and EDLM 514 are equivalent courses; students may not receive credit for both.

EDLM 416. Advanced Media Utilization (3).

Explores recent research, experimental programs, and new developments in the utilization of media. EDLM 416 and EDLM 516 are equivalent courses; students may not receive credit for both. Prerequisite: EDCS 316.

EDLM 426. Instructional Methods for Library Media (3).

Survey and learn instructional methods filled by library media specialists and the instructional methods they employ: storytelling, creative drama, authoring software, effective presentation, literature appreciation, reading motivation, puppetry, library skills, independent learning skills, and information literacy skills. EDLM 426 and EDLM 526 are equivalent courses; students may not receive credit for both.

EDLM 436. Selecting Literature for Children and Young Adults (3).

Prospective school library media specialists will learn how to develop quality children and young adult literature collections and programs. EDLM 436 and EDLM 536 are equivalent courses; students may not receive credit for both.

EDLM 448. Collection Development/Library Media (3).

Explore the methods used and the issues and solutions involved in developing a collection in a school library media center. EDLM 448 and EDLM 548 are equivalent courses; students may not receive credit for both.

EDLM 458. Cataloging and Classification for Library Media (3).

Cataloging and classification of library media materials with an emphasis on MARC records. EDLM 458 and EDLM 558 are equivalent courses; students may not receive credit for both.

EDLM 468. Information Storage and Retrieval (3).

Reference collection development and utilization with print, electronic, and on-line resources. EDLM 468 and EDLM 568 are equivalent courses; students may not receive credit for both.

EDLM 478. Administration of Media/Technology Programs (3).

Develop skills and expertise needed to manage media/technology programs at school building, school district, college and university, and private sector levels. EDLM 478 and EDLM 578 are equivalent courses; students may not receive credit for both.

AEROSPACE STUDIES DEPARTMENT (AIR FORCE ROTC)

College of Education and Professional Studies
Ellensburg
Peterson Hall, room 203

509-963-2314
800-CWU-ROTC
Fax: 509-963-2235
www.cwu.edu/~afrotc

See Aerospace Studies (Air Force ROTC)
website for how this program may be used
for educational and career purposes.

Faculty and Staff Chair

Colonel John E. Armour, Jr., MA, human
relations; and MA, military operational art
and science

Assistant Professors

Major Matthew G. Wilson, MA, instrumental
conducting
Captain Thomas T. vonAhlefeld, BS,
Criminology

Staff

Staff Sergeant Jeremy S. McLane, non-
commissioned officer-in-charge, personnel
Staff Sergeant Jerome A. Yates, non-
commissioned officer-in-charge, knowledge
operations management
Kendra L. Sterkel, program coordinator

Department Information

The United States Air Force Reserve
Officer Training Corps (AFROTC),
represented at CWU by Detachment 895,
develops leaders in preparation to be
commissioned as second lieutenants in
the U.S. Air Force. Upon completing a
baccalaureate/master's degree and all officer
qualifications, graduates are commissioned
and enter active duty. The program is
designed to work with your other academic
courses and is taught by active duty officer/
professors. The Air Force is seeking qualified
candidates from under-represented groups
including women, African Americans,
Hispanics, Asian/Pacific Islanders, and
Native American/Alaskan Natives.

The program is designed to educate
students about aerospace studies, with
a leadership lab to provide a unique
opportunity to practice leadership skills.
The Aerospace Studies courses cover an
introduction to the Air Force, history,
leadership, and regional studies/preparation
for active duty. Between sophomore and
junior year, students attend a four-week
field-training encampment, where they
are introduced to an intensive training
environment designed to teach critical
teamwork, leadership, and fellowship skills.
Each year there is also an opportunity to visit
an Air Force base to see the environment and

meet members of the Air Force. All textbooks,
materials, and uniforms are provided.

Admission Requirements

Students from any academic major degree
program with a minimum 2.0 cumulative
GPA are eligible. Enrollment in the freshman
and sophomore classes creates no obligation
to the Air Force. A contractual agreement is
required after the sophomore year to continue
in the ROTC program. Students are eligible to
compete for an enrollment allocation into the
POC only after successfully passing a medical
examination, physical fitness test and having
an excellent SAT, ACT or AFOQT (Air Force
Officer Qualifying Test) score.

Transfer Students

Students transferring from other
institutions who are interested in pursuing a
commission in the Air Force should contact
the Unit Admissions Officer prior to their fall
quarter, if possible.

Scholarships

AFROTC competitive merit scholarships
are available and awarded to both non-
technical and technical majors. A scholarship
will normally cover tuition, fees, and books.
Those who have never been a full-time college
student may apply for a four-year AFROTC
scholarship at www.afrotc.com by December
1 (the year prior to attending college). College
freshmen and sophomores may compete
for three-year and two-year scholarships.
All contracted cadets in good standing
receive a monthly stipend, separate from any
scholarships.

Special Training Opportunities

There are a variety of summer programs
available to enhance a student's knowledge
of the Air Force. Opportunities such as base
visits, flying, parachuting, Air Force Office
of Special Investigations, engineering, space
orientation, as well as trips to other countries
to enhance cultural awareness or language
immersion. All travel and meals are provided.

Aerospace Studies Minor

AFROTC courses are accredited and
may be taken as an academic minor or as free
electives. The Aerospace Studies minor is
awarded upon successful completion of the
required courses.

Required Courses

AFRO 301 - Air Force Leadership Studies	.. 3
AFRO 302 - Air Force Leadership Studies	.. 3
AFRO 303 - Air Force Leadership Studies	.. 3
AFRO 401 - National Security Affairs and Preparation for Active Duty 3
AFRO 402 - National Security Affairs and Preparation for Active Duty 3
AFRO 403 - National Security Affairs and Preparation for Active Duty 3

Total Credits: 18

Aerospace Studies Courses

AFRO 101. Foundations of the USAF (1).

A survey course briefly overviewing Air
Force structure, missions, organizations,
officership, professionalism, and an
introduction to communicative skills.

AFRO 101LAB. GMC Leadership Laboratory

(2). Practical experience in Air Force
customs and courtesies, physical fitness,
drills, ceremonies, and opportunities
available to commissioned officers. Two
hours weekly plus mandatory physical
training. Grade will either be S or U.
Corequisite: AFRO 101.

AFRO 102. Foundations of the USAF (1).

A survey course briefly overviewing Air
Force structure, missions, organizations,
officership, professionalism, and an
introduction to communicative skills.

AFRO 102LAB. GMC Leadership Laboratory

(2). Practical experience in Air Force
customs and courtesies, physical fitness,
drills, ceremonies, and opportunities
available to commissioned officers. Two
hours weekly plus mandatory physical
training. Grade will either be S or U.
Corequisite: AFRO 102.

AFRO 103. Foundations of the USAF (1).

A survey course briefly overviewing Air
Force structure, missions, organizations,
officership, professionalism, and an
introduction to communicative skills.

AFRO 103LAB. GMC Leadership Laboratory

(2). Practical experience in Air Force
customs and courtesies, physical fitness,
drills, ceremonies, and opportunities
available to commissioned officers. Two
hours weekly plus mandatory physical
training. Grade will either be S or U.
Corequisite: AFRO 103.

AFRO 201. The Evolution of USAF Air

and Space Power (1). Through historical
examples, we examine the development
of Air Force capabilities and missions to
demonstrate the evolution of today's USAF
air and space power.

AFRO 201LAB. GMC Leadership Laboratory

(2). Practical experience in Air Force
customs and courtesies, drills, ceremonies,
giving military commands, and preparation
for field training. Two hours weekly plus
mandatory physical training. Grade will
either be S or U. Corequisite: AFRO 201.

AFRO 202. The Evolution of USAF Air

and Space Power (1). Through historical
examples, we examine the development
of Air Force capabilities and missions to
demonstrate the evolution of today's USAF
air and space power.

AFRO 202LAB. GMC Leadership Laboratory

(2). Practical experience in Air Force
customs and courtesies, drills, ceremonies,
giving military commands, and preparation
for field training. Two hours weekly plus
mandatory physical training. Grade will
either be S or U. Corequisite: AFRO 202.

AFRO 203. The Evolution of USAF Air

and Space Power (1). Through historical
examples, we examine the development

of Air Force capabilities and missions to demonstrate the evolution of today's USAF air and space power.

AFRO 203LAB. GMC Leadership

Laboratory (2). Practical experience in Air Force customs and courtesies, drill and ceremonies, giving military commands, and preparation for field training. Two hours weekly plus mandatory physical training. Grade will either be S or U. Corequisite: AFRO 203.

AFRO 296. Individual Study (1-3). May be repeated for credit.

AFRO 298. Special Topics (1-6). May be repeated for credit under different titles.

AFRO 301. Air Force Leadership Studies

(3). Provides leadership, management fundamentals, professional knowledge, Air Force personnel and evaluation systems, leadership ethics, and the communication skills required of an Air Force junior officer.

AFRO 301LAB. POC Leadership Laboratory

(2). Students plan, organize, coordinate, and direct cadet corps activities, enhancing communication, management, and other leadership skills. Two hours weekly plus mandatory physical training. Grade will either be S or U. Corequisite: AFRO 301.

AFRO 302. Air Force Leadership Studies

(3). Provides leadership, management fundamentals, professional knowledge, Air Force personnel and evaluation systems, leadership ethics, and the communication skills required of an Air Force junior officer.

AFRO 302LAB. POC Leadership Laboratory

(2). Students plan, organize, coordinate, and direct cadet corps activities, enhancing communication, management, and other leadership skills. Two hours weekly plus mandatory physical training. Grade will either be S or U. Corequisite: AFRO 302.

AFRO 303. Air Force Leadership Studies

(3). Provides leadership, management fundamentals, professional knowledge, Air Force personnel and evaluation systems, leadership ethics, and the communication skills required of an Air Force junior officer.

AFRO 303LAB. POC Leadership Laboratory

(2). Students plan, organize, coordinate, and direct cadet corps activities, enhancing communication, management, and other leadership skills. Two hours weekly plus mandatory physical training. Grade will either be S or U. Corequisite: AFRO 303.

AFRO 350. Four-week Summer Field

Training (3). Organization, operation, and mission of an Air Force base; physical conditioning; applied leadership training and evaluation; marksmanship; survival orientation; and field exercises. May be repeated for credit. Grade will either be S or U.

AFRO 398. Special Topics (1-6).

AFRO 401. National Security Affairs and

Preparation for Active Duty (3). Examines national security process, regional studies, advanced leadership ethics, Air Force Doctrine, officership, military justice, and preparation for active duty.

AFRO 401LAB. POC Leadership Laboratory

(2). Advanced leadership experiences

involving planning and conducting cadet training activities, oral and written communications, and developing human relations skills. Two hours weekly plus mandatory physical training. Grade will either be S or U. Corequisite: AFRO 401.

AFRO 402. National Security Affairs and Preparation for Active Duty (3).

Examines national security process, regional studies, advanced leadership ethics, Air Force Doctrine, officership, military justice, and preparation for active duty.

AFRO 402LAB. POC Leadership Laboratory

(2). Advanced leadership experiences involving planning and conducting cadet training activities, oral and written communications, and developing human relations skills. Two hours weekly plus mandatory physical training. Grade will either be S or U. Corequisite: AFRO 402.

AFRO 403. National Security Affairs and

Preparation for Active Duty (3). Examines national security process, regional studies, advanced leadership ethics, Air Force Doctrine, officership, military justice, and preparation for active duty.

AFRO 403LAB. POC Leadership Laboratory

(2). Advanced leadership experiences involving planning and conducting cadet training activities, oral and written communications, and developing human relations skills. Two hours weekly plus mandatory physical training. Grade will either be S or U. Corequisite: AFRO 403.

AFRO 496. Individual Study (1-3).

AFRO 498. Special Topics (1-6).

AFRICANA AND BLACK STUDIES PROGRAM

College of Arts and Humanities
Ellensburg
Language and Literature Bldg., room 408F

509-963-1553

www.cwu.edu/~africana

Program Directors

Bobby Cummings, PhD, English, Michaelson Hall, room 133

Paulus Pimomo, PhD, English, Language and Literature Bldg., room 408F

Program Advisor

Bobby Cummings, PhD

Program Faculty Professors

Delores Cleary, PhD, sociology, ethnic studies, American Indian studies

Bobby Cummings, PhD, curriculum, rhetoric and composition, African American literature

Paulus Pimomo, PhD, English

Charles Reasons, LLB, criminology, criminal justice, law

Todd Schaefer, PhD, political science

Associate Professors

Lois Breedlove, MA, journalism

Nelson Pichardo, PhD, sociology, ethnic studies

Assistant Professors

Teresa Francis, JD, LLM, criminal law, correctional law

Raymond Hall, PhD, folklore

Lecturer

Karen Francis-McWhite, MA, English

Africana and Black Studies Minor

The Africana and black studies minor program offers interdisciplinary study of the history, culture, economics, and political institutions that have shaped the experiences of people of African ancestry throughout the world. The program serves as an interdisciplinary intellectual center for study and research in the many dimensions of African and black diasporic experiences, and for application of knowledge and scholarship to advance the common good. It provides access for students and scholars to a broad range of information and research by drawing upon the insights of English, geography, history, political science, music, and other disciplines at Central. The minor is designed for all highly motivated and adventurous students in all majors who have a serious interest in learning about the black diaspora and its impact on the individual countries and on the interdependent world in which we live.

Students in the minor are encouraged to take advantage of study-abroad programs to Africa and to countries of the black diaspora. Africana and Black Studies minors are expected to participate actively in co-curricular multicultural learning experiences offered by the following: student organizations, Students for the Dream Living Learning Community, Diversity Education Center, Campus Life activities, Center for the Dream, University Housing and New Student Programs, Center for Student Empowerment, Latino and Latin American Studies Program, and the David Wayne Coon Center for Excellence in Leadership.

Required Courses

Select one..... 5

ABS 110 - Expressive African American Culture (5)

OR

ABS 201 - Introduction to Africana Studies 1400 to 1865 (5)

OR

ABS 202 - Introduction to Africana Studies 1865 to Present (5)

HIST 332 - History of the Black Diaspora ... 5

Africana Electives

Select three courses12-15

ABS 300 - Black Diaspora Studies (5)

ABS 302 - Hip Hop as Global Culture (5)

ABS 303 - African and African American Fiction as History (5)

ABS 305 - 20th Century Black Women's Literature (4)
 ABS 306 - African Women: Models of Empowerment (5)
 ABS 310 - Black Diaspora: France and French Caribbean (4)
 ABS 400 - Race and Literature (4)
 HIST 331 - Colonial Africa (3-5)
 ENG 330 - African American Literature (5)

Social Science Electives

Select one course4-5
 POSC 365 - African Politics (5)
 SOC 365 - Minority Groups (5)
 ETS/SOC 354 - Minority Experiences (5)
 LAJ 402 - African Americans and the Constitution (4)

Special Topics

ABS 398 - Special Topics4-6

Total: 30-36

Africana and Black Studies Courses

ABS 110. Expressive African American Culture (5). An interdisciplinary exploration of a variety of perspectives in African American folk culture, from oral expressions developed during slavery to contemporary rap and stand-up comedy. The course includes an overview of the worldwide contribution of black oral performative art. This is a General Education writing course-A and H-Literature and Humanities. Prerequisite: ENG 101 with a grade of C- or better.

ABS 201. Introduction to Africana Studies Before 1865 (5). A survey of African American studies from 1400 to 1865 which traces the development of African Americans through the Middle passages into the antebellum Southern United States.

ABS 202. Introduction to Africana Studies, 1865-Present (5). Traces the development of the African Diaspora in the United States from reconstruction to the present.

ABS 300. Black Diaspora Studies (5). Examines communities developing from displacement of Africans during colonization of the New World and the impact of these communities on Latin America and the Caribbean.

ABS 302. Hip Hop as Global Culture (5). This course examines Africana and black diasporic connections through popular culture using hip hop music. Hip hop allows us to study and understand contemporary history of black youth in Africa, Europe, and North America.

ABS 303. African and African American Fiction as History (5). The course will use black fiction to study the history of black people, using works by writers such as Chinua Achebe, Richard Wright, James Baldwin, and Toni Morrison. It will also use films and poems.

ABS 305. 20th Century Black Women's Literature (4). This seminar reads poetry,

fiction, memoir, and criticism by and about black American women from 1919 to the 1990s. Prerequisite: ENG 101.

ABS 306. African Women: Models in Empowerment (5). This online course introduces students to the role of women in Africa's development. Using gender, feminist, and globalization perspectives, students will analyze women's roles in leadership, economics, education, and environmental issues in Africa.

ABS 310. Black Diaspora: France and French Caribbean (4). Examines the arts and culture of historical and contemporary communities in France and the French Caribbean that developed in relation to historical events in France and the colonization of Africa and the New World. Prerequisite: ENG 101.

ABS 398. Special Topics (1-6).

ABS 400. Race and Literature (4). Course reviews theory and use of "race" in the construction of knowledge and in English canonical texts.

AMERICAN INDIAN STUDIES PROGRAM

College of the Sciences
 Ellensburg
 Language and Literature, room 422

509-963-1546

www.cwu.edu/~ais

See website for how this program may be used for educational and career purposes.

Faculty and Staff

Program Directors

Toni Culjak, PhD, English, Language and Literature Building, room 408D

Professors

Tracy Andrews, PhD, anthropology
 Kathleen Barlow, PhD, anthropology
 Delores Cleary, PhD, sociology
 Toni Culjak, PhD, English
 Steven Hackenberger, PhD, anthropology
 Patrick McCutcheon, PhD, anthropology
 Micheal Ogden, PhD, communication
 Morris Ubelacker, PhD, geography

Associate Professors

Daniel Herman, PhD, history
 Patrick Lubinski, PhD, anthropology
 Christopher Schedler, PhD, English

Lecturers

Sharron Connor, MA, philosophy and religious studies

American Indian Studies Minor

The American Indian studies minor program goals are to provide an interdisciplinary opportunity to learn about American Indian peoples, to facilitate research and creative activities that concern American Indian peoples, and to recognize

the diversity represented in the rich heritage of American Indians. Students with a minor in American Indian studies will use academic and experiential knowledge to appreciate the natural and cultural diversity of American Indian people.

Required Courses

AIS 101 - Pre-contact Period of American Indians, Pre-AD 1492 5
 AIS 102 - Contact Period of

American Indians 5
 AIS 103 - Emergence of Contemporary American Indians 5

Humanities Electives.....9-10

Select at least two of the following courses:
 AIS 320/PHIL 320 - American Indian

Philosophy (5)
 AIS 321/RELS 320 - American Indian Spirituality (5)

ENG 332 - American Indian Literature (5)

ENG 334 - American Indian Oral and Non-fiction Literature (5)

ENG 461 - Studies in Film and Culture (5)

ETS 373 - American Indian Authors and Publications (5)

ETS 471 - Issues in American Indian Education (5)

HIST 338 - Conquest and Compromises: American History since 1492 (5)

Science Electives..... 8

Select at least two of the following courses:
 ANTH 324 - North American Archaeology (4)

ANTH 325 - Prehistory of the Pacific Northwest (4)

ANTH 341 - Native American Cultures of the Pacific Northwest (4)

ANTH 347 - Native American Cultures of North America (4)

POSC 411 - American Indian Politics / Sovereignty (4)

SOC 366 - Sociology of American Indians (5)

Additional course opportunities in:
 AIS 296/496 - Individual Studies1-6

AIS 490 - Cooperative Education1-6
 AIS 491 - Workshop1-6

AIS 498 - Special Topics1-5

Total Credits: 32-33

American Indian Studies Courses

AIS 101. Pre-contact Period of American Indians, Pre-AD 1492 (5). An

interdisciplinary approach explores the lifeways and environments of American Indians prior to European contact and settlement. Sources of pre-contact information consist of the archaeological, oral history, and paleoenvironmental records.

AIS 102. Contact Period of American Indians (5). An interdisciplinary study of the life ways and environments of American Indians during the period of European contact. Sources of contact period

information come from the archaeological, American Indian and European written and oral history records. This is a General Education writing course-Social and Behavioral Science.

AIS 103. Emergence of Contemporary American Indians (5). An interdisciplinary approach explores the emergence of contemporary American Indians after AD 1890 with an emphasis on social, political, and cultural aspects. Sources of information about this period come from written and oral history. This is a General Education writing course-Social and Behavioral Science.

AIS 296. Individual Study (1-6).

AIS 320. American Indian Philosophy (5). The course examines philosophy indigenous to North America through native and non-native historical and contemporary sources; explores the interplay of native and non-native philosophical concepts and the influence of indigenous American roots on contemporary American philosophy. AIS 320 and PHIL 320 are equivalent courses; students may not receive credit for both.

AIS 321. American Indian Spirituality (5). Introduction to American Indian spirituality with emphasis on myths, rituals, and beliefs; including historical, economic, political and legal issues that influence the ways of American Indian spiritual practice; Ghost Dance, Native American Church, etc. AIS 321 and RELS 320 are equivalent courses; students may not receive credit for both.

AIS 490. Cooperative Education (1-12). An individualized contracted field experience with business, industry, government, or social service agencies. This contractual arrangement involves a student-learning plan, cooperating employer supervision, and faculty coordination. May be repeated for credit. Grade will either be S or U. By permission.

AIS 491. Workshop (1-6). Occasional workshops will be offered to provide a context for American Indian artists/scholars to teach. May be repeated for credit. Grade will either be S or U.

AIS 496. Individual Study (1-6).

AIS 498. Special Topics (1-5).



ANTHROPOLOGY AND MUSEUM STUDIES DEPARTMENT

College of the Sciences
Ellensburg
Dean Hall, room 357A

509-963-3201

Fax: 509-963-3215

www.cwu.edu/~anthro

See website for how this program may be used for educational and career purposes.

Faculty and Staff

Chair

Kathleen Barlow, PhD, Dean Hall, room 356

Professors

John A. Alsoszatai-Petheo, PhD, biological anthropology

Tracy J. Andrews, PhD, sociocultural anthropology, ethnicity, medical and ecological anthropology, gender, Native North America

Kathleen Barlow, PhD, psychological anthropology, learning and culture, museum anthropology, art and aesthetics, resource management

Anne S. Denman (emeritus), PhD, American culture, intercultural issues

Steven Hackenberger, PhD, archaeology, cultural resource management, North America and Caribbean

Patrick Lubinski, PhD, archaeology, zooarchaeology, cultural resource management, North America

Patrick McCutcheon, PhD, archaeology, evolutionary and environmental archaeology, cultural resource management

William C. Smith (emeritus), PhD, archaeology, museum studies, comparative world prehistory

Penglin Wang, PhD, linguistic and cultural anthropology, East and Central/Inner Asia, China

Associate Professors

Loran E. Cutsinger, PhD, cultural anthropology, informal economy, gender, globalization, transnationalism, British Caribbean

Lene Pedersen, PhD, sociocultural anthropology, visual and environmental anthropology, postcolonialism, SE Asia (Indonesia), E. Africa, circumpolar North

Lori K. Sheeran, PhD, biological anthropology, primate ecology, gibbons, China

Assistant Professors

Mary Lee Jensvold, PhD, primate behavior and ecology, communication, CHCI

Joseph Lorenz, PhD, biological anthropology, anthropologist genetics, DNA, ancient DNA, genetics of American Indians, North America

Staff

Penelope Anderson, secretary senior

Department Information

Anthropology presents an integrated perspective on the cultural and biological nature of humans. Anthropologists study present and past human diversity through classroom, laboratory, and field studies in cultural and biological anthropology, including archaeology, linguistics, ethnology, and applied anthropology.

Students interested in major and minor programs should contact the department office as soon as possible for further information, application forms, and assignment of an advisor. Anthropology majors are expected to meet with their advisors at least once a quarter.

Students need a GPA of 2.5 or higher to be admitted to the department.

Special Programs

Reflecting the broad nature of anthropological study, the department directly sponsors or is affiliated with a wide range of on- and off-campus options to broaden classroom experiences. Further information about the following programs is available through the anthropology department office:

- Museum Studies Program, offering coursework, field experiences, and projects with local and regional museums
- Central Washington Archaeological Survey (CWAS), a service, research, and public information facility with special emphasis in the Northwest
- Bachelor of science in primate behavior and ecology, an interdisciplinary program providing undergraduate training in method and theory of primatology as basis for research, laboratory, and field experience
- Master of science in resource management, offering an integrated program in natural and cultural resource management including anthropology classes in cultural resource management, and historic preservation
- Master of science in primate behavior, an interdisciplinary program in primatology, including courses in the history, field and lab methods, and current topics and issues in the discipline
- Macintosh and PC computer labs housed in Farrell Hall
- Center for Spatial Information, providing a range of Geographic Information System (GIS) tools for analysis of social and natural science data
- Summer workshops and field schools, including survey archaeology in eastern Washington, primate and biodiversity studies in China, and workshops in forensic anthropology

- Study abroad opportunities coordinated through the CWU Office of International Study and programs
- Departmental honors program encourages individualized research and study in a sub-area of anthropology. It is open to junior and senior students with an anthropology major GPA of 3.0 or better
- Anthropology Student Association, an active student group which sponsors academic and social events related to the discipline.

Anthropology Core Requirements

ANTH 110 - Introduction to Biological Anthropology	5
ANTH 110LAB - Biological Anthropology Laboratory	1
OR	
ANTH 309LAB - Skeletal Analysis and Comparison	
ANTH 120 - Introduction to Archaeology ..	5
ANTH 130 - Introduction to Cultural Anthropology	5
ANTH 180 - Introduction to Linguistics ..	5
ANTH 301 - Anthropology: Principles and Assessment	2

Total Core Credits: 23

Bachelor of Science

Anthropology Major

This major prepares students for graduate work in anthropology or for careers in anthropology and closely related fields. Electives are chosen in consultation with an advisor to lead into specialization in areas such as: ethnology, linguistics, archaeology, environmental studies, or biological anthropology. Students in this major must have course schedules approved quarterly by their departmental advisors.

Required Courses

Anthropology Core Requirements	23
ANTH 451 - History and Theory of Anthropology	4
ANTH 458 - Senior Comprehensive Survey	4
Department approved 400-level seminar ..	3-4

Select one course in the following subfields:3-4
Archaeology, Biological Anthropology, and Linguistics.

Archaeology:

ANTH 320 - Research/Laboratory in Archaeology (2)	
ANTH 321 - Archaeological Methods (4)	
ANTH 321LAB - Archaeological Methods Laboratory (2)	
ANTH 322 - World Prehistory (4)	
ANTH 323 - Field Archaeology (3-6)	
ANTH 324 - North American Archaeology (4)	
ANTH 325 - Prehistory of the Pacific Northwest (4)	

Biological Anthropology:

ANTH 310 - Research/Laboratory in Biological Anthropology (1-2)	
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ANTH 311 - Advanced Biological Anthropology: Principles of Human Evolution (4)	
ANTH 312 - Human Origins: the Fossil Evidence (4)	
ANTH 313 - Primate Social Behavior (4)	
ANTH 314 - Human Variation and Adaptation in Living Populations (4)	
ANTH 315 - Forensic Skeletal Analysis (4)	
ANTH 411 - Primate Conservation (4)	
ANTH 418 - Primate Evolution (4)	

Linguistics:

ANTH 381 - Language in Culture (4)	
ANTH 382* - Descriptive Linguistics (4)	
ANTH 384 - Language and Gender (4)	
ANTH 480 - Survey of Linguistics (4)	

*Students planning on graduate school in linguistics are strongly advised to select ANTH 382

Select two courses in Cultural

Anthropology	6-8
ANTH 333 - Culture and Marriage (4)	
ANTH 341 - Native American Cultures of the Pacific Northwest (4)	
ANTH 342 - Hispanic Cultures of the Western U.S. (4)	
ANTH 344 - Cultures of Asia (4)	
ANTH 345 - Cultures of Southeast Asia and Oceania (4)	
ANTH 346 - Cultures in Latin America and the Caribbean (4)	
ANTH 347 - Native American Cultures of North American (4)	
ANTH 351 - Visual Anthropology (4)	
ANTH 354 - Anthropology of Religion (4)	
ANTH 355 - Culture, Person, Self (4)	
ANTH 356 - Gender Roles in Cross-cultural Perspective (4)	
ANTH 357 - Medical Anthropology: Cross-cultural Perspectives on Health and Healing (4)	
ANTH 358 - Culture and Politics in a Global Economy (4)	
ANTH 359 - Survey of Music in Cross-cultural Perspectives (2)	
ANTH 426 - Stone Tool Analysis (4)	
ANTH 445LAB - Visual Anthropology Lab (2)	
ANTH 449 - Contemporary Native American Cultures and Issues (4)	

Select one of the following Methods courses

ANTH 215 - Concepts in GIS (3)	
ANTH 404 - Intermediate GIS (5)	
ANTH 414 - Forensic Anthropology: Cold Case Analysis (6)	
ANTH 415 - Forensic Anthropology: Theoretical and Applied Issues (4)	
ANTH 417 - Advanced GIS (4)	
ANTH 421 - Archaeological Theory (4)	
ANTH 425 - Zooarchaeology (4)	
ANTH 444 - Ethnographic Field Methods (4)	
ANTH 483 - Sociolinguistics (4)	
ANTH 485 - Method and Theory in Biological Anthropology (1-8)	

ANTH 486 - Advanced Methods in Archaeology (1-8)	
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Select one of the following 4

ANTH 491 - Workshop (1-6)	
ANTH 493 - Anthropological Field Experience (1-8)	
ANTH 496 - Individual Study (1-6)	

Electives in Anthropology and

related fields6-10
 (Department-approved electives must include a course in statistics.)

Total Credits: 65

Bachelor of Arts

(NOTE: Students seeking a BA degree must complete one year college/ university study or two years high school study of a single foreign language.)

Bachelor of Arts

Anthropology Major

This liberal arts and sciences major provides background to prepare students for any vocation, in that a measure of achievement in all careers is success in human relationships. The major is also consistent with employment in a variety of business, government, and social service areas.

Required Courses

Anthropology Core Requirements	23
Select 300-level courses from at least three subfields	15
Archaeology, Cultural Anthropology, Linguistics, Biological Anthropology	
Anthropology Theory and Method (400-level)	16
(Must include a department-approved, 400-level seminar course)	
ANTH 458 - Senior Comprehensive Survey (4)	
OR	
ANTH 459 - Senior Colloquium (3)	3-4
Department-approved electives	3-4

Total Credits: 61

Bachelor of Arts

Anthropology 45-Credit Major

This 45-credit major must be accompanied by a major in a discipline related to anthropology. The program will consist of coursework focused on areas related to the dual major and must be designed in close consultation with an anthropology advisor. A program proposal must be approved prior to admission to this BA program.

Required Courses

Introductory (100-level)	15-20
Intermediate (300-level)	15-20
(Must include ANTH 301)	
Theory and Method (400-level)	10
(ANTH 458 or 459 recommended)	

Total Credits: 45

Anthropology Minor

Required Courses

Select three from the following. 15-16

- ANTH 110 - Introduction to Biological Anthropology (5)
AND
ANTH 110LAB - Biological Anthropology Laboratory (1)
OR
ANTH 309L* - Skeletal Analysis and Comparison (2)
ANTH 120 - Introduction to Archaeology (5)
ANTH 130 - Introduction to Cultural Anthropology (5)
ANTH 180 - Introduction to Linguistics (5)
Department-approved electives 10
(Students in teacher education must include ANTH 324 or 347, and ANTH 355 or 381 within the 10 credits of electives. ANTH 381 suggested for those enrolled in Teaching English as a Second Language.)
* If ANTH 309L is taken then one credit will be applied to program electives.

Total Credits: 25-26

Museum Studies Minor

The museum studies minor prepares students for entry-level, museum-related employment and/or for graduate work in museum studies. To be eligible for admission to this program, students should be enrolled in a related major (e.g., anthropology, art, biology, geology, geography, history, recreation and tourism, science education, etc.).

Approval by the anthropology department chair is also required.

Required Courses

One of the following. 5

- ANTH 107 - General Anthropology (5)
ANTH 110 - Introduction to Biological Anthropology (5)
ANTH 120 - Introduction to Archaeology (5)
ANTH 130 - Introduction to Cultural Anthropology (5)
ANTH 360 - Introduction to Museum Studies. 4
ANTH 361 - Museum Exhibit Design 4
ANTH 362 - Museum Curation and Management 4
ANTH 490 - Cooperative Education 6
Department-approved electives 7

Total Credits: 30

Non-profit Organization Administration Minor

The minor in non-profit organization administration is an interdisciplinary minor designed to provide an understanding of the organization, financing, and management issues in non-profit organizations. It is designed to complement majors in artistic,

advocacy, and educational endeavors. The minor provides practical, hands-on skills as well as discussion of the issues facing non-profit organizations.

Required Courses

- ACCT 301 - Financial Accounting Analysis . 5
COM 312 - Introduction to Non-profit Leadership 3
COM 427 - Grant Writing/Fund-raising 3
COM 470 - Applied Public Relations (5) . . . 4-5
OR
COM 475 - Public Relations and Advertising Management (4)
Choose one of the following: 5
ANTH 490 - Cooperative Education (Internship) (5)
ART 490 - Cooperative Education (Internship) (5)
COM 490 - Cooperative Education (Internship) (5)
MUS 490 - Cooperative Education (Internship) (5)
TH 490 - Cooperative Education (Internship) (5)

Areas of Interest

- Choose any of the following for a total of at least 9 credits. 9
ANTH 360 - Introduction to Museum Studies (4)
ANTH 361 - Museum Exhibit Design (4)
COM 370 - Writing for Public Relations (4)
COM 487 - Public Relations Professional Seminar (3)
MUS 482 - Music Business (3)
TH 350 - Theatre Management (3)
TH 351 - Theatre Management (3)
TH 360 - Stage Management (3)

Total Credits: 29-30

Non-profit Organization Administration Certificate

The certificate in non-profit organization administration is an interdisciplinary approach designed to provide an understanding of the organization, financing, and management issues in non-profit organizations. It is designed to complement majors in artistic, advocacy, and educational endeavors. The courses provide practical, hands-on skills as well as discussion of the issues facing non-profit organizations.

Required Courses

- ACCT 301 - Financial Accounting Analysis . 5
COM 312 - Introduction to Non-profit Leadership 3
COM 427 - Grant Writing/Fund-raising 3
COM 470 - Applied Public Relations (5)
OR
COM 475 - Public Relations and Advertising Management (4). 4-5
Choose one of the following: 5
ANTH 490 - Cooperative Education (Internship) (5)
ART 490 - Cooperative Education (Internship) (5)
COM 490 - Cooperative Education (Internship) (5)

- MUS 490 - Cooperative Education (Internship) (5)
TH 490 - Cooperative Education (Internship) (5)

Total Credits: 20-21

Anthropology Courses

ANTH 107. General Anthropology (5).

Human biological and cultural adaptations: survey of concepts, methods, and perspectives on past and present.

ANTH 110. Introduction to Biological Anthropology (5).

A survey of the history, philosophy and theory of biological anthropology including biological relationships to other primate forms, the fossil record, and evolutionary adaptations. Corequisite: ANTH 110LAB.

ANTH 110LAB. Biological Anthropology Laboratory (1).

Practical laboratory experience with data in human osteology, comparative primate anatomy and ethology, forensic anthropology, genetics, and the fossil record of human evolution. Two hours laboratory per week. ANTH 110LAB required for anthropology majors and minors; optional for students completing breadth requirements of General Education.

ANTH 120. Introduction to Archaeology (5).

Introduction to the concepts, methods, and development of archaeology.

ANTH 130. Introduction to Cultural Anthropology (5).

Understanding human cultures: concepts, methods, and basic data involved in the comparative study of human cultural adaptations.

ANTH 180. Introduction to Linguistics (5).

Backgrounds, developments, and relation to other fields of study. ANTH 180 and ENG 180 are equivalent courses; students may not receive credit for both.

ANTH 215. Concepts in GIS (3).

Basic principles and uses of Geographic Information Systems (GIS). Practice with the use of GIS in solving land management and evaluation problems. ANTH 215 and GEOG 215 are equivalent courses; students may not receive credit for both. Two hours lecture and four hours lab per week.

ANTH 296. Individual Study (1-6).

ANTH 298. Special Topics (1-6).

ANTH 301. Anthropology: Principles and Assessment (2).

Principles and assessment course for majors: current topics and careers, research, funding; development of assessment portfolios and individual program plans. Required for all BA and BS anthropology majors at admission.

ANTH 309LAB. Skeletal Analysis and Comparison (2).

Upper-division introductory laboratory course which provides critical visual and hands-on exposure essential to students planning to continue with coursework in fossil primate studies, human evolution, and other applications, such as forensic anthropology.

ANTH 310. Research/Laboratory in Biological Anthropology (1-2).

Laboratory research analysis of biological anthropology

materials. May be taken concurrently with and as a supplement to other 300-level courses in biological anthropology. No more than 10 credits of ANTH 310 and 485 are allowed to fulfill BA or BS requirements. The course may be repeated for a cumulative maximum of 8 credits. By permission. Prerequisite: previous college work in biological anthropology or other natural sciences.

ANTH 311. Advanced Biological

Anthropology: Principles of Human Evolution (4). Analysis and interpretation of major principles of modern biological anthropology from an evolutionary perspective: genetics, population genetics, ecology, comparative anatomy and human paleontology. Prerequisites: ANTH 110, and 110LAB.

ANTH 312. Human Origins: The Fossil

Evidence (4). The fossil record of human and protohuman forms. Basic data and interpretation. Three hours lecture and two hours laboratory per week.

ANTH 313. Primate Social Behavior (4).

Survey of field studies of nonhuman primates relevant to the study of human social systems and adaptation. Prerequisites: either ANTH 107, 110, 130, or BIOL 183.

ANTH 314. Human Variation and

Adaptation in Living Populations (4). Survey of genetic, morphological and physiological variability of living human populations and their biological source mechanisms. Current population dynamics are used to project future alternatives for change. Prerequisite: sophomore standing or above.

ANTH 315. Forensic Skeletal Analysis

(4). A survey of the human skeleton and techniques of human skeletal analysis. Identification of age, sex, and other traits in modern and extinct populations.

ANTH 320. Research/Laboratory in

Archaeology (2). Analysis of archaeological materials. Minimum of 4 hours laboratory per week. No more than 10 credits of ANTH 320 and 486 allowed to fulfill BA or BS requirements. Prerequisite: ANTH 120.

ANTH 321. Archaeological Methods

(4). Introduction to methods used by archaeologists, with an emphasis on laboratory methods for analysis of chipped stone, ceramics, faunal remains, and other archaeological materials.

ANTH 321LAB. Archaeological Methods

Laboratory (2). Hands-on application of typical methods used in archaeological investigations, with an emphasis on laboratory techniques for studying chipped stone, ceramics, faunal remains, and other archaeological materials. Co- or prerequisite: ANTH 321.

ANTH 322. World Prehistory (4). Old and New World prehistory from late Pliocene to the early historic period, including the ecology and development of hunting-gathering, agriculture and state-level societies. ANTH 322 and HIST 322 are

equivalent courses; students may not receive credit for both.

ANTH 323. Field Archaeology (3-6).

Identification, mapping and recording of archaeological sites; techniques of excavation. Grade will either be S or U. Prerequisite: ANTH 120.

ANTH 324. North American Archaeology

(4). Prehistoric cultures of North America, with emphasis on adaptation to changing environments.

ANTH 325. Prehistory of the Pacific

Northwest (4). Prehistoric cultures of Washington State and adjoining regions.

ANTH 333. Culture & Marriage (4). The

reciprocal relationships between the biophysical and cultural components in mating, nurturing and sexual access. Cross-cultural patterns in marriage. ANTH 333 and FS 333 are equivalent courses; students may not receive credit for both.

ANTH 341. Native American Cultures

of the Pacific Northwest (4). Ecological settings and cultural adaptations of Pacific Northwest Native Americans in historical and contemporary contexts. Culture change and continuity, language, religion, resource management, and tribal sovereignty.

ANTH 342. Hispanic Cultures of the

Western U.S. (4). This course provides an overview of Hispanic cultures in the American Southwest, California and the Pacific Northwest. Culture change and maintenance through language, religion and an economic resource base are highlighted.

ANTH 344. Cultures of Asia (4). Setting and

cultural adaptation of the peoples of Asia. Representative groups from cultural regions of East Asia and Central/Inner Asia.

ANTH 345. Cultures of Southeast Asia and

Oceania (4). Setting and cultural adaptation of the peoples of Southeast Asia and Oceania.

ANTH 346. Cultures of Latin America

and the Caribbean (4). Survey of anthropological research on cultures of Latin America and the Caribbean in historical and contemporary contexts.

ANTH 347. Native American Cultures of

North America (4). Ecological settings and cultural adaptations of North American Native Americans in historical and contemporary contexts. Culture change and continuity, language, religion, resource management and tribal sovereignty.

ANTH 351. Visual Anthropology (4).

Provides methodological, theoretical and practical background to produce and evaluate imagery in films and video; guidelines and practice of image presentation/manipulation in anthropological and social contexts. ANTH 351 and COM 351 are equivalent courses; students may not receive credit for both. Prerequisites: either ANTH 130, ART 225, COM 321, or COM 330.

ANTH 354. Anthropology of Religion

(4). A cross-cultural analysis of religion, cosmology and world view.

ANTH 355. Culture, Person, Self (4). A cross-cultural analysis of the relationship of individuals to cultural beliefs and practices.

ANTH 356. Gender Roles in Cross-cultural

Perspective (4). Bio-cultural factors affecting human gender roles.

ANTH 357. Medical Anthropology: Cross-

cultural Perspectives on Health and Healing (4). Emphasizes cultural and biological factors influencing health maintenance in human populations and cross-cultural perspectives on illness, healing and the provision of health care.

ANTH 358. Culture and Politics in a Global

Economy (4). Comparative perspectives on cultural processes of change within the global economic system.

ANTH 359. Survey of Music in Cross-

cultural Perspectives (2). An introduction to ethnomusicology: the cultural context of music with emphasis on Africa, Asia, Native North and South America, Oceania. ANTH 359 and MUS 359 are equivalent courses; students may not receive credit for both.

ANTH 360. Introduction to Museum

Studies (4). Concepts relating to museums in society: history, ethics, philosophy, administration, legislation and education.

ANTH 361. Museum Exhibit Design (4).

Principles of design applied to visual presentation of material culture, ideas and concepts through educational exhibits.

ANTH 362. Museum Curation and

Management (4). Application of techniques of environmental security, restoration and preservation in the management of museum collections.

ANTH 380. Non-verbal Communication

(4). Fundamentals of non-verbal communication including codes, relationship to biology and culture, usage, and interrelationships. COM 380 and ANTH 380 are equivalent courses.

ANTH 381. Language in Culture (4).

Language as a culture trait. Influence of language on other human institutions. Includes psycholinguistics, sociolinguistics, ethnographic semantics, and multilingualism in its sociocultural setting.

ANTH 382. Descriptive Linguistics (4).

Introduction to the basic concepts and mechanics of formal linguistic analysis.

ANTH 384. Language and Gender (4). This

course is designed to guide students to explore the active and rapidly expanding field of gender studies and language research dealing with how biological and cultural awareness of sexes are reflected in speech. ANTH 384 and WS 384 are equivalent courses; students may not receive credit for both.

ANTH 398. Special Topics (1-6).

ANTH 404. Intermediate GIS (5). Applied concepts, principles, and operation of fundamental GIS applications, including raster-vector data models, topology, digitizing, and various analytical techniques such as overlay, buffers, and Boolean queries. Lecture and practical applications.

- ANTH 384 and WS 384 are equivalent courses; students may not receive credit for both. Prerequisites: students must have completed either GEOG, GEOL, or ANTH 303, or 403.
- ANTH 410. Biological Anthropology: Theoretical and Research Issues** (4). Exploration of the theoretical underpinnings of biological anthropology, their expression in current research topics in the field, and the transition from earlier approaches to their current implementation. Seminar structure. May be repeated up to 8 credits. Prerequisites: ANTH 110 and an additional 5 units of biological anthropology.
- ANTH 411. Primate Conservation** (4). A seminar that focuses on conservation issues of particular relevance for non-human primates, including deforestation, bushmeat hunting, and pet trade; and on conservation strategies, including reintroduction, captive management, and ecotourism. ANTH 411 and PRIM 511 are equivalent courses; students may not receive credit for both. Prerequisites: ANTH 110 and 313.
- ANTH 412. Long-term Primate Studies** (4). A survey of major long term field research projects including apes, monkeys, and lemurs; comparisons across sites and results of long term observation of non-human primates. Prerequisite: ANTH 313.
- ANTH 414. Forensic Anthropology: Cold Case Analysis** (6). The course explores the recovery and examination of skeletal remains through practical experience in the recovery of buried remains. Students will plan, manage, and conduct a forensic skeletal analysis of a cold case. Findings will be presented. May be repeated for credit. Prerequisites: ANTH 110, 315, and 310.
- ANTH 415. Forensic Anthropology: Theoretical and Applied Issues** (4). An in-depth and critical analysis of journal articles pertaining to forensic anthropology, osteology, and archaeology. An examination of archaeological techniques that can be adapted to forensic and medico-legal investigations. Prerequisites: ANTH 110, 315, and 310.
- ANTH 416. Pongid Behavior** (4). An overview of Pongid (chimpanzee, gorilla and orangutan) physiology, social and developmental behaviors in natural and laboratory conditions. ANTH 416 and PRIM 516 are equivalent courses; students may not receive credit for both. Prerequisite: ANTH 313.
- ANTH 417. Advanced GIS** (4). Advanced GIS principles, techniques, analysis, and application. Lecture and practical hands-on experience. Applied experience using GIS software. ANTH, GEOL, and GEOG 417 are equivalent courses; students may not receive credit for more than one. Prerequisites: either GEOG, GEOL, or ANTH 404.
- ANTH 418. Primate Evolution** (4). An overview of primate evolution from the earliest forms to modern representatives. Fossils, paleoenvironments, adaptive radiations and evolutionary trends among the primates. Prerequisites: ANTH 110 and 313.
- ANTH 421. Archaeological Theory** (4). Discussion of research problems in data collection, analysis, and interpretation. Prerequisite: ANTH 120.
- ANTH 425. Zooarchaeology** (4). Mammalian osteology and methods in the analysis of animal bones from archaeological sites. Prerequisites: ANTH 120 and either ANTH 110LAB or BIOL 183.
- ANTH 426. Stone Tool Analysis** (4). The theory, method, and technique of stone tool analysis are presented so that students can undertake a research project analyzing a stone tool assemblage. Prerequisites: either ANTH 120 or 323.
- ANTH 427. Environmental Archaeology** (4). Analyses of sediments and plant and animal remains from archaeological sites are used to explore relationships between humans and their environments. Case studies combine natural and physical sciences to study long-term change in landscapes and ecosystems. ANTH 427/527 and GEOG 427/527 are equivalent courses; students may not receive credit for more than one. Graduate credit requires an additional research paper to be specified in syllabus. Prerequisites: either ANTH 120 or GEOG 107.
- ANTH 440. Ecology and Culture** (4). Investigation into interdependent environmental and human cultural systems. Traditional agroecologies and subsistence strategies; contemporary problems of resource management, social equity, political ecology, and sustainable development. ANTH 440 and GEOG 440 are equivalent courses; students may not receive credit for both.
- ANTH 444. Ethnographic Field Methods** (4). Methods used in ethnographic field work.
- ANTH 445LAB. Visual Anthropology Lab** (2). A lab-oriented course providing practical experience in basic ethnographic film approaches. Prerequisites: either ANTH or COM 351, and admission to either the anthropology, film and video studies, or resource management major or minor.
- ANTH 446. Anthropology of Globalization** (4). Critically examines current theories of globalization in anthropology. Course includes selected ethnographic research on topics including global flows of people, material, ideas, identities, global political structures, and local accommodation and resistance.
- ANTH 449. Contemporary Native American Cultures and Issues** (4). Analysis of contemporary Native North American cultures and issues, including tribal sovereignty, resource management, education, religion, economic, and health status, cultural continuity, and adaptation. SOC 449 and ANTH 449 are equivalent courses; students may not receive credit for both. Prerequisites: either ANTH 341, ANTH 347, SOC 366, and AIS 103.
- ANTH 451. History and Theory of Anthropology** (4). Content and developmental history of anthropological theories and methods. Prerequisite: 20 units of anthropology courses.
- ANTH 458. Senior Comprehensive Survey** (4). Advanced comprehensive survey of the field of anthropology as to its content and intent. Specifically designed for majors preparing for graduate work. Prerequisite: admission to an anthropology major plan.
- ANTH 459. Senior Colloquium** (3). A capstone seminar for the anthropology BA. The seminar reinforces interdisciplinary preparation and knowledge in one field of anthropology (linguistics, ethnology, archaeology, or biological anthropology).
- ANTH 480. Survey of Linguistics** (4). Linguistic concepts and the relation between linguistics and other fields of study. Open to seniors and graduate students only. ANTH 480 and ENG 480 are equivalent courses; students may not receive credit for both. Prerequisite: senior standing.
- ANTH 483. Sociolinguistics** (4). Concepts and methods of sociolinguistic analysis in first and second languages. Will examine differences among cultures in the relationship between language usage and inequality. ANTH 483 and FNLA 483 are equivalent courses; students may not receive credit for both. Prerequisites: either ANTH 180, ANTH 381, ENG 180, or FNLA 481.
- ANTH 485. Method and Theory in Biological Anthropology** (1-8). Methods and techniques, research problems, data collection, analysis, interpretation. Laboratory orientation. No more than 10 credits of ANTH 310 and ANTH 485 are allowed to fulfill BA or BS requirements. May be repeated up to 8 credits. Prerequisite: introductory plus 5 upper-division credits in biological anthropology or corresponding coursework in the biological sciences.
- ANTH 486. Advanced Methods in Archaeology** (1-8). Archaeological research design; planning and supervision of laboratory and field operation; preparation of reports for publication. No more than 10 credits of ANTH 320 and 486 allowed to fulfill BA or BS requirements. May be repeated up to 8 credits. Prerequisite: 5 upper-division credits in archaeology.
- ANTH 487. Field Linguistics** (1-8). A laboratory oriented course providing both demonstration and practicum in recording, transcription, and structure of languages. Tapes and field derived data. May be repeated up to 8 credits.
- ANTH 488. Advanced Research in Cultural Anthropology** (1-8). May be repeated up to 8 credits. Prerequisites: ANTH 130 and 5 upper-division credits in cultural anthropology.
- ANTH 490. Cooperative Education** (1-12). An individualized, contracted field experience with business, industry, government, or

social service agencies. This contractual arrangement involves a student-learning plan, cooperating employer supervision, and faculty coordination. May be repeated for credit. Grade will either be S or U. By permission.

ANTH 491. Workshop (1-6).

ANTH 492. Anthropological Teaching

Experience (1-2). May be repeated for credit. Grade will either be S or U.

ANTH 493. Anthropological Field

Experience (1-8). Individual or group off-campus experience in the field study of anthropological phenomena. May be repeated for credit.

ANTH 494. Applied GIS Project (2-6).

GIS projects in anthropology, biology, geography, geology, resource management. ANTH, GEOG, and GEOL 494 are equivalent courses.

ANTH 496. Individual Study (1-6).

ANTH 498. Special Topics (1-6).

ANTH 499. Seminar (1-5).

ART DEPARTMENT

College of Arts and Humanities
Ellensburg
Randall Hall, room 100

509-963-2665

Fax: 509-963-1918

www.cwu.edu/~art

See website for how this program may be used for educational and career purposes.

Faculty and Staff

Chair

Liahana Armstrong, PhD

Professors

Michael Chinn, MFA, wood design, design

Keith Lewis, MFA, jewelry and metalsmithing, design

Glen Bach, MFA, graphic design

Associate Professors

Maya Chachava, MFA, painting, drawing

Shari Stoddard, PhD, art education

Assistant Professors

Paula Airth, MFA, graphic design

Alex Emmons, MFA, photography and digital imaging

Stephen Robison, MFA, ceramics

Lecturers

Joan Cawley-Crane, MA

Chris Hinrichs, BA

Heather Horn-Johnson, MA

Margo Selski, MFA

Staff

Jeff Cleveland, department maintenance

Heather Horn-Johnson, gallery manager

Sharon Jonassen, secretary

Departmental Information

The Department of Art is the primary agent for the study and practice of visual culture. Our faculty facilitates liberal learning and academic excellence to enable our students to assume their respective roles as practitioners, educators, and informed patrons of the visual arts. Degrees are offered in studio art, graphic design, and art education with allied course offerings in art history and criticism. We also offer minors in art studio and art history.

Bachelor of Fine Arts Core Requirements

ART 150 - Drawing I	5
ART 170 - Basic Design I	5
ART 171 - Basic Design II	5
ART 235 - Ancient and Medieval Art	4
ART 236 - Renaissance Through Mid-19th Century Art	4
ART 237 - Impressionism Through Postmodernism	4
ART 495 - Studio Project	1
Select one Course from the following	4
ART 374 - History of Graphic Design (4)	
ART 389 - Contemporary Concepts in Art (4)	
ART 414 - Recent Art (4)	
ART 456 - History of Eastern Art (4)	

Total Core Credits: 32

Bachelor of Fine Arts Art Graphic Design Specialization

A comprehensive studio art degree for students desiring careers in graphic design/visual communications. Critical thinking through the exploration of digital and print media is emphasized. After completion of the art core and pre-graphic design prerequisites, students are required to complete the graphic design concentration requirements, including a contracted field experience. Transfer students are encouraged to complete as many of the transferable art requirements prior to enrolling at CWU.

An Apple laptop is required.

Bachelor of Fine Arts Core

Requirements	32
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Required Courses

Pre-Graphic Design Requirements

ART 225 - Photography I	5
ART 274 - Typography	5
ART 282 - Computer Art I	5
ART 351 - Illustration I	5
Select one course from	5
ART 325A - Photography II-Color Photo Media (5)	
ART 325B - Photography II-Alternative Processes (5)	
ART 325C - Photography II-Digital Imaging (5)	

Graphic Design Requirements

ART 370 - Layout and Design I	5
ART 371 - Layout and Design II	5
ART 372 - Design and Production I	5
ART 451 - Illustration II	5

ART 470 - Advertising Graphic Design	5
ART 471 - Corporate Graphic Design	5
ART 472 - Design and Production II	5
ART 474 - Typography II	5
ART 490 - Cooperative Education (Internship)	10

Total Credits: 107

Studio Art Specialization

A comprehensive studio art degree for students desiring to pursue studio art-related careers or seeking artistic enrichment. The degree can be directed toward either a discipline-specific studio art practice or a cross-disciplinary and/or cross-media studio art practice.

Bachelor of Fine Arts Core

Requirements	32
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Required Courses

Select 69 credits from department-approved courses (at least 48 credits must be upper-division. The maximum number of credits in a specific media area is 25).	69
Advisor-approved Upper-division Electives	4

Total Credits: 105

Bachelor of Arts

(NOTE: Students seeking a BA degree must complete one year college/university study or two years high school study of a single foreign language.)

Bachelor of Arts Art Major

Bachelor of Arts Art Core Requirements

ART 150 - Drawing I	5
ART 170 - Basic Design I	5
ART 171 - Basic Design II	5
ART 235 - Ancient and Medieval Art	4
ART 236 - Renaissance Through Mid-19th Century Art	4
ART 237 - Impressionism Through Postmodernism	4
ART 414 - Recent Art	4
ART 495 - Studio Project	1

Total Core Credits: 32

Studio Arts Required Courses

Select 5 Department-approved, lower-division studio courses from the following..... 25

ART 225 - Photography I (5)	
ART 241 - Wood Design I (5)	
ART 246 - Jewelry / Metals I (5)	
ART 260 - Painting (5)	
OR ART 262 - Watercolor I (5)	
ART 265 - Ceramics I (5)	
ART 280 - Sculpture I (5)	
ART 282 - Computer Art I (5)	

Select 18 credits from department-approved, upper-division courses..... 18

Total Credits: 75

Bachelor of Arts Visual Art Teaching Major

This major satisfies the endorsement for visual arts.

A comprehensive visual-art program that qualifies students to teach art at either the elementary or secondary levels in regular or self-contained classrooms. Students taking this major are required to apply to the Teacher Preparation Program and complete the Professional Education Program requirements offered through the Department of Educational Foundations and Curriculum.

Required Courses

ART 150 - Drawing I	5
ART 170 - Basic Design I	5
ART 171 - Basic Design II	5
ART 235 - Ancient and Medieval Art	4
ART 236 - Renaissance Through Mid-19th Century Art	4
ART 237 - Impressionism Through Postmodernism	4
ART 330 - Art in the Elementary School	4
ART 332 - Art Curriculum and Field Experience	4
ART 430 - Components of Art Education	4
ART 432 - Art in Secondary School	4
ART 495 - Studio Project	1
Select four courses from the following	20

ART 225 - Photography I (5)
ART 250 - Drawing II (5)
ART 241 - Wood Design (5)
ART 246 - Jewelry / Metals I (5)
ART 260 - Painting I (5)
ART 262 - Watercolor I (5)
ART 265 - Ceramics I (5)
ART 280 - Sculpture I (5)
ART 282 - Computer Art I (5)
ART 285 - Printmaking I (5)

Total Credits: 64

Art Studio Minor

Required Courses

Select one course	5
ART 150 - Drawing I (5)	
ART 170 - Basic Design I (5)	
Select one course	4
ART 235 - Ancient and Medieval Art (4)	
ART 236 - Renaissance Through Mid- 19th Century Art (4)	
ART 237 - Impressionism Through Postmodernism (4)	
ART 414 - Recent Art (4)	
Select 15 credits from department-approved studio courses	15

Total Credits: 24

Art History Minor

Required Courses

Select 24 credits from the following. 24

- ART 235 - Ancient and Medieval Art (4)
- ART 236 - Renaissance Through Mid-19th Century Art (4)
- ART 237 - Impressionism Through Postmodernism (4)
- ART 410 - Art of the Italian Renaissance (4)

ART 414 - Recent Art (4)
ART 415 - Painters and Printmakers of Northern Europe (4)
ART 456 - History of Eastern Art (4)

Total Credits: 24

Art Courses

ART 101. Introduction to Western Art (5).

The visual arts as an expression of the human experience. Does not apply to the art major.

ART 102. Introduction to Non-Western Art (5).

A survey of non-western painting, sculpture, and architecture. This course does not apply to the art major.

ART 150. Drawing I (5).

Studio experience emphasizing the understanding of form and composition through the use of various drawing materials and techniques. May include drawing from the nude figure. Six hours studio per week.

ART 170. Basic Design I (5).

Exploration of the elements and principles of design in two-dimensional media. Emphasis on the development of design vocabulary, conceptual clarity, visual analysis, and technical proficiency. Six hours studio per week.

ART 171. Basic Design II (5).

Exploration of the elements and principles of design in three-dimensional media. Emphasis on the development of design vocabulary, conceptual clarity, visual analysis, and technical proficiency. Six hours studio per week. Prerequisite: ART 170.

ART 225. Photography I (5).

A basic course encompassing the conceptual concerns addressed within the technical framework of black-and-white photographic processes. Six hours studio per week.

ART 226. Beginning Photography: Digital (5).

This course surveys the beginning conceptual and technical tools required to navigate digital photography. Six hours of studio per week.

ART 235. Ancient and Medieval Art (4).

A historical survey of Western Art from ancient times through the Gothic period.

ART 236. Renaissance through Mid-19th Century Art (4).

A historical survey of Western Art from the Renaissance to Impressionism. Prerequisite: ART 235.

ART 237. Impressionism through Postmodernism (4).

Art in Europe and the United States from Impressionism through Postmodernism. Prerequisites: ART 235 and 236.

ART 241. Wood Design I (5).

Introduction to wood as an artistic and design medium. Emphasis on visual communication utilizing basic shaping and finishing process. Six hours studio per week.

ART 246. Jewelry/Metals I (5).

Design and construction of jewelry and small-scale metal objects. Emphasis on technical skill development, applied technique, conceptual problems, and introduction to contemporary work. Six hours studio per week.

ART 250. Drawing II (5).

A continuation of ART 150 with an emphasis on technique, composition, and interpretation of ideas. Includes drawing from the figure. Six hours studio per week. Prerequisite: ART 150.

ART 260. Painting I (5).

An introduction to the techniques of painting for expressive purposes. Six hours studio per week. Prerequisites: ART 150 and 170.

ART 262. Watercolor I (5).

An introduction to the techniques of transparent watercolor and the visual problems of painting. Six hours studio per week. Prerequisite: ART 150.

ART 265. Ceramics I (5).

Beginning instruction in ceramics, hand-building and wheel-throwing techniques, including idea development and an exploration of techniques. Six hours studio per week.

ART 274. Typography (5).

History and application of typography as a tool for visual communication. Prerequisite: ART 170.

ART 280. Sculpture I (5).

Introduction to the studio experience in sculpture. Emphasis is on the fundamental materials and basic methods of sculpture, including references to the history of sculpture. Six hours studio per week.

ART 282. Computer Art I (5).

Use of computer systems and web software as tools for creative expression. Prerequisite: ART 170.

ART 285. Printmaking I (5).

Exploration of techniques and history of prints, with an emphasis on relief printmaking. Six hours of studio per week. Prerequisites: ART 150 and ART 170.

ART 296. Individual Study (1-6).

ART 298. Special Topics (1-6).

ART 299. Seminar (1-5).

ART 300. Papermaking (4). Hand papermaking techniques, exploring historical and contemporary works / methods. Watermarking, pigmentation, moldmaking, with emphasis on sheetforming and fiber preparation. May be repeated for credit.

ART 324. History of Photography (4).

A survey of contemporary photographers, their ideas, and the influences of their work upon culture. Covers mid-20th century to the present. Prerequisite: ART 225.

ART 325A. Photography II-Color Photo Media (5).

Introduction to color photography encompassing the visual culture dialogue as well as techniques for digital, transparency, and negative films, as well as the beginning use of artificial light. Prerequisite: ART 225.

ART 325B. Photography II-Alternative Processes (5).

An introduction to 19th century photographic processes, review of the contemporary concepts, and its application immersed with digital-and film-based negative techniques. Prerequisite: ART 225.

ART 325C. Photography II-Digital Imaging (5).

An introduction to digital still photography and contemporary visual

concepts encompassing the televised to printed image. Techniques reviewed include image capture, RAW process, composing, color management, and printing options. Prerequisite: ART 225.

ART 330. Art in the Elementary School (4). Content and methodology for teaching art in the elementary school. Prerequisite: conditional or full admission to the Teacher Preparation Program.

ART 332. Art Curriculum and Field Experience (4). Developing discipline-based art education curriculum for the elementary and middle school, as well as preparing curriculum to teach Friday children's art classes. Prerequisite: ART 330.

ART 341. Wood Design II (5). Design and fabrication of furniture forms. Emphasis on creative form development utilizing advanced fabrication and finishing processes. Prerequisite: ART 241.

ART 346A. Jewelry/Metals II (5). Technical and conceptual aspects of jewelry and metalwork through modelmaking, casting, moldmaking, and construction of linkages and chains. Emphasis on personal exploration. Prerequisite: ART 246.

ART 346B. Jewelry/Metals II: Enameling (5). Technical and conceptual aspects of jewelry and metalwork with focus on enameling (glass on metal). Emphasis on personal exploration. Prerequisite: ART 246.

ART 346C. Jewelry/Metals II: Form and Surface (5). Technical and conceptual aspects of jewelry and metalwork utilizing methods of form and surface embellishment. Emphasis on personal exploration. Prerequisite: ART 246.

ART 350. Drawing III (5). A continuation of ART 250 with increased emphasis on drawing as a major means of visual expression. Includes drawing from the figure. Prerequisite: ART 250.

ART 351. Illustration I (5). Introduction to a variety of media and techniques associated with illustration. Prerequisites: ART 250 and either ART 260, or 262.

ART 360A. Painting II (5). Continued study of technical and formal approaches to painting, with an emphasis on representational and narrative strategies. Prerequisite: ART 260.

ART 360B. Painting III (5). Continued study of technical and formal approach to painting, with emphasis on color. Prerequisite: ART 360A.

ART 362. Watercolor II (5). A continuation of ART 262 stressing a higher degree of individual expression and experimentation with various waterbased media. Prerequisite: ART 262.

ART 365A. Ceramics II-Advanced Handbuilding (5). Advanced instruction in ceramic sculptural techniques, including historical and contemporary influences, investigation of clay bodies, and idea development. Prerequisite: ART 265.

ART 365B. Ceramics II-Advanced Wheel Throwing (5). Advanced instruction in ceramic pottery using the wheel, including

vessel design and an investigation of clay bodies and high fire glazes. Prerequisite: ART 265.

ART 367. Kiln Building and Repair (5). This course covers kiln building for gas- and wood-fired kilns. Students will learn about refractory materials, forced air and natural draft burner systems, pilot burners and safety systems. Catenary and sprung arch forms will be built. May be repeated up to 10 credits. Prerequisite: ART 265.

ART 368. Ceramic Materials and Effects (5). This course covers an investigation into materials and their effects in the media of ceramics. Glaze calculation and testing along with clay body tests will be the main focus of this course. Low fire, midrange and high-fire temperatures will also be addressed. May be repeated up to 10 credits. Prerequisite: ART 265.

ART 370. Layout and Design I (5). Two-dimensional design, introduction to type, design, and composition concepts. Two hours lecture and four hours studio per week. By permission.

ART 371. Layout and Design II (5). Advanced work in design composition with emphasis on applications of letter forms and color. Two hours lecture and four hours studio per week. By permission.

ART 372. Design and Production I (5). Emphasis on advertising art and production techniques. Two hours lecture and four hours studio per week. By permission.

ART 374. History of Graphic Design (4). A historical survey of the graphic arts from their beginning to the present.

ART 380A. Sculpture II: Object and Form (5). A continuation of the studio experience of sculpture, emphasizing the development of object and form, a higher level of technical competence, greater exploration of materials, and conceptual development. Prerequisite: ART 280.

ART 380B. Sculpture II: Installation Art (5). A continuation of the studio experience of sculpture, emphasizing the development of installation art within a spatial context, a higher level of technical competence, greater exploration of materials, and conceptual development. Prerequisite: ART 280.

ART 381. Mixed-media Art (5). A concentrated study of the integration of two- and three-dimensional media into mixed-media art forms. Five studio hours per week. May be repeated up to 10 credits. Prerequisites: ART 260 and ART 280.

ART 382. Computer Art II (5). Exploration of several software programs and computer output devices for creation of electronic art.

ART 389. Contemporary Concepts in Art (4). Exploration of the contextual, formal, and philosophic meanings of current art movements and theories in regards to their relevance and place in contemporary art practice.

ART 398. Special Topics (1-6).

ART 410. Art of the Italian Renaissance (4). The painting, sculpture, and architecture of the Italian Renaissance from the late Middle Ages through the 16th century. Prerequisite: ART 236.

ART 414. Recent Art (4). The visual arts of the last 25 years, including the traditional forms of painting, sculpture and architecture, and newer forms including video, computer, and performance art. Prerequisite: ART 237.

ART 415. Painters and Printmakers of Northern Europe (4). Art of Germany, Flanders, and Holland, 15th-18th century.

ART 425. Photography III: Advanced (5). This is a portfolio building and professional development course. Designed for the advanced student to independently pursue creative research appropriate to conceptual concerns and technical application related to photo-media. May be repeated up to 20 credits. Prerequisites: ART 325A, ART 325B, and ART 325C.

ART 430. Components of Art Education (4). Content and strategies for teaching aesthetics, art criticism, art history, and art production in art education; writing, implementing, and assessing quality art lessons. Prerequisite: ART 330.

ART 432. Art in Secondary School (4). Current philosophies and curriculum in the secondary school; objectives, planning, methods of teaching and evaluation. Prerequisite: ART 430.

ART 441. Wood Design III (5). Advanced design and fabrication of furniture forms. Emphasis on research and development of furniture forms utilizing advanced and/or innovative fabrication and finishing processes. Six hours studio per week. May be repeated for credit. Prerequisite: ART 341.

ART 446. Jewelry/Metals III (5). Advanced exploration of personal expression in metals, with emphasis on self-direction, conceptual and technical mastery, and professionalization of practice. May be repeated for credit. Prerequisites: ART 346A, ART 346B, and ART 346C.

ART 449. Principles of Color (5). The technical, historic and aesthetic dimensions of pigment and light colors including an examination of major color theories. Prerequisite: two art studio courses.

ART 450. Drawing IV (5). Advanced study and experimentation with technical, formal, and conceptual problems in drawing. Includes drawing from the figure. May be repeated for credit by undergraduates only. Prerequisite: ART 350.

ART 451. Illustration II (5). A continuation of ART 351 stressing development of personal expression in illustration. May be repeated for credit by undergraduates only. Prerequisite: ART 351.

ART 456. History of Eastern Art (4). A survey of the architecture, sculpture, painting, and the crafts of India, Indonesia, China, and Japan. ART 456 and ART 556 are equivalent courses; students may not receive credit for both.

ART 460. Painting IV (5). Advanced study and experimentation in technical, formal, and conceptual approaches to painting, with an emphasis on developing individual expression. May be repeated for credit. Prerequisites: ART 360B and ART 450.

ART 465. Ceramics III (5). A continued exploration of ceramic materials and processes. Emphasis on developing professional practices and personal vocabulary through the ceramic medium. May be repeated for credit. By permission. Prerequisites: ART 365A or ART 365B.

ART 470. Advertising Graphic Design (5). Concept and design of advertising problems. Presentation and communication skills; introduction to analysis and implementation of marketing strategies. May be repeated for credit.

ART 471. Corporate Graphic Design (5). Principles of corporate concept and design: advanced presentation and communication skills; analysis and implementation of marketing strategies in the corporate setting. By permission. Prerequisite: ART 470.

ART 472. Design and Production II (5). Continues the development of professional attitudes; promotes creative problem solving techniques; defines the role of designer or art director and relationships to typographer and printer. Prerequisite: ART 471.

ART 474. Typography II (5). Explore traditional and conceptual typographic applications, structural and visual elements of typography, with an emphasis on history, anatomy, terminology, letter, word, line, paragraph, and type-image relationships. Prerequisite: ART 274.

ART 480. Sculpture III (5). Advanced studies in sculpture. Emphasis is on creative self-expression and the development of a self-directed body of work. May be repeated for credit. Prerequisites: ART 380A and ART 380B.

ART 490. Cooperative Education (1-12). An individualized, contracted field experience with business, industry, government, or social service agencies. This contractual arrangement involves a student-learning plan, cooperating employer supervision, and faculty coordination. May be repeated for credit. Grade will either be S or U. By permission.

ART 491. Workshop (1-6).

ART 495. Studio Project (1). Preparation of a professional portfolio and presentation of a body of work suitable for exhibition.



Satisfies end-of-major assessment requirement. Must be taken during one of the last two quarters prior to graduation. Grade will either be S or U.

ART 496A. Individual Study: Computer Art (1-6).

ART 496C. Individual Study: Ceramics (1-6).

ART 496D. Individual Study: Drawing (1-6).

ART 496E. Individual Study: Art Education (1-6).

ART 496G. Individual Study: Graphic Design (1-6).

ART 496H. Individual Study: Art History (1-6).

ART 496J. Individual Study: Jewelry/Metals (1-6).

ART 496P. Individual Study: Painting (1-6).

ART 496S. Individual Study: Sculpture (1-6).

ART 496T. Individual Study: Photography (1-6).

ART 496W. Individual Study: Wood Design (1-6).

ART 498. Special Topics (1-6).

ART 499. Seminar (1-5).

ASIA/PACIFIC STUDIES PROGRAM

College of Arts and Humanities

Ellensburg

Language and Literature Bldg., room 100-0

509-963-1190

Fax 509-963-1654

www.cwu.edu/~aps

See website for how this program may be used for educational and career purposes.

Faculty and Staff

Program Director

James Cook, PhD

Program Faculty

Yukari Amos, PhD, education

Liahna Armstrong, PhD, English

George Bellah, PhD, theatre

John Bowen, PhD, geography

Toni Culjak, PhD, English

Jeffrey W. Dippmann, PhD, philosophy and religious studies

Michael Launius, PhD, political science

Chenyang Li, PhD, philosophy and religious studies

Joshua Nelson, PhD, Japanese language

Penglin Wang, PhD, anthropology

Hong Xiao, PhD, sociology

Bang-Soon Yoon, PhD, political science and women's studies

Associate Faculty

Koushik Ghosh, PhD, economics

Xiadong Kuang, PhD, communications

Alejandro Lee, PhD, Spanish language

Yong Joo Lee, PhD, finance and OSCM

Kun Liao, PhD, finance and OSCM

Yuanxia Liu, MA, lecturer, Chinese language

Kenneth Munsell, MA, lecturer, history

Mariko Okada-Collins, MA, lecturer, Japanese language

Cameron Otopalik, visiting professor, political science

Hideki Takei, PhD, ITAM

Fen Wang, PhD, ITAM

Program Information

The Asia/Pacific Studies Program is an interdisciplinary program focusing on a region currently undergoing a dramatic economic, political, and social transformation. The program provides students with a grasp of the region's diversity while emphasizing the interactive nature of an overarching community of nations. Careers in international business, government service, and education can be augmented by preparation in Asia/Pacific Studies. The program also serves as an excellent preparation for graduate study in various academic and professional fields.

Bachelor of Arts

(NOTE: Students seeking a BA degree must complete one year college/university study or two years high school study of a single foreign language.)

Bachelor of Arts

Asia/Pacific Studies Major

Required Courses

AST 102 - Introduction to Asian Studies 3

AST 401 - Asia/Pacific Studies Capstone . . . 3

First- and Second-year Chinese 30

CHIN 151 - First-year Chinese (5)

CHIN 152 - First-year Chinese (5)

CHIN 153 - First-year Chinese (5)

CHIN 251 - Second-year Chinese (5)

CHIN 252 - Second-year Chinese (5)

CHIN 253 - Second-year Chinese (5)

OR

First- and Second-year Japanese

JAPN 151 - First-year Japanese (5)

JAPN 152 - First-year Japanese (5)

JAPN 153 - First-year Japanese (5)

JAPN 251 - Second-year Japanese (5)

JAPN 252 - Second-year Japanese (5)

JAPN 253 - Second-year Japanese (5)

Choose six classes from the following

list 15

You are required to choose a minimum of one class from each of the three groups.

Elective courses may not be chosen from the student's major area.

(Note: Other courses may be included with advisor's approval)

Group 1 (Social Sciences)

ANTH 344 - Cultures of Asia (4)

ANTH 345 - Cultures of Southeast Asia and Oceania (4)

AST 310 - Japan Today (3)

GEOG 474 - Geography of China (4)

GEOG 475 - Geography of Asia (5)

POSC 366 - Government and Politics of East Asia (5)

POSC 367 - Politics of Japan (5)
 POSC 368 - Chinese Politics (5)
 POSC 369 - Korean Politics (5)
 POSC 373 - International Politics of the Pacific Rim (5)

Group 2 (Aesthetic Experience)

AST 301 - Chinese Literature in Translation (4)
 AST 347 - Japanese Literature in Translation (4)
 AST 465 - Indian Cinema (4)
 AST 466 - Asian Cinema (4)
 CHIN 461 - Chinese Cinema (4)
 JAPN 462 - Japanese Cinema (4)
 TH 375 - Asian Drama (4)

Group 3 (Humanities)

HIST 380 - Modern East Asia (5)
 HIST 381 - Modern Southeast Asia (5)
 HIST 383 - East Asian Civilization (5)
 HIST 465 - History of the People's Republic of China (5)
 HIST 483 - Modern China (5)
 HIST 484 - Modern Japan (3-5)
 PHIL 345 - Chinese Philosophy (5)
 RELS 351 - Religions of China and Japan (5)
 RELS 352 - Religions of India (5)
 RELS 401 - The Daoist Tradition (5)

Total Credits: 61-65

Asia/Pacific Studies Minor

Required Courses

AST 102 - Introduction to Asian Studies 3
 First-year Chinese 15
 CHIN 151 - First-year Chinese (5)
 CHIN 152 - First-year Chinese (5)
 CHIN 153 - First-year Chinese (5)

OR

First-year Japanese
 JAPN 151 - First-year Japanese (5)
 JAPN 152 - First-year Japanese (5)
 JAPN 153 - First-year Japanese (5)

Choose three classes from the following list 13-14

You are required to choose a minimum of one class from each of the three groups. Elective courses may not be chosen from the student's major area.
 (Note: Other courses may be included with advisor's approval. At least two departments must be represented among selected courses.)

Group 1 (Social Sciences)

ANTH 344 - Cultures of Asia (4)
 ANTH 345 - Cultures of Southeast Asia and Oceania (4)
 AST 310 - Japan Today (3)
 GEOG 474 - Geography of China (4)
 GEOG 475 - Geography of Asia (5)
 POSC 366 - Government and Politics of East Asia (5)
 POSC 367 - Politics of Japan (5)
 POSC 368 - Chinese Politics (5)
 POSC 369 - Korean Politics (5)
 POSC 373 - International Politics of the Pacific Rim (5)

Group 2 (Aesthetic Experience)

AST 301 - Chinese Literature in Translation (4)
 AST 347 - Japanese Literature in Translation (4)
 AST 465 - Indian Cinema (4)
 AST 466 - Asian Cinema (4)
 CHIN 461 - Chinese Cinema (4)
 JAPN 462 - Japanese Cinema (4)
 TH 375 - Asian Drama (4)

Group 3 (Humanities)

HIST 380 - Modern East Asia (5)
 HIST 381 - Modern Southeast Asia (5)
 HIST 383 - East Asian Civilization (5)
 HIST 465 - History of the People's Republic of China (5)
 HIST 483 - Modern China (5)
 HIST 484 - Modern Japan (3-5)
 PHIL 345 - Chinese Philosophy (5)
 RELS 351 - Religions of China and Japan (5)
 RELS 352 - Religions of India (5)
 RELS 401 - The Daoist Tradition (5)

Total Credits: 31-32

Asia/Pacific Studies Courses

AST 102. Introduction to Asian Studies (3).

An interdisciplinary introduction to the study of Asia; emphasizing geography, history, culture, and economics.

AST 301. Chinese Literature in Translation

(4). A survey of Chinese literature in translation. AST 301 and CHIN 301 are equivalent courses; students may not receive credit for both.

AST 310. Japan Today (3). Study of culture, social structure, human relations, and issues and problems in contemporary Japan.

AST 347. Japanese Literature in Translation

(4). A survey of Japanese literature in translation. AST 347 and JAPN 301 are equivalent courses; students may not receive credit for both. Prerequisite: ENG 101 with a grade of C- or better.

AST 396. Individual Study (1-6).

AST 398. Special Topics (1-6).

AST 401. Asia/Pacific Studies Capstone

(3). Senior research project of creative expression, to be completed in conjunction with elective course under the supervision of an Asia Pacific Studies teaching faculty member or someone designated by director.

AST 465. Indian Cinema (4). An examination

of the history, aesthetic achievements, major directors and themes, and cultural explorations of Indian cinema. The course explores films from a variety of Indian cinematic traditions including the Bengali, Hindi, Bangladeshi, Telugu, Tamil, Marathi, Malavalam, Kashmir, and Kannada film industries.

AST 466. Asian Cinema (4). A survey of the history, aesthetic achievements, major directors and themes, and cultural explorations of Asian cinema (exclusive of India, China, and Japan). The course will include films from Korea, Cambodia, Vietnam, Laos, Nepal, Thailand, etc.

AVIATION DEPARTMENT

College of Education and Professional Studies
 Ellensburg
 Black Hall Suite 225
 400 East University Way
 509-963-2364
 Fax: 509-963-2377

CWU-Moses Lake
 7662 Chanute Street NE
 Moses Lake, WA 98837
 509-793-2355 or 509-793-2914
 Fax: 509-762-1918

www.cwu.edu/~aviation

See website for how this program may be used for educational and career purposes.

Faculty and Staff

Chair

Amy Hoover, PhD

Professors

Teresa Sloan, MIT, FAA ground schools, air transportation
 Dale Wilson, MS, aviation safety, human factors, aviation weather

Associate Professors

Amy Hoover, PhD, mountain flying, meteorology, human factors

Lecturers

David Clark, BS, FAA ground schools, Alpha Eta Rho advisor
 Jason Underhill, BS, flight simulation coordinator

Staff

Denee Scribner, BS, office manager

Department Information

The Department of Aviation offers two Bachelor of Science degrees.

1. Professional Pilot degree: Specializations in flight officer and commercial pilot
2. Aviation Management degree: Specializations in aviation management and aviation maintenance management.

Accrediting Information

The aviation department holds an FAA Air Agency certificate. Ground schools and flight labs are conducted under 14CFR Part 141 of the Federal Aviation Administration regulations. CWU aviation department is a member of the University Aviation Association.

Department Standards

Admissions

Students must apply for acceptance into a flight technology specialization. Application will be reviewed upon acceptance to CWU. Admission decisions are based on a number of factors, including grade point average,

SAT/ACT scores, letters of recommendation, financial capability, and a written statement of purpose, as outlined in the aviation department application form. Transportation Security Administration (TSA) regulations require proof of citizenship for pilots.

Financial Obligations

Flight training fees are paid by the student and will be in addition to normal university tuition and fees (see aviation department website for current fees). Additional fees are required for AVP 444, AVP 445, and AVP 489 (see online student registration handbook). Additional costs for students enrolled in flight labs include current FAA charts, pilot supplies, and optional personal aviation headphones.

Professional Pilot, BS

Professional Pilot Core Requirements

AVM 417 - Aviation Safety Management	4
AVM 418 - Threat and Error Management in Aviation	3
AVM 330 - Aviation Law	3
AVM 350 - Aviation Career Planning and Professionalism	3
AVP 101 - Private Pilot Flight Laboratory I	1
AVP 102 - Private Pilot Flight Laboratory II	1
AVP 103 - Private Pilot Flight Laboratory III	1
AVP 141 - Principles of Flight I	4
AVP 142 - Principles of Flight II	4
AVP 201 - Instrument Pilot Flight Laboratory I	1
AVP 202 - Instrument Pilot Flight Laboratory II	1
AVP 203 - Instrument Pilot Flight Laboratory III	1
AVP 211 - Meteorology for Pilots	4
AVP 221 - Aircraft Systems I	3
AVP 241 - Instrument Flight I	3
AVP 242 - Instrument Flight II	3
AVP 304 - Commercial Pilot Flight Laboratory I	1
AVP 305 - Commercial Pilot Flight Laboratory II	1
AVP 306 - Commercial Pilot Flight Laboratory III	1
AVP 312 - Aviation Weather Services	3
AVP 319 - Applied Aerodynamics	3
AVP 322 - Aircraft Systems II	3
AVP 323 - Advanced Navigation	3
AVP 332 - Aviation History	3
AVP 337 - Aviation Physiology and Survival	4
AVP 340 - Human Factors in Flight	4
AVP 352 - Multiengine Principles	2
AVP 354 - Commercial Pilot	4

Total Core Credits: 70



Flight Officer Specialization

This specialization prepares graduates for professional pilot positions within the airline industry. To graduate, students must complete the commercial pilot certificate,* multiengine rating, and certified flight instructor certificate at Central's approved flight training operator at Bowers Field in Ellensburg, Washington.**

*Except as provided in approved articulation agreements.

**Once a student has enrolled at CWU, all subsequent flight training must be conducted by Central's approved flight training operator and shall be done in a manner approved by the FAA under 14 CFR Part 141 regulations.

Required Courses

Professional Pilot Core Requirements	70
AVM 333 - Air Transportation	4
AVP 301 - Certified Flight Instructor Laboratory	1
AVP 348 - Air Carrier Operations	4
AVP 401 - Multiengine Flight Laboratory	1
AVP 410 - Crew Resource Management	3
AVP 422 - Aircraft Systems III - Turboprop Systems	3
AVP 423 - Aircraft Systems IV - Turbojet Systems	4
AVP 444 - Multiengine FTD Baron G58	2
AVP 445 - Turboprop FTD, King Air 200	2
AVP 448 - Fundamentals of Flight Instruction	5
AVP 469 - Turbojet Operations	4
AVP 489 - Turbojet FTD, CRJ - 200	3
Department-approved electives; any AVM or AVP course not used in required courses	4

Total Credits: 110

Commercial Pilot Specialization

This specialization prepares graduates for commercial aviation employment opportunities. To graduate, students must complete the commercial pilot certificate* at Central's approved flight-training operator at Bowers Field in Ellensburg, Washington.** A minor is required.

*Except as provided in approved articulation agreements.

**Once a student has enrolled at CWU, all subsequent flight training must be conducted by Central's approved flight training operator, and shall be done in a manner approved by the FAA under 14 CFR Part 141 regulations.

Required Courses

Professional Pilot Core Requirements	70
AVP 332 - Aviation History	3
AVP 375 - Mountain and Canyon Flying	3
Department-approved AVM or AVP Electives	10
Department-approved electives	4

Total Credits: 90

Aviation Management, BS

Aviation Management Core Requirements

ADMG 385 - Business Communication and Report Writing	5
AVM 330 - Aviation Law	3
AVM 333 - Air Transportation	4
AVM 335 - Aviation Management	3
AVM 417 - Aviation Safety Management	4
AVM 418 - Threat and Error Management in Aviation	4
HRM 381 - Management of Human Resources	5
MATH 130 - Finite Mathematics I	5
MATH 311 - Statistical Concepts and Methods	5
MGT 380 - Organizational Management	5

Total Core Credits: 43

Aviation Management Specialization

This specialization prepares graduates for a variety of administrative and management positions in aviation. Credit for flight training under 14CFR Part 61 or 141 as elective courses for this specialization must be approved by an aviation department advisor. Total college business courses applied to this degree must not exceed 22 credits.

Required Courses

Aviation Management Core Requirements	43
ADMG 372 - Leadership and Supervision	3
COM 345 - Business and Professional Speaking	4
ECON 201 - Principles of Economics Micro	5
ECON 202 - Principles of Economics Macro	5
AVM 334 - Airport Management	3
AVM 350 - Aviation Career Planning and Professionalism	3
MKT 360 - Principles of Marketing	5

Select Either..... 5

ACCT 251 - Financial Accounting (5)
ACCT 301 - Financial Accounting Analysis (5)

Select Either..... 3

AVM 434 - Airport Operations (3)
AVM 438 - Airport Planning and Design (3)

Department-approved electives 11

Any AVM or AVP course not used in required courses;
Any course with a prefix of ADMG, AFRO, CS, ECON, IET, IT, ITAM, MSL, or SHM
MATH 153 or higher (except MATH 164), POSC 320

Total Credits: 90

Aviation Maintenance Management Specialization

This specialization prepares graduates for entry into aviation maintenance and management in the aviation industry or FAA. Students enrolling in this specialization must already possess an FAA Airframe and Powerplant certificate and/or graduation

certificate from a Federal Aviation Administration-approved 14CFR Part 147 school. (Certificate not offered at Central Washington University.) Forty-five credits of the Airframe and Powerplant certificate will be accepted upon completion of all other degree requirements. Total college business courses applied to this degree must not exceed 22 credits.

Required Courses

Aviation Management Core Requirements . 43
Airframe and Powerplant Certificate 45
(Certificate not offered at Central Washington University. Forty-five credits of the Airframe and Powerplant Certificate will be accepted upon completion of all other degree requirements. See program advisor.)
ENG 310 - Technical Writing 4

Total Credits: 92

Aviation Professional Pilot Minor

A program designed for students who wish to earn a pilot's license (private pilot certificate). Flight training is taken through CWU's approved flight training operator at Bowers Field in Ellensburg, Washington, and may be taken under FAR Part 61 or Part 141.

Required Courses

AVP 101 - Private Pilot Flight Laboratory I . 1
AVP 102 - Private Pilot Flight
Laboratory II 1
AVP 103 - Private Pilot Flight
Laboratory III 1
AVP 141 - Principles of Flight I 4
AVP 142 - Principles of Flight II 4
AVP 211 - Meteorology for Pilots 4
AVP 221 - Aircraft Systems I 3
Department-approved AVM or AVP
electives 6

Total Credits: 24

Aviation Management Minor

An aviation management minor provides students with an introduction to several key areas of aviation management.

Required Courses

AVM 330 - Aviation Law 3
AVM 334 - Airport Management 4
AVM 335 - Aviation Management 3
AVM 417 - Aviation Safety Management . . . 4
MGT 380 - Organizational Management . . . 5
Choose a minimum of two courses from the following: 7-8
AVM 333 - Air Transportation (4)
AVM 434 - Airport Operations (3)
AVM 438 - Airport Planning and
Design (4)

Total Credits: 26-27

Aviation Management Courses

AVM 296. Individual Study (1-6).
AVM 298. Special Topics (1-6).
AVM 330. Aviation Law (3). This course provides an introduction to aviation law, the legal system, and the principles of law and how they may be applied to aspects of

air transportation. Prerequisite: students must be junior standing or above to enroll in this class.

AVM 333. Air Transportation (4). The air transportation system including facilities, regulations, and problems encountered in commercial transportation, airline operations, economic, ethical, and social considerations. Prerequisite: ENG 101 with a grade of C- or better.

AVM 334. Airport Management (3). Airport operations and management, including analysis of the role of the airport manager in planning, finance, and administration; public relations, social, political, and environmental considerations; operational requirements and facilities maintenance.

AVM 335. Aviation Management (3). Management of aviation activities, manpower, facilities, regulations, and flight operations.

AVM 350. Aviation Career Planning and Professionalism (3). Career planning as applicable to students pursuing careers in the air transportation industry. Prerequisite: junior standing or above.

AVM 417. Aviation Safety Management (4). Fundamentals of aviation safety program management. By permission. Prerequisite: Commercial Pilot Certificate Course Stage IV.

AVM 418. Threat and Error Management in Aviation (3). Principles of Threat and Error Management (TEM) in aviation operations. Prerequisite: AVP 340.

AVM 434. Airport Operations (3). Prerequisite: AVM 333 and AVM 334.

AVM 438. Airport Planning and Design (4). Methodologies necessary to the planning and design of airports. Prerequisite: AVM 434.

AVM 490. Cooperative Education (1-12). An individualized, contracted field experience with business, industry, government, or social service agencies. This contractual arrangement involves a student-learning plan, cooperating employer supervision, and faculty coordination. By permission. May be repeated up to 20 credits. Grade will either be S or U.

AVM 496. Individual Study (1-6).

AVM 498. Special Topic (1-6).

AVM 499. Seminar (1-5).

Aviation Pilot Courses

AVP 101. Private Pilot Flight Laboratory I (1). Basic flight maneuvers, solo flight in local area, and introduction of maximum performance takeoff and landing procedures. Corequisite: AVP 141.

AVP 102. Private Pilot Flight Laboratory II (1). Plan and conduct cross-country flights and perform short-field and soft-field takeoffs and landings. Prerequisite: AVP 101. Corequisite: AVP 142.

AVP 103. Private Pilot Flight Laboratory III (1). Perform private pilot operation at a standard to obtain the private pilot certificate. Prerequisite: AVP 102.

AVP 141. Principles of Flight I (4). Basic knowledge of airplanes and their systems, aerodynamics, flight safety, airports, aeronautical charts, airspace, radio communications, air traffic control services, and aviation regulations. Corequisite: AVP 221.

AVP 142. Principles of Flight II (4). Basic knowledge of airplane performance and loading, preflight planning including weather analysis, visual and radio (VOR/ADF) navigation, flight physiology, and aeronautical decision making. Preflight planning for cross-country flights. Prerequisite: C- or above in AVP 141. Corequisite: AVP 211.

AVP 201. Instrument Pilot Flight Laboratory I (1). Altitude control by instrument reference only, use of full and partial panel, and radio navigation. Prerequisite: private pilot certification.

AVP 202. Instrument Pilot Flight Laboratory I (1). IFR approaches and holding patterns. Prerequisite: AVP 201.

AVP 203. Instrument Pilot Flight Laboratory III (1). Perform all IFR maneuvers and procedures to FAA instrument rating practical test standards. Prerequisite: AVP 202.

AVP 211. Meteorology for Pilots (4). Meteorological processes and weather hazards applicable to the flight environment. Corequisite: AVP 142.

AVP 221. Aircraft Systems I (3). Light training aircraft engines, propellers and engine systems, flight controls, fuel systems, instrumentation, tires, wheels and brakes. Corequisite: AVP 141.

AVP 241. Instrument Flight I (4). Discussion and study of aircraft instruments, basic attitude instrument flying, navigation, regulations, procedures, and aeronautical decision making for the instrument pilot. Prerequisite: private pilot certifications.

AVP 242. Instrument Flight II (3). Procedures for IFR departure, enroute and arrival operations. Preparation for FAA aeronautical knowledge exam. Prerequisite: C- or above in AVP 241. Corequisite: AVP 312.

AVP 296. Individual Study (1-6).

AVP 298. Special Topics (1-6). Course content identified by title in the university class schedule. May be repeated for credit under different titles. May be repeated for credit.

AVP 301. Certified Flight Instructor Laboratory (1). Analyze and perform maneuvers from the right seat. Demonstrate proficiency and instructional knowledge to FAA practical test standards. Prerequisite: AVP 448 and Commercial Pilot Certificate.

AVP 304. Commercial Pilot Flight Laboratory I (1). Plan and conduct VFR cross-country flights using pilotage, dead reckoning, and radio navigation. Night flight operations. Prerequisite: AVP 203.

AVP 305. Commercial Pilot Flight Laboratory II (1). Operation of complex aircraft and basic knowledge of advanced commercial maneuvers. Prerequisite: AVP 304.

AVP 306. Commercial Pilot Flight Laboratory III (1). Perform flight maneuvers and procedures to FAA commercial pilot practical test standards. Prerequisite: AVP 305.

AVP 307. Hypobaric Chamber (1). Physiological aspects of flight to include participation in FAA-sponsored USAF night vision lab and hypobaric (altitude) chamber training. Prerequisite: AVP 337.

AVP 312. Aviation Weather Services (3). Comprehensive analysis of weather service for flight crews, including interpretation of applicable alpha-numeric and graphic weather reports and forecasts. Corequisite: AVP 242.

AVP 319. Applied Aerodynamics (3). Theories of flight and flight factors including airfoil shape, drag, velocity, lift and thrust, stability and control. Prerequisite: AVP 242.

AVP 322. Aircraft Systems II (3). Complex aircraft systems. Prerequisite: AVP 221. Corequisite: AVP 354.

AVP 323. Advanced Navigation (3). Advanced navigation systems, their function, operation and application. Prerequisite: AVP 354.

AVP 331. National Airspace System (3). The national air traffic control system, control procedures, the integration of centers, approach communications, navigation procedures, radar operations, and facilities.

AVP 332. Aviation History (3). Major developments in the history of powered flight. Includes perspectives from civilian, military, international, and air carrier operations. Prerequisite: ENG 101 with a grade of C- or better.

AVP 337. Aviation Physiology and Survival (4). Physiological aspects of flight crew performance, including effects of high altitude, accelerations, disorientation, and fatigue. Basic introduction to wilderness survival. Prerequisite: private pilot certification.

AVP 340. Human Factors in Flight (4). Psychological aspects of flight crew performance and fundamental concepts of crew resource management.

AVP 348. Air Carrier Operations (4). Familiarization and utilization of Company Operations Manual excerpts, Operations Specifications, and Minimum Equipment Lists, and the Code of Federal Regulations (CFR), Hazardous Materials (HMR) part 175, CFR parts 119, 120, 121, and NTSB830 to determine safety of flight and compliance with company policies and procedures and federal regulations. Exposure to multi-crew environment and expectations of professional behavior for flight crews. Prerequisite: AVP 354.

AVP 352. Multiengine Principles (2). Discussion and study of multiengine aerodynamics, operating procedures, systems, performance, weight, and balance considerations, engine-out procedures, single-engine aerodynamics, and instrument flight. Prerequisite: AVP 354.

AVP 354. Commercial Pilot (4). Operation of advanced systems appropriate to complex airplanes and execution of advanced flight maneuvers. Preparation for FAA written examination. Prerequisite: private pilot certificate with instrument (airplane) rating, or FAA instrument airplane knowledge test passed. Corequisite: AVP 322.

AVP 375. Mountain and Canyon Flying (3). Synthesis of fundamental concepts and practices including navigation in mountainous terrain, aircraft performance and density altitude, canyon flying and airport operations in constricted areas, mountain and canyon meteor, emergencies, and flight safety. By permission. Prerequisite: private pilot certificate.

AVP 401. Multiengine Flight Laboratory (1). Perform multiengine aircraft systems and operations, normal and emergency procedures to FAA practical test standards. Prerequisite: AVP 352 and Commercial Pilot Certificate.

AVP 410. Crew Resource Management (3). Study of human performance in complex systems with an examination of stress, anxiety, fatigue, communication, personality and judgement, and practical application of human factors and performance in modern aviation. Prerequisite: AVP 340.

AVP 422. Aircraft Systems III-Turboprop Systems (3). Introduction and familiarization of turbine engines and turboprop aircraft systems. Prerequisite: AVP 322 and AVP 354.

AVP 423. Aircraft Systems IV-Turbojet Systems (4). Introduction and familiarization of transport category aircraft systems. Prerequisite: AVP 422.

AVP 424. Dash 8 Aircraft Systems and Operations (4). Dash 8 turboprop aircraft systems. Prerequisite: AVP 422 and AVP 444.

AVP 444. Multiengine FTD, Baron G58 (2). Introduction to and familiarization of Electronic Flight Instrument Systems (EFIS), Crew Resource Management (CRM) in multi-crew environment, use of flight director and autopilot in a simulated flight environment. By permission. Prerequisite: AVP 352, admission to the flight officer specialization, and Commercial Pilot Certificate course stage V complete.

AVP 445. Turboprop FTD, King Air 200 (2). Introduction and familiarization of turbine-powered aircraft operations in a simulated flight environment, including Crew Resource Management (CRM), Electronic Flight Information Systems (EFIS), Flight Director (FD), and Autopilot (AP) operations. Prerequisite: AVP 422 and AVP 444.

AVP 448. Fundamentals of Flight Instruction (5). A two-part course consisting of fundamentals of instruction, including: foundations of learning, learning theories, styles, domains, teaching process and methods, lesson design and evaluation, and human behavior. The role of the airplane flight instructor, including: privileges and

responsibilities, teaching aeronautical decision making, flight safety, and professionalism. Prerequisite: instrument rating and commercial pilot flight stage V complete.

AVP 458. Advanced Flight Instruction, Instrument (3). Methodology used in teaching instrument flight and acquisition of the Instrument Ground Instructor certificate (IGI). Prerequisite: AVP 448, and Certified Flight Instructor Certificate course stage 1.

AVP 469. Turbojet Operations (4). Introduction and familiarization of transport category aircraft operations including: Crew Resource Management (CRM), flows and checklist procedures, aircraft limitations, normal and emergency operational procedures. Prerequisite: AVP 423.

AVP 475A. Specialty Flight Laboratory: Single Engine Seaplane (1). Receive ground and flight instruction in the listed specialty. Flight hours will vary with each specialty. A minimum of 10 flight hours normally required for credit except as approved by aviation faculty. May be repeated for a different specialty. Grade will either be S or U. By permission. Prerequisite: FAA pilot certificate.

AVP 475B. Specialty Flight Laboratory: Multiengine Seaplane (1). Receive ground and flight instruction in the listed specialty. Flight hours will vary with each specialty. A minimum of 10 flight hours normally required for credit except as approved by aviation faculty. May be repeated for a different specialty. Grade will either be S or U. By permission. Prerequisite: FAA pilot certificate.

AVP 475C. Specialty Flight Laboratory: Helicopters (1). Receive ground and flight instruction in the listed specialty. Flight hours will vary with each specialty. A minimum of 10 flight hours normally required for credit except as approved by aviation faculty. May be repeated for a different specialty. Grade will either be S or U. By permission. Prerequisite: FAA pilot certificate.

AVP 475D. Specialty Flight Laboratory: Mountain Flying (1). Receive ground and flight instruction in the listed specialty. Flight hours will vary with each specialty. A minimum of 10 flight hours normally required for credit except as approved by aviation faculty. May be repeated for a different specialty. Grade will either be S or U. By permission. Prerequisite: FAA pilot certificate.

AVP 475E. Specialty Flight Laboratory: Aerobatics (1). Receive ground and flight instruction in the listed specialty. Flight hours will vary with each specialty. A minimum of 10 flight hours normally required for credit except as approved by aviation faculty. May be repeated for a different specialty. Grade will either be S or U. By permission. Prerequisite: FAA pilot certificate.

AVP 475F. Specialty Flight Laboratory: Other

(1). Receive ground and flight instruction in the listed speciality. Flight hours will vary with each speciality. A minimum of 10 flight hours normally required for credit except as approved by aviation faculty. Hang gliders are specifically omitted. May be repeated for a different speciality. Grade will either be S or U. By permission. Prerequisite: FAA pilot certificate.

AVP 489. Turbo FTD, CRJ-200 (3).

Introduction and familiarization of turbojet-powered aircraft operations in a simulated flight environment, including Crew Resource Management (CRM), Electronic Flight Instrument Systems (EFIS), Engine Indicating and Crew Alerting Systems (EICAS), Flight Director (FD), and automation philosophy / operation. Prerequisites: AVP 423, AVP 445 and AVP 469, multiengine rating.

AVP 490. Cooperative Education (1-12).

An individualized contracted field experience with business, industry, government, or social service agencies. This contractual arrangement involves a student learning plan, cooperating employer supervision, and faculty coordination. May be repeated for credit. Grade will either be S or U. By permission.

AVP 496. Individual Study (1-6).

AVP 498. Special Topics (1-6).

Course content identified by title in the university class schedule. May be repeated for credit under different titles.

AVP 499. Seminar (1-5).

BIOLOGICAL SCIENCES DEPARTMENT

College of the Sciences
Ellensburg
Science Bldg., room 338

509-963-2731

Fax: 509-963-2730

www.cwu.edu/~biology

See website for how this program may be used for educational and career purposes.

Faculty and Staff Chair

Paul W. James, PhD

Professors

Daniel D. Beck, PhD, physiological ecology and herpetology

David M. Darda, PhD, evolutionary vertebrate morphology, herpetology

Kristina A. Ernest, PhD, terrestrial and community ecology

Paul W. James, PhD, ecology and fisheries biology

Sheldon R. Johnson, PhD, zoophysiology, mammalogy (emeritus)

Robert E. Pacha, PhD, microbiology (emeritus)

Wayne S. Quirk, PhD, sensation and perception, neuroscience

Linda A. Raubeson, PhD, evolutionary biology and genetics

Stamford D. Smith, PhD, entomology (emeritus)

Lixing Sun, PhD, behavioral ecology and evolution

Associate Professors

Tom R. Cottrell, PhD, plant ecology

James E. Johnson, PhD, mycology, systematics

Holly C. Pinkart, PhD, microbiology, microbial ecology

Mary E. Poulson, PhD, plant physiology

Ian J. Quitadamo, PhD, science education, cell and molecular biology

R. Steven Wagner, PhD, conservation genetics and herpetological science

Assistant Professors

Lucinda Carnell, PhD, molecular behavioral genetics

Jennifer Dechaine, PhD, plant biology

Blaise Dondji, PhD, human physiology, microbiology, parasitology, immunology

Jason T. Irwin, PhD, animal physiology

Alison Scoville, PhD, ecological and evolutionary genomics

Daniel J. Selski, PhD, developmental neurobiology

Gabrielle Stryker, PhD, microbiology, immunology and parasitology

Lecturers

Clay Arango, PhD

Lucy Bottcher, PhD

Raymon Donahue, PhD

Gabriella Jackson, PhD

Staff

Emily Babbik, engineering technician

Jonathan Betz, instructional classroom support technician

Mary Bottcher, instructional classroom support technician

Eric Foss, instructional classroom support technician

Kariann Linnell, secretary supervisor

Jeff Wilcox, engineering technician

Department Information

The Department of Biological Sciences provides the biological component of the liberal arts education at the university. We promote student understanding of biological concepts relevant to the individual and society, and foster an appreciation of scientific inquiry. Evolution is the unifying theme of our curriculum. Our students obtain a broad education, covering a wide variety of biological disciplines. We focus on the student. Classes are small, facilitating hands-on experience, interactions with faculty, and opportunities for both undergraduate and graduate research. We offer a full complement of competitive pre-professional programs, strong programs in regional field biology, and a quality program for secondary biology educators.

Admission Requirements

To be admitted to a biology major or minor, all students must:

1. Meet with an advisor
Advisors are normally assigned by the biology department upon admission to the major. However, it is highly recommended that a student talk with an advisor well before being admitted to the major. Any biology department faculty member may serve as an advisor but different faculty members advise in different areas. Please meet with your advisor as early in your academic career as possible to begin planning your program.
2. Complete and file an application to the major by the beginning of the junior year. A formal application to the biology major must be submitted with your advisor's approval. The entry-to-major qualifications must be met and application should be made by the beginning of the junior year. Application forms can be obtained from the advisor, the department office, or online at www.cwu.edu/~biology/forms/index.html.
3. Complete and file a program of study by the end of the junior year.
To graduate, each student must have on file in the biology department and in the registrar's office, an official Course of Study. The Course of Study documents a student's individual degree program and lists the required and elective courses necessary for successful program completion. It is prepared by the student in conjunction with his or her advisor and should be approved by the student, advisor, and department chair at least one year prior to graduation. Students should meet with their advisor regularly to discuss their progress. Course of Study forms can be obtained from the advisor, the department office, or online at: www.cwu.edu/~biology/forms/index.html.

Student Scholarly Activities

The department is student oriented and provides a diversity of laboratory and field experiences. Students are encouraged to participate in a variety of activities.

- Research activities: Students are encouraged to seek out a faculty member who is engaged in active research that complements the student's career goals. Students who begin research early and continue it through their career in the department gain a better understanding of their profession and are more competitive in the job market or in graduate school admissions.
- Field program: The department believes in the importance of exposing students to biological field experiences. In addition to those provided by regular courses, the department offers summer field courses and trips to biologically interesting areas during breaks between quarters.

Student Organizations

Biology Club: All biology students are encouraged to join the Biology Club. This student-run organization meets regularly to discuss academic planning and career opportunities in biology. The club performs service activities and plans recreational outings. See its website at www.cwu.edu/~biology/biologyClub/biologyClub.html.

Beta Beta Beta: BBB is the undergraduate National Biological Sciences Honorary Society. Students maintaining a high grade point average (3.0 or higher) are encouraged to apply.

Various organizations for students interested in health professions (medicine, dentistry, etc.) are available to provide information, support, and opportunities for service.

Fees

Laboratory or field fees are assessed for many of the department's lab courses. These fees are used as partial support for purchasing lab materials or providing transportation costs.

General Consideration for Biology Majors and Minors

- The biological sciences department must approve each student's program at least one academic year preceding graduation
- CHEM 181 has a prerequisite of high school chemistry and qualification for MATH 153. PHYS 111 has a prerequisite of high school algebra and trigonometry. PHYS 181 has a prerequisite or corequisite of MATH 172, 173, and 272. BIOL 360 has a prerequisite of MATH 153.
- Credits earned in CHEM 181, 181LAB, and PHYS 111 will be allowed in partial fulfillment of the natural science breadth requirements as well as the requirements of the biology major or minor.
- A maximum of 15 credits in BIOL 295, BIOL 490, BIOL 295 and BIOL 496 may be included in the major (as electives in the BS degrees).
- A major in biological sciences incorporates classes from mathematics and other sciences. A full year of introductory biology and introductory chemistry is required for enrollment in upper-division biology classes. The introductory chemistry sequence (CHEM 181, 182, 183) is pre- or corequisite to the introductory biology series (BIOL 181, 182, 183). Students are urged to complete these two introductory series in their first year or as early in their academic career as possible.

Graduation Requirements

- You must have a cumulative GPA of at least 2.25 in your major.

- End-of-major assessment must be completed, usually in conjunction with BIOL 499S. This requirement helps to assess whether the department has fulfilled its instructional objectives and provides us with information that will enable us to continuously improve our programs and courses.
- Application for the bachelor's degree must be filed by the second Friday of the quarter preceding the quarter in which the degree is to be received. Complete instructions and deadlines are available in Registrar Services.

Bachelor of Arts Biology Major

The BA degree is designed to develop a general breadth in the sciences. Students completing the BA major will find that their strong general background will allow them flexibility in career choices. The BA degree meets the requirements for admission to most graduate schools and medical schools. (NOTE: Students seeking a BA degree must complete one year college/university study or two years high school study of a single foreign language.)

Required Courses

BIOL 181 - General Biology I	5
BIOL 182 - General Biology II	5
BIOL 183 - General Biology III	5
BIOL 213 - Quantitative Methods in Biology	4
BIOL 321 - Genetics	5
BIOL 470 - Mechanisms of Evolution	3
BIOL 497 - Honors Thesis	1
OR	
BIOL 499S - Senior Seminar (1)	
CHEM 181 - General Chemistry I	4
CHEM 181LAB - General Chemistry Laboratory I	1
CHEM 182 - General Chemistry II	4
CHEM 182LAB - General Chemistry Laboratory II	1
CHEM 183 - General Chemistry III	4
CHEM 183LAB - General Chemistry Laboratory III	1
CHEM 361 - Organic Chemistry I	3
CHEM 361LAB - Organic Chemistry Laboratory I	2
CHEM 362 - Organic Chemistry II	3
Select from the following sequences	10
PHYS 111, 111LAB, 112, 112LAB, OR	
PHYS 181, 181LAB, 182, 182LAB	
Select from the following	5-10
BIOL 355 - Human Anatomy and Physiology (5)	
AND	
BIOL 356 - Human Anatomy and Physiology (5)	
BIOL 441 - Plant Physiology (5)	
BIOL 455 - Zoophysiology (5)	
Select from the following	5
BIOL 360 - General Ecology (5)	
BIOL 420 - Environmental Microbiology (5)	

Total Credits: 71-76

Bachelor of Science Biology Major

The BS major offers undergraduate students a degree program with depth of training in the biological sciences and supporting fields. This program prepares students for immediate entrance into careers in biological sciences or for graduate work (for preparation for teaching high school biology, see biology teaching major). Students may choose a general BS degree (no specialization), or a specialization in one of three areas: cell and molecular biology, ecology, or organismal biology (these will be indicated on the student's transcripts). Students consult with the appropriate biology advisor for approval of their BS program and electives, which must be submitted for approval to the biological sciences department at least one academic year preceding graduation. All students in the BS biology major must complete all BS core requirements, plus additional specific requirements if they choose a specialization.

A maximum of 15 credits in BIOL 295, BIOL 490, BIOL 495, and BIOL 496 may be included in the major. CHEM 181 has a prerequisite of high school chemistry and qualification for MATH 153. BIOL 360 has a prerequisite of MATH 153.

Biology Core Requirements

BIOL 181 - General Biology I	5
BIOL 182 - General Biology II	5
BIOL 183 - General Biology III	5
BIOL 213 - Quantitative Methods in Biology	4
BIOL 321 - Genetics	5
BIOL 360 - General Ecology	5
OR	
BIOL 420 - Environmental Microbiology (5)	
BIOL 441 - Plant Physiology	5
OR	
BIOL 455 - Zoophysiology (5)	
BIOL 470 - Mechanisms of Evolution	3
BIOL 497 - Honors Thesis	1
OR	
BIOL 499S - Senior Seminar (1)	
General Chemistry and Laboratory	15
CHEM 181, 181LAB, 182, 182LAB, 183, 183LAB	
CHEM 361 - Organic Chemistry I	3
CHEM 361LAB - Organic Chemistry Laboratory I	2
CHEM 362 - Organic Chemistry II	3

Total Core Credits: 61

Organismal diversity requirement:

All students in the biology BS program must take at least one advanced (300- or 400-level) animal course, one advanced plant course, and one advanced course covering other organisms (fungi, protists, bacteria, viruses). These courses may be contained within the core or taken as electives. See department for list of approved courses in each category. These need not be additional courses already included to satisfy other major requirements.

Bachelor of Science

General Biology (no specialization)

This general degree offers students the flexibility to choose a broad range of courses within biology or tailor course requirements to specific interests. A biology advisor must approve electives.

Required Courses

Biology Core Requirements	61
General Biology Electives	39

Total Credits: 100

Cell and Molecular Biology Specialization

Cell and molecular biology (CMB) is the study of what cells are, how they are put together, what makes them work, what makes them differ from each other, how they associate and interact, and what goes wrong in disease states. The study of cell and molecular biology facilitates understanding of a wide variety of disciplines including genetics, developmental biology, microbiology, immunology, and physiology. The emphasis in CMB is designed for students with interests in the cellular and molecular basics of life and the application of molecular techniques to medical, technological, and environmental issues. The goal of the CMB specialization is to prepare graduates to be competitive in applications for entry into graduate degree programs, professional programs, or technical / industrial jobs. A full year of physics (PHYS 111/112/113 + labs or PHYS 181/182/183 + labs) is recommended for students interested in cell and molecular biology.

Students interested in microbiology are eligible to become registered microbiologists (National Registry of Microbiologists, American Academy of Microbiology) upon completing the following requirements:

1. A minimum of a baccalaureate degree in biological science with 30 quarter credits in microbiology courses.
1. Acceptable experience equivalent to one year of full-time work in a microbiology laboratory related to the specialty area in which certification is sought. Experience must have been gained within the immediate past three years. Certification as a conditional registrant is offered to individuals who possess the academic qualifications for registered microbiologist, but lack the required year of full-time laboratory experience.

Required Courses

Biology Core Requirements	61
BIOL 323 - Microbiology	5
BIOL 425 - Molecular Biotechnology	5
BIOL 430 - Cell Biology	5
CHEM 431 - Biochemistry I	3
Department-approved electives	21

Total Credits: 100

Ecology Specialization

Ecology is the study of how organisms interact with their physical and biological environment. The ecology specialization is designed for students interested in basic and applied ecology, including fisheries, wildlife management, forestry, ecological restoration, and conservation biology. Students following this specialization will gain experience in natural history, field research, and experimental design. Potential careers may be found in federal, state, and tribal agencies, or private environmental consulting firms. The ecology faculty strongly suggests that every student augment the single required taxonomy course with an elective second taxonomy course. Students interested in graduate study in ecology should work closely with their advisor to tailor this specialization to their particular field of interest.

Required Courses

Biology Core Requirements	61
BIOL 467 - Biological Field Techniques	5
MATH 170 - Intuitive Calculus	5

Select one of the following advanced

ecology courses	5
BIOL 461 - Community Ecology (3)	
BIOL 461LAB - Community Ecology Lab (2)	
BIOL 462 - Wildlife and Fisheries Ecology (5)	
BIOL 463 - Limnology (5)	
BIOL 464 - Terrestrial Plant Ecology (5)	
BIOL 466 - Conservation Biology (5)	

Select one of the following taxonomy

courses	4-5
BIOL 341 - Plant Taxonomy (5)	
BIOL 443 - Mycology (5)	
BIOL 444 - Algae and Bryophytes (5)	
BIOL 445 - Field Mycology (5)	
BIOL 450 - Ichthyology (4)	
BIOL 451 - Herpetology (4)	
BIOL 452 - Ornithology (4)	
BIOL 453 - Mammalogy (5)	

Department-approved electives19-20

Total Credits: 100

Organismal Biology Specialization

The organismal biology specialization allows a student to explore the structure (morphology), function (physiology), development, behavior, and taxonomic diversity of animals, plants, fungi and/or microbes. A student looking for a traditional zoology or botany program will be well served by this specialization. The organismal specialization is a good choice for students preparing for graduate study in organismal biology or planning for a career in the health professions, forensics, or state or federal agency work, and it can complement other programs such as teaching, biological anthropology, and psychology.

Required Courses

Biology Core Requirements	61
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Select two of the following

structural/functional courses10-11

BIOL 353 - Comparative Vertebrate Anatomy (6)	
BIOL 354 - General Vertebrate Embryology (5)	
BIOL 442 - Comparative Morphology of Vascular Plants (5)	
BIOL 454 - Histology (5)	

Select one of the following taxonomy

courses 4- 5

BIOL 341 - Plant Taxonomy (5)	
BIOL 444 - Algae and Brophytes (5)	
BIOL 445 - Field Mycology (5)	
BIOL 450 - Ichthyology (4)	
BIOL 451 - Herpetology (4)	
BIOL 452 - Ornithology (4)	
BIOL 453 - Mammalogy (5)	

Department-approved electives23-25

Total Credits: 100

Bachelor of Science Biology Teaching Major

This major satisfies the criteria for an endorsement in biology and qualifies students to teach biology at the high school, middle school, or junior high levels. Students should consider working toward endorsement in a second area such as chemistry, Earth science, general science, physics, middle-level science, or middle-level mathematics. Students taking this major are required to apply to the Teacher Preparation Program and complete the Professional Education Program requirements offered through the Department of Educational Foundations and Curriculum, with the exception of EFC 416 and EFC 350 (44 total credits required). Students completing this program are required to demonstrate knowledge, skill, and disposition proficiency through a program portfolio prior to student teaching. Students must pass the WEST-E exam for biology to receive a biology endorsement.

Required Courses

BIOL 181 - General Biology I	5
BIOL 182 - General Biology II	5
BIOL 183 - General Biology III	5
BIOL 213 - Quantitative Methods in Biology	4
BIOL 321 - Genetics	5
BIOL 322 - Introductory Microbiology	5
OR	
BIOL 323 - Microbiology (5)	
BIOL 360 - General Ecology	5
BIOL 427 - Biotechnology for Teachers	5
BIOL 470 - Mechanisms of Evolution	3
Select either	5-10

BIOL 355 - Human Anatomy and Physiology (5)	
AND	
BIOL 356 - Human Anatomy and Physiology (5)	
OR	
BIOL 441 - Plant Physiology (5)	
OR	
BIOL 455 - Zoophysiology (5)	

BIOL 492 - Laboratory Experience in Teaching Biological Sciences	2
SCED 324 - Science Education in Secondary Schools I	3
SCED 325 - Science Education in Secondary Schools II	3
SCED 401 - Interdisciplinary Secondary Science Inquiry	5
SCED 487 - Teaching Secondary Science Seminar	2
CHEM 181, 181LAB, 182, 182LAB, 183, 183LAB - General Chemistry and Laboratory	15
CHEM 361, 361LAB, 362 - Organic Chemistry and Laboratory	8
Total Credits: 85-90	

Biology Minor

Not available to biology majors

Required Courses

BIOL 181 - General Biology I	5
BIOL 182 - General Biology II	5
BIOL 183 - General Biology III	5
BIOL 213 - Quantitative Methods in Biology	4
Electives in Biological Sciences	10
General Chemistry and Laboratory	15
CHEM 181, 181LAB, 182, 182LAB, 183, 183LAB	

Total Credits: 44

Biology: Teaching Secondary Minor

This minor is restricted to students working on a teaching major in chemistry, earth science, physics, or general science if not the chosen designated science area. Students completing this minor are required to demonstrate proficiency of student learning outcomes through a program portfolio prior to student teaching. Students may satisfy the biology reaching requirement by either taking BIOL 492 or through an independent live science teaching experience. In addition, students must pass the WEST-E exam for biology to receive a biology endorsement.

Required Courses

CHEM 181/181LAB - General Chemistry I	5
CHEM 182/182LAB - General Chemistry II	5
CHEM 183/183LAB - General Chemistry III	5
BIOL 181 - General Biology I	5
BIOL 182 - General Biology II	5
BIOL 183 - General Biology III	5
BIOL 213 - Quantitative Methods in Biology	4
BIOL 321 - Genetics	5
BIOL 360 - General Ecology	5

Total Credits: 44

Craft Beer Trade Certificate

Program Advisor
Steve Wagner, PhD

An interdisciplinary certificate program designed to be completed in an intensive 10-week session. The program provides an overview of the science, technology, and sales/merchandising aspects of the craft beer brewing industry. Topics include principles of malting and brewing, brewing process technology, brewing microbiology, and principles of merchandising management for micro brewing industry. Students learn about the trade using a variety of approaches including lab work, hands on experiences, lectures, field trips, and industry speakers.

Pre-admission requirements

MATH 153 - Pre-calculus Mathematics I (5)
Choose one of the following:
CHEM 101 - Contemporary Chemistry (4)
CHEM 111/111LAB - Introduction to Chemistry/Lab (5)
CHEM 181/181LAB - General Chemistry/Lab (5)

Admission Requirements

Students must be 21 years of age or older to enroll in the program and must apply for acceptance into the program.

Special Requirements

Students will be expected to spend significant time outside the classroom working on assignments and projects. Some sessions may meet on Saturdays. In order to receive the certificate, students must earn a grade of B- or above in each of the four courses.

Financial Obligations

Because this is a self-support funded program, no tuition waiver programs apply. Additional course fees and continuing education tuition applies.

Required Courses

Pre-admission Requirements	10
BIOL 312 - Brewing Microbiology	4
BIOL 317 - Principles and Biochemistry of Brewing	4
RMT 320 - Principles of Merchandising Management for Micro Brewing	5
IET 360 - Brew Process Technology	3

Total Credits: 26

Allied Health Science Course

AHSC 301. Introduction to Medical

Technology (2). Introduction to laboratory procedures and theory of urinalysis, clinical chemistry, hematology, blood banking and coagulation. One hour lecture and two hours laboratory per week. By permission.

Biological Sciences Courses

BIOL 101. Fundamentals of Biology (5).

Biology in the modern world. Four hours lecture and one two-hour laboratory per

week. May not be counted toward a major or minor in the department of biological sciences.

BIOL 181. General Biology I (5). Introduction to the scientific method and the principles of ecology, genetics and evolution. Four lecture hours and three laboratory hours per week. Co- or prerequisite: CHEM 181.

BIOL 182. General Biology II (5).

Introduction to the principles of cellular and molecular biology. Four lecture hours and three laboratory hours per week. Prerequisite: BIOL 181. Co- or prerequisite: CHEM 182.

BIOL 183. General Biology III (5).

Introduction to the form and function of multicellular organisms. Four lecture hours and three laboratory hours per week. Prerequisite: BIOL 182. Co- or prerequisite: CHEM 183.

BIOL 200. Plants in the Modern World (5).

Plants and their significance in the world today. Three hours lecture and three hours laboratory per week. (Not open to majors in the biological sciences.) May not be counted toward a major or minor in the department of biological sciences.

BIOL 201. Human Physiology (5). Organ systems of humans. Not open to students with credit in BIOL 455; may not be counted toward a major or minor in the department of biological sciences.

BIOL 213. Quantitative Methods in Biology (4).

An introduction to commonly used methods for analyzing biological data. Use of statistical and graphical software will be emphasized. Prerequisites: MATH 130 and either BIOL 182 or BIOL 183.

BIOL 220. Introductory Cell Biology (5).

Concepts, processes and structures involved in understanding life at the cellular level. Does not count toward biology majors for students who complete BIOL 181, 182, and 183. Prerequisites: CHEM 113 or 183.

BIOL 295. Research (1-6). Laboratory research experience. May be repeated up to 15 credits.

BIOL 298. Special Topics (1-6).

BIOL 300. Introduction to Evolution (5). The evidence, theories, and mechanisms of the evolution of life, including man. May not be counted toward a major in the department of biological sciences. Prerequisite: sophomore standing or above.

BIOL 302. Human Ecology (5). Basic concepts of ecology with emphasis on ecosystems and populations and how human activities and attitudes relate to these basic concepts. May not be counted toward a major in the department of biological sciences. Prerequisite: sophomore standing or above.

BIOL 304. Human Inheritance (5). The study of human inheritance and related areas of biology. May not be counted toward a major in the department of biological sciences.

BIOL 312. Brewing Microbiology (4). An introduction to the biology of yeasts and other organisms important in the craft brewing industry. Includes the application of laboratory methods useful in brewing

and quality control. Students must be 21 years of age or older. Prerequisites: MATH 153 with a grade of C or better, either CHEM 101, 111, or 181, and admission to the Craft Beer Trade Certificate Program.

BIOL 317. Principles and Biochemistry of Brewing (4). An introduction to the principles of brewing and biochemistry of fermentation processes important in the craft brewing industry. Includes the application of laboratory methods useful in product evaluation and quality control. Students must be 21 years of age or older. Prerequisites: MATH 153 with a grade of C or better, either CHEM 101, 111, or 181, and admission to the Craft Beer Trade Certificate Program.

BIOL 321. Genetics (5). A lecture and laboratory course in the basic principles of heredity of plants and animals. Four hours lecture and two hours laboratory per week. Prerequisites: BIOL 183 or BIOL 220 and either BIOL 213 or CHEM 332 and CHEM 332LAB.

BIOL 322. Introductory Microbiology (5). Introductory biology of microorganisms and viruses with applications to medicine, food science, industry, and agriculture. Intended for nutrition and allied health students. Three hours lecture and four hours laboratory per week. Biology majors are encouraged to take BIOL 323. May be counted toward a degree in the biology department in lieu of BIOL 323, but cannot be counted toward a degree in the biology department if BIOL 323 is successfully completed. Prerequisites: BIOL 182 or 220.

BIOL 323. Microbiology (5). Principles of microbiological practice, including isolation, cultivation, identification, physiology, evolution, and ecology. Two hours lecture and six hours laboratory per week. Does not count toward any biology major if student has successfully completed BIOL 322. Prerequisites: BIOL 213 and either BIOL 183, or 220.

BIOL 341. Plant Taxonomy (5). Classification of vascular plants, using local flora. Two hours lecture and six hours laboratory per week; the course includes field trips and individual field work. Prerequisites: either BIOL 182, BIOL 183, or BIOL 200.

BIOL 343. Plant Anatomy (5). A treatment of the fundamental facts and aspects of vascular plant anatomy. Plant tissues with special reference to their development, organization, and biological significance. Three hours lecture and four hours laboratory per week. Prerequisites: either BIOL 182 or BIOL 183.

BIOL 351. General Entomology (5). Insect biology, taxonomy, structure, and relationships to man. Two hours lecture and six hours laboratory or field work per week.

BIOL 352. Parasitology (5). Biological relations of animal parasite and host; structure, classification, and methods of diagnosis of parasitic protozoa, worms, and arthropods. Two hours lecture and six hours laboratory per week. Prerequisite: BIOL 183.

BIOL 353. Comparative Vertebrate

Anatomy (6). Evolutionary, functional, and developmental aspects of vertebrate morphology. Three hours lecture and six hours laboratory per week. Prerequisite: BIOL 183.

BIOL 354. General Vertebrate Embryology (5). Comparative development; fertilization, growth and differentiation, experimental morphogenesis, and establishment of the early organ systems. Two hours lecture and six hours laboratory per week. Prerequisites: CHEM 361 and 361LAB, and BIOL 183.

BIOL 355. Human Anatomy and Physiology (5). The first quarter of a two-quarter study of the structure and function of the human body. Students should not take BIOL 355 unless they intend to take BIOL 356. Three hours lecture and four hours laboratory per week. Prerequisites: either BIOL 183 or 220, or both EXSC 250 and 351.

BIOL 356. Human Anatomy and Physiology (5). The second quarter of the two quarter study of the structure and function of the human body. Three hours lecture and four hours laboratory per week. Prerequisite: BIOL 355.

BIOL 360. General Ecology (5). Interrelationships of organisms with their environment. Three hours lecture and four hours laboratory/field work/discussion per week. A weekend field trip may be required. Prerequisites: BIOL 213 and MATH 153.

BIOL 362. Biomes of the Pacific Northwest (4). One-week field trip to explore the various biomes of Washington. Emphasis on writing field notes, observing and identifying organisms and communities. Prerequisite: BIOL 181.

BIOL 377. Regional Natural History (2). Classroom study of the natural history of a selected region as preparation for a one- to two-week field trip. Emphasis will be on developing background skills to undertake a field exploration over the quarter (winter, spring, summer) break. Subtitles will identify the selected geological region (e.g. Baja California Natural History). May be repeated for credit under a different subtitle (region). BIOL 377 and GEOL 377 are equivalent courses. By permission.

BIOL 377LAB. Regional Natural History (3). Special fees required. One- to two-week field trip to explore biological and physical patterns and processes in selected regions of North America. Emphasis will be on recording field observations, keeping a field journal, field study techniques, and performing investigations chosen and developed by student participants. Subtitles will identify the region studied. BIOL 377LAB and GEOL 377LAB are equivalent courses; students may not receive credit for both. May be repeated for credit.

BIOL 398. Special Topics (1-6).

BIOL 420. Environmental Microbiology (5). Ecology of microorganisms in marine, fresh-water and soil environments. Three hours

lecture and four hours laboratory per week. Prerequisites: BIOL 323 and CHEM 362.

BIOL 421. General Virology (5). Interrelationship between animal, plant, and bacterial viruses and their hosts, with emphasis on the animal viruses. Five hours lecture per week. Prerequisites: BIOL 430, BIOL 321, or CHEM 432.

BIOL 422. Immunology (5). Nature of the immune response, disease preventing and producing mechanisms and laboratory applications. Five hours lecture per week. Prerequisites: CHEM 361 and either BIOL 183, or 220.

BIOL 423. Techniques in Immunology and Virology (5). A practical course in dealing with the routine techniques used in diagnostic and experimental immunology and virology. Three hours lecture and four hours laboratory per week. Co- or prerequisites: either BIOL 420 or 422.

BIOL 425. Molecular Biotechnology (5). The practice and theory of techniques used in molecular biology. Two hours lecture and six hours laboratory per week. Prerequisite: BIOL 321.

BIOL 426. Medical Microbiology (3). An introduction to medical microbiology emphasizing the biology of pathogenic bacteria, their relation to infectious diseases and the isolation and identification of specific disease agents. Three lectures per week. Prerequisite: BIOL 323.

BIOL 426LAB. Medical Microbiology Laboratory (2). Co- or prerequisite: BIOL 426. Prerequisite: BIOL 323.

BIOL 427. Biotechnology for Teachers (5). This course will help pre-service teachers develop the necessary skills to construct and perform biological experiments using contemporary biotechnology in the context of educational theory and application. May be repeated for credit. Prerequisite: BIOL 321.

BIOL 430. Cell Biology (5). Analysis of cell organization and the processes governing cell function and behavior. Four hours lecture and three hours laboratory per week. Prerequisites: CHEM 361, 361LAB, and BIOL 182.

BIOL 440. Plant Pathology (5). Representative diseases of plants and the bacterial and fungal organisms which cause them. Two hours lecture and six hours laboratory per week. Prerequisites: BIOL 182 or BIOL 183.

BIOL 441. Plant Physiology (5). A critical study of the physiological processes of plants including water relations, photosynthesis, mineral assimilation, and responses to the environment. Co- or prerequisites: BIOL 213 and CHEM 362.

BIOL 443. Mycology (5). The biology, morphology, and economic importance of the major groups of fungi including the slime molds. Three hours lecture and four hours laboratory per week. Prerequisites: either BIOL 183 or both BIOL 182, and 220.

BIOL 444. Algae and Bryophytes (5). Study of the occurrence, evolution, physiology, and ecology of fresh-water and marine

algae and non-vascular plants with emphasis on those in the Pacific Northwest. Prerequisites: either BIOL 182 or BIOL 183.

BIOL 445. Field Mycology (5). Stresses taxonomy, morphology, and ecology of mushrooms and related forms with emphasis on Northwest flora. Offered fall quarter only. Prerequisites: either BIOL 182 or BIOL 213.

BIOL 450. Ichthyology (4). An introduction to the biology, taxonomy, and distribution of modern fishes with special reference to the Pacific Northwest. Three hours lecture and two hours laboratory or field work per week. Prerequisites: BIOL 213 and BIOL 183.

BIOL 451. Herpetology (4). An introduction to biology, taxonomy, and distribution of modern amphibians and reptiles with special reference to the Pacific Northwest. Two hours lecture and four hours laboratory or field studies per week. Prerequisites: BIOL 183.

BIOL 453. Mammalogy (5). Evolution, taxonomy, and ecology of mammals with laboratory emphasis on Pacific Northwest mammals. Three hours lecture and four hours laboratory per week. Prerequisite: BIOL 183.

BIOL 455. Zoophysiology (5). Vertebrate physiology; laboratory experience in physiological techniques. Three hours lecture and four hours laboratory per week. Prerequisites: CHEM 362, either BIOL 213 or 183, and either BIOL 220 or 320.

BIOL 462. Wildlife and Fisheries Ecology (5). Ecological principles of wildlife and fish populations and communities as they relate to management theory and practice in the Pacific Northwest. Three hours lecture/discussion and four hours laboratory/field work per week. Weekend field trips may be required. Prerequisite: BIOL 360.

BIOL 463. Limnology (5). Chemical, physical, and biological characteristics of inland waters. Three hours lecture and four hours laboratory per week. Prerequisites: CHEM 182 and BIOL 360.

BIOL 464. Terrestrial Plant Ecology (5). The ecological relationships of plant species and plant communities. Three hours lecture and either four hours laboratory. Weekend field trips may be required. Prerequisites: BIOL 213, 360, and either BIOL 182, or 183.

BIOL 465. Biology of Animal Behavior (4).

Three lectures and two hours of laboratory a week. Prerequisites: BIOL 213 or PSY 362.

BIOL 466. Conservation Biology (5). An introduction to the theory and practice of conservation biology, with emphasis on case studies. Two hours lecture, one hour discussion, and four hours lab or field study per week. Weekend field trips may be required. Prerequisite: BIOL 360.

BIOL 467. Biological Field Techniques (5). Intensive, field-based experience in techniques used by field biologists to sample organisms and their environments, and analyze data collected in the field.

BIOL 470. Mechanisms of Evolution (3). Darwinian evolution and the modern synthesis. Prerequisites: 15 credits of biology, and senior standing.

BIOL 490. Cooperative Education (1-12). An individualized, contracted field experience with business, industry, government, or social service agencies. This contractual arrangement involves a student learning plan, cooperating employer supervision, and faculty coordination. May be repeated for credit. Grade will either be S or U. By permission.

BIOL 491. Workshop (1-6). May be repeated for credit.

BIOL 492. Laboratory Experience in Teaching Biological Sciences (2). Experience in planning, managing, and teaching in a laboratory setting. May be repeated for credit.

BIOL 493. Biological Field Practicum (1-15). Individual or group off-campus experience in the field study of biological phenomena. May be repeated for credit.

BIOL 495. Research (1-6). Laboratory research experience. May be repeated up to 6 credits.

BIOL 496. Individual Study (1-6).

BIOL 497. Honors Thesis (1-5). This course may be substituted for BIOL 499S in any biology baccalaureate program. Prerequisite: admission to Departmental Honors Program.

BIOL 498. Special Topics (1-6).

BIOL 499. Seminar (1-5).

BIOL 499S.. Senior Seminar (1). Biological sciences: reading, writing, and speaking. Either this course or BIOL 497, Honors Thesis, is required in all baccalaureate programs of the biology department. Prerequisite: senior standing.

BUSINESS AND MARKETING EDUCATION

As of June 8, 2007, the Business Education Teacher Preparation Endorsement Program and the Marketing Education Teacher Preparation Endorsement Program were placed on reserve and no new declarations of major or minor are being accepted. Washington State approval for the Business Education Endorsement Program will naturally lapse in August 2009. Candidates currently in the program must complete the endorsement prior to August 31, 2009.

Business Education Courses

BSED 146. Basic Accounting (5). Basic introductory course to accounting concepts. May not be taken for college credit if any other college accounting course or courses have been completed. May be audited.

BSED 316. Educational Technology (3). Students will explore a variety of concepts and resources related to the appropriate and effective integration of technology / media in school settings. Prerequisites: PSY 314, either EFC 310 or EDF 301A, and full admission to the Teacher Preparation Program. CS or IT 101 are also recommended prerequisites. BSED 316 and EDCS 316 are equivalent courses; students may not receive credit for both.

BSED 445. Techniques of Cooperative Education (3). Philosophy, place, methods, and techniques of coordinating work experience. BSED 445 and MKED 445 are equivalent courses; students may not receive credit for both.

BSED 492. Practicum (5-15). Grade will either be S or U. By permission.

BSED 493A. Undergraduate Research Practicum (1-3). Conduct research under direct supervision of a professor with specific learning agreement required. Department requirements must be met. ADMG, IT, and RMT 493A are equivalent courses; students may not receive credit for more than one. May be repeated for credit. Grade will either be S or U.

Marketing Education Courses

MKED 350. Principles of Advertising (4). An introduction to the field of advertising and its fit into society including integrated marketing communication, consumer behavior, segmentation and target marketing, application of advertising research, creative and media strategy, copy, layout, production, budgeting, agency organization, and international and local advertising.

MKED 445. Techniques of Cooperative Education (3). Philosophy, place, methods, and techniques of coordinating work experience. MKED 445 and BSED 445 are equivalent courses; students may not receive credit for both.



CENTER FOR TEACHING AND LEARNING

College of Education and Professional Studies
Ellensburg
Black Hall, room 228-17
509-963-1409

Alternative Pathway to Teaching Regional Consortia Program

Yakima
Deccio Higher Education Bldg.
1000 S. 12th Ave.
509-963-3709

Director
Rexton Lynn

General Information

CWU is the lead/recommending institution for this program, which includes Pacific Lutheran University, Heritage University, and Western Washington University as partners. The goal of the consortia program is to prepare teachers in state-identified shortage areas for jobs in communities where they currently live. The minimum number of interns accepted into the program shall be 10; the maximum to be accepted shall be 25.

All courses, regardless of offering institution, will be completed, in-person, at CWU-Yakima, which is located at Yakima Valley Community College, Deccio Higher Education Building, 1000 S. 12th Avenue, Yakima, WA 98902. Distance education, K-20, or internet/hybrid classes will not be available for this program.

Admissions requirements are listed in the College of Education and Professional Studies section of the catalog following certification information.

Center for Teaching and Learning Courses

ECTL 470. Alternative Pathways to Teaching: Seminar Series (2). Course reserved for candidates admitted into the APT Regional Consortia Program. Twenty-four hours of seminars on ELL, special education, mathematics, and assessment issues in public schools. Candidate must attend all hours to receive credit. Grade will either be S or U. Prerequisite: full admission to CWU, and the APT Regional Consortia Program.

ECTL 480. Alternative Pathways to Teaching: Curriculum Planning (3). Course reserved for candidates admitted into the APT Regional Consortia Program. Candidates will learn about and develop practical lesson planning, management, and assessment strategies, as well as methods and models of teaching, including reflection and analysis. Prerequisite: full admission

to CWU, and the APT Regional Consortia Program. Grade will either be S or U.
ECTL 490. Alternative Pathways to Teaching: Internship (3). Course is reserved for candidates admitted into the APT Regional Consortia Program. Candidates will be required to complete an internship for a minimum of 90 teacher-contracted days in any public school setting to satisfy legislative requirements. Candidates may be asked, and are expected, to extend their time in the internship for up to one full school year in order to meet program requirements. Grade will either be S or U.

CHEMISTRY DEPARTMENT

College of the Sciences
Ellensburg
Science Bldg., room 302

509-963-2811
Fax: 509-963-1050
www.cwu.edu/~chem
See website for how this program may be used for educational and career purposes.

**Faculty and Staff
Chair**
JoAnn Peters, PhD

Professor
Anthony Diaz, PhD, inorganic, solid state
Martha J. Kurtz, PhD, chemistry and science education
JoAnn Peters, PhD, organic, mechanistic
Carin Thomas, PhD, biochemistry, toxicology

Associate Professors
Levente Fabry-Asztalos, PhD, organic
Anne Johansen, PhD, environmental, analytical
Tim Sorey, PhD, chemistry education

Assistant Professors
Gil Belofsky, PhD, organic
Stephen Chamberland, PhD, organic
Yingbin Ge, PhD, physical
Todd Kroll, PhD, biochemistry
Dion Rivera, PhD, physical, analytical

Lecturers
Bing-Lin Chen, PhD, general
Robert Rittenhouse, PhD, general
Viorel Sarca, PhD intro/organic

Staff
Tony Brown, stockroom manager
Don Davis, computer technician
Mari Sorey, stockroom assistant
Lisa Stowe, secretary
Jeff Wilcox, instrument technician

Department Information

The department offers three majors. In each major, courses in the first two years emphasize fundamental topics in chemistry,

mathematics, and physics. Students then choose advanced courses in chemistry and related areas to complete the requirements in their major.

These majors provide opportunities for practical experience in chemistry. Students are encouraged to do research on campus with a faculty member, and to participate in the department's seminar program. Two minors are offered to supplement career related fields.

Department Standards

Students must have earned a grade of C- or higher in all prerequisites to be admitted to a course. To graduate, all chemistry majors are required to achieve at least a 2.0 cumulative GPA and a 2.25 GPA in courses required for the major.

Lab Fees

All chemistry labs have fees associated with them that must be paid when registering for the course:

CHEM 101, Contemporary Laboratory . . .	\$45
CHEM 111LAB, Chemistry Laboratory . . .	\$45
CHEM 112LAB, Chemistry Laboratory . . .	\$45
CHEM 113LAB, Chemistry Laboratory . . .	\$45
CHEM 181LAB, General Chemistry Laboratory	\$45
CHEM 182LAB, General Chemistry Laboratory	\$45
CHEM 183LAB, General Chemistry Laboratory	\$45
CHEM 332LAB, Quantitative Analysis Laboratory	\$45
CHEM 345, Environmental Chemistry . . .	\$45
CHEM 361LAB, Organic Chemistry Laboratory	\$45
CHEM 363LAB, Qualitative Organic Chemistry Laboratory	\$45
CHEM 382LAB, Integrated Physical/Inorganic Laboratory I	\$45
CHEM 383LAB, Integrated Physical/Inorganic Laboratory II	\$45
CHEM 431LAB, Biochemistry Laboratory	\$45
CHEM 452LAB, Instrumental Analysis Laboratory	\$45

Bachelor of Arts Chemistry: Teaching Major

This major satisfies the criteria for an endorsement in chemistry and qualifies students to teach chemistry at the high school, middle, or junior high levels. Students should seriously consider working toward endorsement in a second area, such as biology, general science, Earth science, middle level science, middle level mathematics, physics, or mathematics. Students taking this major are required to apply to the Teacher Preparation Program and complete the Professional Education Program requirements offered through the Department of Educational Foundations and Curriculum, with the exception of EFC 416 and EFC 350 (44 total credits required). Students completing this program are required to demonstrate knowledge, skill, and disposition proficiency

through a program portfolio prior to student teaching. Students must pass the WEST-E exam for chemistry to receive a chemistry endorsement.

Students are recommended to take MATH 273 before taking CHEM 381.

Required Courses

General Chemistry and Laboratory	15
CHEM 181, 181LAB, 182, 182LAB, 183, 183LAB	
Analytical Chemistry	5
CHEM 332, 332LAB - Quantitative Analysis and Laboratory (3,2)	
OR	
CHEM 345 - Environmental Chemistry (5)	
CHEM 350 - Inorganic Chemistry	3
Organic Chemistry	8
CHEM 361, 361LAB, 362	
CHEM 381 - Physical Chemistry (Thermodynamics)	5
Biochemistry	5
CHEM 431, 431LAB - Biochemistry I and Laboratory	
CHEM 492 - Laboratory Experience in Teaching Chemistry	2
SCED 324 - Science Education in Secondary Schools I	3
SCED 325 - Science Education in Secondary Schools II	3
SCED 401 - Interdisciplinary Secondary Science Inquiry	5
SCED 487 - Teaching Secondary Science Seminar	2
Introductory Physics or General Physics	15
PHYS 111, 111LAB, 112, 112LAB, 113, 113LAB	
OR	
PHYS 181, 181LAB, 182, 182LAB, 183, 183LAB	
Mathematics	15
MATH 172, 173, 272	

Total Credits: 86

Bachelor of Science Chemistry Major

The bachelor of science major is designed for students who plan a career in chemistry or related fields. The program prepares students for further study in graduate programs, or to enter the workplace directly. The BS degree is certified by the American Chemical Society if the nine department-approved electives come from a designated set of upper-division courses within chemistry. Consult your major advisor about department-approved electives.

Students are recommended to take MATH 273 before taking CHEM 381.

BS Chemistry Core Requirements

General Chemistry and Laboratory	15
CHEM 181, 181LAB, 182, 182LAB, 183, 183LAB	
Organic Chemistry	13
CHEM 361, 361LAB, 362, 363, 363LAB	

Total Core Credits: 28

Required Courses

Quantitative Analysis	5
CHEM 332, 332LAB	
CHEM 350 - Inorganic Chemistry	3
CHEM 431 - Biochemistry I	3
CHEM 431LAB - Biochemistry Laboratory	2
CHEM 452 - Instrumental Analysis	3
CHEM 452LAB - Instrumental Analysis Laboratory	2
CHEM 488 - Colloquium II	1
MATH 172 - Calculus I	5
MATH 173 - Calculus II	5
MATH 272 - Multivariable Calculus I	5
Physical Chemistry	15
CHEM 381, 382, 382LAB, 383, 383LAB	
Introductory Physics or General Physics	15
PHYS 111, 111LAB, 112, 112LAB, 113, 113LAB	
OR	
PHYS 181, 182, 182LAB, 183, 183LAB	
Department-approved electives	9

Total Credits: 101

Biochemistry Specialization

This specialization is designed for students who plan a career in biochemistry or a related health science area such as medicine or dentistry. Majors may pursue further graduate studies, a career in biotechnology, or a related industry.

Students are recommended to take MATH 273 before taking CHEM 381.

Required Courses

BS Chemistry Core Requirements	28
Quantitative Analysis	5
CHEM 332, 332LAB	
CHEM 350 - Inorganic Chemistry	3
Physical Chemistry	10
CHEM 381, 382, 382LAB	
Biochemistry	13
CHEM 431, 431LAB, 432, 433, 433LAB	
CHEM 488 - Colloquium	1
General Biology	15
BIOL 181, 182, 183	
BIOL 321 - Genetics	5
Select one of the following	2-5
CHEM 383, 383LAB - Physical Chemistry (5)	
CHEM 452, 452LAB - Instrumental Analysis (5)	
CHEM 495 - Senior Research (2-5)	
BIOL 323 - Microbiology (5)	
BIOL 425 - Molecular Biotechnology (5)	
Introductory Physics or General Physics	15
PHYS 111, 111LAB, 112, 112LAB, 113, 113LAB	
OR	
PHYS 181, 182, 182LAB, 183, 183LAB	
MATH 172 - Calculus I	5
MATH 173 - Calculus II	5
MATH 272 - Multivariable Calculus I	5

Total Credits: 112-115

Chemistry Minor

Required Courses

General Chemistry and Laboratory	15
CHEM 181, 181LAB, 182, 182LAB, 183, 183LAB	

Department-approved upper-division electives in chemistry 16

Total Credits: 31

Chemistry: Teaching Minor

This minor is restricted to students working on a teaching major in biology, Earth science, or physics. Students completing this minor are required to demonstrate knowledge, skill, and disposition proficiency through a program portfolio prior to student teaching. Students must pass the WEST-E exam for chemistry to receive a chemistry endorsement.

Required Courses

General Chemistry and Laboratory	15
CHEM 181, 181LAB, 182, 182LAB, 183, 183LAB	
Analytical Chemistry	5
CHEM 332, 332LAB - Quantitative Analysis and Laboratory (5)	
OR	
CHEM 345 - Environmental Chemistry (5)	
Organic Chemistry and Laboratory	8
CHEM 361, 361LAB, 362	
Biochemistry and Laboratory	5
CHEM 431, 431LAB	
CHEM 492 - Laboratory Experience in Teaching Chemistry	2

Total Credits: 35

Chemistry Courses

CHEM 101. Contemporary Chemistry (5). Chemical principles and their application to contemporary problems of human beings and their environment. Four lectures and one laboratory session weekly.

CHEM 111. Introduction to Chemistry (4). Chemical principles of the compositions, structure, properties, and changes of matter. Designed for students in certain health science programs. Four lectures weekly. This is a General Education writing course-Natural Sciences - Fundamental Disciplines Physical and Biological Sciences.

CHEM 111LAB. Introductory Chemistry Laboratory (1). Introduction to basic chemistry techniques. One two-hour laboratory session weekly. Co- or prerequisite: CHEM 111.

CHEM 112. Introduction to Organic Chemistry (4). Structure, properties, nomenclature and reactions of carbon compounds. Prerequisites: CHEM 111 or CHEM 183 with a grade of C- or better.

CHEM 112LAB. Introduction to Organic Chemistry Laboratory (1). Basic techniques in organic chemistry. Two hours of laboratory weekly. Prerequisites: CHEM 111LAB or CHEM 183LAB with a grade of C- or better. Co- or prerequisite: CHEM 112.

CHEM 113. Introduction to Biochemistry (4). Structure, properties, and metabolism of biomolecules. Four lectures weekly. Prerequisite: CHEM 112 with a grade of C- or better.

CHEM 113LAB. Introduction to Biochemistry Laboratory (1). One two-

- hour laboratory session weekly. Co- or prerequisite: CHEM 113. Prerequisite: CHEM 112LAB with a grade of C- or better.
- CHEM 181. General Chemistry I (4).** This course introduces chemistry concepts such as atoms and molecules, stoichiometry, solution chemistry, thermochemistry, electronic structure of the atom and periodicity, and chemical bonding. Prerequisites: qualification for MATH 153 or math placement exam. High school chemistry is also a strongly recommended prerequisite.
- CHEM 181LAB. General Chemistry Laboratory I (1).** This laboratory supports hands-on, inquiry-based approaches to exploring topics presented in CHEM 181. One three-hour lab session weekly. Co- or prerequisite: CHEM 181.
- CHEM 182. General Chemistry II (4).** Builds upon chemical concepts from CHEM 181. Introduces molecular geometry and bonding theories, gas laws, intermolecular forces, solution properties, and chemical kinetics. Four lectures weekly. Prerequisite: CHEM 181 with a grade of C- or better.
- CHEM 182LAB. General Chemistry Laboratory II (1).** Integrates concepts learned in CHEM 181 and supports hands-on, inquiry-based approaches to topics presented in CHEM 182. One three-hour laboratory session weekly. Co- or prerequisite: CHEM 182. Prerequisite: CHEM 181LAB with a grade of C- or better.
- CHEM 183. General Chemistry III (4).** Builds upon chemical concepts from CHEM 181 and CHEM 182. Introduces chemical equilibria, acid-base chemistry, solubility, entropy, free energy, and electrochemistry. Four lectures weekly. Prerequisite: CHEM 182 with a grade of C- or better.
- CHEM 183LAB. General Chemistry Laboratory III (1).** Integrates concepts introduced in CHEM 181 and CHEM 182 and supports hands-on, inquiry-based approaches to topics in CHEM 183. One three-hour laboratory session weekly. Co- or prerequisite: CHEM 183. Prerequisite: CHEM 182LAB with a grade of C- or better.
- CHEM 295. Research (1-6).**
- CHEM 296. Individual Study (1-6).**
- CHEM 298. Special Topics (1-6).**
- CHEM 332. Quantitative Analysis (3).** Principles of quantitative analytical chemistry, including statistical treatment of data, complex equilibria, activity, and volumetric, gravimetric, and instrumental analysis. Corequisite: CHEM 332LAB. Prerequisites: CHEM 183 and 183LAB with a grade of C- or better in each.
- CHEM 332LAB. Quantitative Analysis Laboratory (2).** Accompanying laboratory to qualitative chemistry including statistical treatment of data and volumetric, gravimetric, and instrumental analysis. Corequisite: CHEM 332. Prerequisites: CHEM 183 and 183LAB with a grade of C- or better in each.
- CHEM 345. Environmental Chemistry (5).** Introduction to aquatic, atmospheric, and soil chemistry. Chemical analysis of environmental samples collected on class field trips. Three lectures and six laboratory hours per week. Prerequisite: CHEM 183 with a grade of C- or better.
- CHEM 350. Inorganic Chemistry (3).** Bonding in small molecules. Includes a review of basic bonding models and a thorough study of molecular orbital theory. Prerequisites: CHEM 183, and either PHYS 113 or 183, with a grade of C- or better in each.
- CHEM 361. Organic Chemistry I (3).** An introduction to organic chemistry for students majoring in the sciences or preparing for health related careers. Organic structures, nomenclature, spectroscopy, and chemistry of alkanes, alkenes, and alkynes. Co- or prerequisite: CHEM 183 with a grade of C- or better.
- CHEM 361LAB. Organic Chemistry Laboratory I (2).** An introduction to organic chemistry laboratory techniques including melting point determination, recrystallization, extraction, distillation, chromatography, and IR and NMR spectroscopy. Two laboratory sessions weekly. Co- or prerequisite: CHEM 361.
- CHEM 362. Organic Chemistry II (3).** Part two of the organic chemistry series. Stereochemistry, nucleophilic substitution and elimination, chemistry of alcohols, ethers, and an introduction to the chemistry of the carbonyl group. Prerequisite: CHEM 361 with a grade of C- or better.
- CHEM 363. Organic Chemistry III (3).** Part three of the organic chemistry series. Carbonyl alpha-substitutions and condensations and the chemistry of carboxylic acid derivatives, benzene, amines, and carbohydrates. Prerequisites: CHEM 362 and 361LAB with a grade of C- or better in each.
- CHEM 363LAB. Organic Chemistry Laboratory II (2).** Application of basic laboratory techniques learned in CHEM 361LAB to more advanced functional group transformations. Two laboratory sessions weekly. Co- or prerequisite: CHEM 363. Prerequisite: CHEM 361LAB with a grade of C- or better.
- CHEM 381. Physical Chemistry (Thermodynamics) (5).** Prerequisites: CHEM 183 & 183LAB, MATH 272, and either PHYS 113 & 113LAB, or PHYS 183 & 183LAB with a grade of C- or better in each.
- CHEM 382. Physical Chemistry (Quantum Chemistry) (3).** Introduction to quantum mechanics as applied to chemical systems. The electronic structure of atoms and molecules. Prerequisite: CHEM 381 with a grade of C- or better.
- CHEM 382LAB. Integrated Physical/Inorganic Laboratory I (2).** Synthesis of inorganic compounds and their characterizations using physical chemistry methods, with additional experiments in thermodynamics, quantum mechanics, and kinetics. Six hours of laboratory weekly. Co- or prerequisite: CHEM 382.
- CHEM 383. Physical Chemistry (Quantum, Statistical Mechanics, Kinetics) III (3).** Molecular bonding, introduction to statistical mechanics, phenomenological kinetics. Prerequisite: CHEM 382 with a grade of C- or better.
- CHEM 383LAB. Integrated Physical/Inorganic Laboratory II (2).** Synthesis of inorganic compounds and their characterization using physical chemistry methods, with additional experiments in thermodynamics, quantum mechanics, and kinetics. Six hours of laboratory weekly. Co- or prerequisite: CHEM 383. Prerequisite: CHEM 382LAB with a grade of C- or better.
- CHEM 395. Research (1-6).** May be repeated for credit. By permission.
- CHEM 431. Biochemistry I (3).** Chemical structure, physical properties, nomenclature and function of proteins, carbohydrates, lipids, nucleic acids, and biological membranes. Protein function includes membrane transporters and enzyme kinetics, inhibition, and regulation. Prerequisite: CHEM 362 with a grade of C- or better.
- CHEM 431LAB. Biochemistry Laboratory (2).** Quantitative and qualitative biochemical techniques applied to proteins and nucleic acids. Two laboratory sessions weekly. Co- or prerequisite: CHEM 431. Prerequisite: CHEM 361LAB with a grade of C- or better.
- CHEM 432. Biochemistry II (3).** Metabolism of carbohydrates, lipids, amino acids, and nucleotides, including metabolic regulation and thermodynamics. Prerequisite: CHEM 431 with a grade of C- or better.
- CHEM 433. Biochemistry III (3).** In depth coverage of the central dogma of biochemistry, including DNA replication and repair and transcriptional and translational aspects of genetic regulation, with emphasis on common biochemical techniques and data analysis. Prerequisite: CHEM 431 with a grade of C- or better.
- CHEM 433LAB. Biochemistry Lab II (2).** Molecular cloning of a gene into a plasmid vector, followed by expression and purification of the encoded protein using modern chromatography techniques. Downstream analysis and experimentation is then conducted on the purified protein. Prerequisite: CHEM 431LAB. Co- or prerequisite: CHEM 433.
- CHEM 452. Instrumental Analysis Lecture (3).** Theory and functional aspects of modern analytical instrumentation. Emphasis is on components of instruments, limitations of measurements, and applicability of techniques to specific analytical problems. Corequisite: CHEM 452LAB. Prerequisites: CHEM 332 and 332LAB with a grade of C- or better in each.
- CHEM 452LAB. Instrumental Analysis Laboratory (2).** Accompanying laboratory to Instrumental Analysis Lecture providing hands-on experience with a number of instrumental methods used in modern chemical research, analysis, and process control. Two laboratory sessions weekly. Co- or prerequisite: CHEM 452 with a grade of C- or better.

CHEM 473. Transition Metal Chemistry (3).

A survey of the structure, spectroscopy, and characterization of transition metal compounds, and the electronic structures of transition metals and lanthanides.

Prerequisites: CHEM 350 and 382 with a grade of C- or better in each.

CHEM 488. Colloquium (1). Students prepare an oral presentation on a current topic in chemistry. May be from a research experience or from a review of the chemistry literature. Prerequisite: senior standing.

CHEM 490. Cooperative Education (1-12). An individualized contracted field experience with business, industry, government, or social service agencies. This contractual arrangement involves a student learning plan, cooperating employer supervision, and faculty coordination. May be repeated for credit. Grade will either be S or U. By permission.

CHEM 491. Workshop (1-6).

CHEM 492. Laboratory Experience in Teaching Chemistry (2). Integrates both chemistry and education in order to guide teaching assistants into hands-on, inquiry-based approaches to learning in the laboratory environment. Additional time to be assigned. May be repeated for credit. Grade will be either S or U.

CHEM 495. Senior Research (1-6).

CHEM 496. Individual Study (1-6).

CHEM 498. Special Topics (1-6).

CHEM 499. Seminar (1-5).

COMMUNICATION DEPARTMENT

College of Arts and Humanities
Ellensburg
Bouillon Hall, room 232A

509-963-1066

Fax: 509-963-1060

www.cwu.edu/~comm

See website for how the communication programs may be used for educational and career purposes.

Faculty and Staff Chair

Philip Backlund, PhD

Professors

Philip Backlund, PhD, communication studies
James L. Gaudino, PhD, communication studies

Michael R. Ogden, PhD, journalism, film and video studies

Associate Professors

Lois J. Breedlove, MA, journalism
Robert C. Fordan, MA, journalism

Assistant Professors

Cesar Garcia, PhD, public relations
Elizabeth Kerns, public relations

Xiaodong Kuang, PhD, public relations, advertising
Steve Jackson, MA, journalism, convergent media

Cynthia Mitchell, MBA, journalism

Maria Sanders, MA, film and video studies

Lecturers

Katherine Horowitz, MA, communication studies

Sacheen Mobley, PhD, communication studies

Toby Staab, MA, journalism

Staff

Crystal Bookman, secretary senior

Kristin Gaskill, *Observer* business manager

Department Information

The Department of Communication prepares students to become active participants in communicating with and the shaping of modern culture in a global society. The department emphasizes student-centered instruction in gathering and disseminating written, spoken, and visual information, as well as course work in the processes, effects, and theories of human communication. The department is committed to a liberal education in written, oral, visual, and convergent media communication, as well as to training in diverse professional fields.

Department Standards

Admission Requirements

Admission to the communication department majors in Public Relations, Journalism and Communication Studies is selective. To preserve effective teacher to student ratios, to ensure students are able to register for needed courses, and to ensure access to necessary equipment, the department limits the total number of majors it can carry at any given time. The number of available spaces in each major varies each quarter according to the number of graduates the previous year. More space is generally open fall quarter.

Admission information and procedures are available in the communication department office.

Exit Requirements

1. Students must maintain a 2.4 GPA with a minimum grade of C- in all courses counted toward fulfilling any major or minor requirements.
2. No course may be counted twice in fulfilling an internal or external minor.

Financial Obligations

Production courses required for broadcast journalism and/or film and video studies have associated lab fees.

Bachelor of Arts

(NOTE: Students seeking a BA degree must complete one year college/university

study or two years high school study of a single foreign language.)

Communication Foundation Core Requirements

COM 189 - Communication Orientation	1
COM 201 - Media and Culture	4
COM 202 - Communication Ethics and the First Amendment	4

Total Core Credits: 9

Bachelor of Arts

Communication Studies Major

The communication studies major begins with a traditional liberal arts perspective, infuses an international/intercultural perspective, and then focuses on practical application of communication knowledge and skill. The major is intended for students who wish to be at home in a wide range of situations and cultures and who value the role of communication in creating effective relationships locally and globally. The major is also an effective foundation for advanced study (academic or professional). Students must complete the communication foundation courses prior to acceptance into the communication studies major.

Required Courses

Communication Foundation Core Requirements	9
COM 207 - Introduction to Communication Studies	4
COM 251 - Small Group Dynamics	4
COM 253 - Interpersonal Communication . .	4
COM 302 - Intercultural Communication . .	4
COM 340 - Public Communication: Theory and Practice	4
COM 350 - Persuasion and Culture	4
COM 365 - Organizational Communication .	4
COM 401 - Language, Thought, and Communication	4
COM 450 - Advanced Public Speaking	4
COM 451 - Communication Analysis and Research	4
COM 485 - Senior Seminar	4
COM 489 - Portfolio Assessment	1

Media Requirement: Select one class from the following: 4
COM 321 - Visual Communication (4)
COM 354 - History of Television (4)
COM 369 - Mass Media and Society (4)
COM 460 - Communication Law (4)

Study-abroad Option: Twelve pre-approved credits from participating international institution 12

OR

Non Study-abroad Option: Twelve pre-approved credits of which eight credits must come from one of the following cognates: 12

Relational Communication

COM 362 - Mediation and Conflict Resolution (4)	
COM 380 - Nonverbal Communication (4)	
COM 402 - Gender Communication (4)	
COM 403 - Family Communication (4)	

Organizational Communication

- COM 345 - Business and Professional Speaking (4)
- COM 362 - Mediation and Conflict Resolution (4)
- COM 375 - Interviewing Principles and Techniques (4)
- COM 465 - Communication and Organizational Leadership (4)

Pre-approved upper-division elective

- credits 5
- Students may choose any COM courses with advisor approval.

Total Credits: 75

Bachelor of Arts

Public Relations Major

Public relations has become an indispensable part of any organization, company, institution, or government trying to create a body of public opinion to support its mission, vision, or values. Understood as a management function in modern organizations in the corporate world, this same professional level has been adopted by NGOs, non-profit organizations, and even governments and countries as a whole. This new scenario offers plenty of opportunities for multifaceted public relations practitioners with skills in written and interpersonal communication, research, negotiation, leadership, creativity, logistics, and problem solving. Students must complete the communication foundation courses prior to acceptance into the public relations major.

Communication Foundation Core

Requirements 9

Required Courses

- COM 208 - Introduction to Public Relations Writing 4
- COM 270 - Introduction to Public Relations 4
- COM 345 - Business and Professional Speaking 4
- COM 350 - Persuasion and Culture 4
- COM 370 - Writing for Public Relations 4
- COM 470 - Public Relations Strategies 5
- COM 475 - Public Relations and Advertising Management 4
- COM 489 - Portfolio Assessment 1
- COM 490 - Cooperative Education 5
- MKT 360 - Principles of Marketing 5

Select 8 credits in media from the following 8

- COM 306 - Introduction to Convergent Media (4)
- COM 442 - NewsWatch Reporting (2)
- COM 446 - Convergence Publishing (2)
- COM 460 - Communication Law (4)
- COM 468 - *Observer* (2)

Select 8 credits in public relations

- specializations from the following 8
- COM 487 - Public Relations Professional Seminar (3)
- COM 472 - Global Public Relations (4)
- COM 473 - Corporate Reputation Management (4)
- COM 474 - Public Opinion (4)

Pre-approved upper-division elective

- credits 10
- Student may choose any COM course with advisor approval.

Total Credits: 75

Bachelor of Arts

Journalism Major

In today's environment of converging media, successful journalists need the necessary skills and concepts to tell meaningful stories for a variety of outlets. In this major, students learn how to conceive ideas and collect and present information using words, pictures, and sounds to craft news stories that are accurate, fair, clear, and compelling. Students will also understand the ethical, legal, and management environment of journalism and the fundamental role media plays in our social, political, and economic system. A specialization in print, broadcast, or convergent media is required. Students must complete the communication foundation courses prior to acceptance into the journalism major.

Communication Foundation Core

Requirements 9

Required Courses

- COM 308 - Writing and Reporting for Print Journalism 5
- COM 310 - Writing and Reporting for Broadcast Journalism 5
- COM 321 - Visual Communication 4
- COM 226 - Writing and Reporting for Convergence Media 4
- COM 489 - Portfolio Assessment 1
- COM 490 - Cooperative Education 1-12

Select two of the following 7-8

- COM 333 - Communication Ethics (3)
- COM 369 - Mass Media and Society (4)
- COM 382 - History of American Journalism (4)
- COM 460 - Communication Law (4)

Total Credits: 41

Select one of the following specializations:

Print Specialization

Required Courses

- COM 347 - Copy Editing 4
- COM 408 - Feature Writing 4
- COM 466 - Investigative Reporting 4

Select 10 credits from the following 10

- Must take at least 4 credits of *Observer*
- COM 442 - NewsWatch Reporting (2)
- COM 446 - Convergence Publishing (2)
- COM 468 - *Observer* (2)
- COM 478 - Advanced Newspaper Editing (3)

Pre-approved upper-division elective

- credits 12
- Student may choose any COM course with advisor approval.

Total Credits: 34

Broadcast Specialization

Required Courses

- COM 322 - Introduction to Studio Production 4
- COM 341 - Introduction to Field Production 4
- COM 342 - Broadcast News Producing and Reporting 4

Select 10 credits from the following 10

- Must take at least 4 credits of NewsWatch Management
- COM 442 - NewsWatch Reporting (2)
- COM 446 - Convergence Publishing (2)
- COM 452 - Applied Video Production (2)
- COM 462 - NewsWatch Management (2)

Pre-approved upper-division elective

- credits 12
- Student may choose any COM course with advisor approval.

Total Credits: 34

Convergent Media Specialization

Required Courses

- COM 306 - Introduction to Convergence Media 4
- COM 336 - Convergent Media Design 4
- COM 406 - Topics in Convergent Media 4

Select 10 credits from the following 10

- Must take at least 4 credits of *Observer*
- COM 442 - NewsWatch Reporting (2)
- COM 446 - Convergence Publishing (2)
- COM 452 - Applied Video Production (2)
- COM 468 - *Observer* (2)

Pre-approved upper-division elective

- credits 12
- Student may choose any COM course with advisor approval.

Total Credits: 34

Major Total Credits: 75

Communication Minor

The communication minor introduces students to the study of communication within a modern social and cultural context.

Students in teacher education must meet with the department chair and the certification director to determine the course of study necessary for endorsement.

Required Courses

- COM 201 - Media and Culture 4
- COM 202 - Communication Ethics and the First Amendment 4
- Department-approved electives 20

Total Credits: 28

Organizational Communication Minor

The minor in organizational communication is designed to complement a broad spectrum of majors leading to careers in government, education, social, and community services. Emphasis is placed on an understanding of the basic nature of communication in organizations, and on the fundamental knowledge and skills necessary for effective communication in organizations

at the interpersonal, small group, and public (large group) levels.

Required Courses

COM 251 - Small Group Dynamics	4
OR	
COM 302 - Intercultural Communication	(4)
COM 345 - Business and Professional Speaking	4
COM 365 - Organizational Communication	4
COM 375 - Interviewing Principles and Techniques	4
COM 490 - Cooperative Education	5
Department-approved electives	4

Total Credits: 25

Advertising Minor

The advertising minor develops competence in advertising planning, production, and distribution. Students with communication majors are encouraged to take the advertising minor. However, it must be done in addition to the requirements of the majors and does not qualify as an outside minor.

Required Courses

COM 280 - Advertising Fundamentals	4
COM 305 - Advertising Copywriting and Placement	4
COM 388 - Advertising Sales	4
COM 405 - Advanced Advertising Copywriting	4
COM 420 - Media Buying and Placement	4
COM 475 - Public Relations and Advertising Management	4

Select 8 credits from the following

COM 306 - Introduction to Convergent Media	(4)
COM 309 - Writing Broadcast Advertising	(4)
COM 341 - Introduction to Field Production	(4)
COM 348 - Publication Design	(3)
COM 440 - Corporate Media Production	(4)

Total Credits: 32

Non-profit Organization Administration Minor

The minor in non-profit organization administration is an interdisciplinary minor designed to provide an understanding of the organization, financing, and management issues in non-profit organizations. It is designed to complement majors in artistic, advocacy, and educational endeavors. The minor provides practical, hands-on skills as well as discussion of the issues facing non-profit organizations.

Required Courses

ACCT 301 - Financial Accounting Analysis	5
COM 312 - Introduction to Non-profit Leadership	3
COM 427 - Grant Writing/Fund Raising	3
COM 470 - Applied Public Relations	(5) 4-5
OR	
COM 475 - Public Relations and Advertising Management	(4)

Choose one of the following:

ANTH 490 - Cooperative Education (Internship)	(5)
ART 490 - Cooperative Education (Internship)	(5)
COM 490 - Cooperative Education (Internship)	(5)
MUS 490 - Cooperative Education (Internship)	(5)
TH 490 - Cooperative Education (Internship)	(5)

Areas of Interest

Choose any of the following for a total of at least 9 credits:

ANTH 360 - Introduction to Museum Studies	(4)
ANTH 361 - Museum Exhibit Design	(4)
COM 370 - Writing for Public Relations	(4)
COM 487 - Public Relations Professional Seminar	(3)
MUS 482 - Music Business	(3)
TH 350 - Theatre Management	(3)
TH 351 - Theatre Management	(3)
TH 360 - Stage Management	(3)

Total Credits: 29-30

Non-profit Organization Administration Certificate

The certificate in non-profit organization administration is an interdisciplinary approach designed to provide an understanding of the organization, financing, and management issues in non-profit organizations. It is designed to complement majors in artistic, advocacy, and educational endeavors. The courses provide practical, hands-on skills as well as discussion of the issues facing non-profit organizations.

Required Courses

ACCT 301 - Financial Accounting Analysis	5
COM 312 - Introduction to Non-profit Leadership	3
COM 427 - Grant Writing/Fund-raising	3
COM 470 - Public Relations Strategies	(5)
OR	
COM 475 - Public Relations and Advertising Management	(4) 4-5

Choose one of the following:

ANTH 490 - Cooperative Education (Internship)	(5)
ART 490 - Cooperative Education (Internship)	(5)
COM 490 - Cooperative Education (Internship)	(5)
MUS 490 - Cooperative Education (Internship)	(5)
TH 490 - Cooperative Education (Internship)	(5)

Total Credits: 20-21

Professional Writing Certificate

The professional writing certificate allows students to develop their writing skills for professional and business environments. It is delivered entirely online to serve professionals already working in careers

as well as students planning to begin professional or business careers. Students will learn the rhetorical requirements for specific forms of written communication, including letters, memos, reports, proposals, promotional materials, and press releases. They will also learn to edit their own writing for clarity, correctness, and style.

Required Courses

ENG 301 - Introduction to Professional Writing	5
ENG 310 - Technical Writing	4
COM 347 - Copy Editing	4
COM 370 - Writing for Public Relations	4

Total Credits: 17

Communication Courses

COM 189. Communication Orientation (1).

Survey of departmental requirements and fields of study. Required for entry into communication majors.

COM 201. Media and Culture (4). An examination of mass media in its historical, societal, and political environments.

Development of an understanding of the impact media has in a diverse world.

COM 202. Communication Ethics and the First Amendment (4). Importance of First Amendment to democratic society. Ethics of communication in the public sphere and the rights and responsibilities of communication professionals. Required for entry into communication majors.

Development of an understanding of the impact media has in a diverse world.

COM 207. Introduction to Communication Studies (4). Introductory course designed to develop oral communication abilities for effective communication across a variety of contexts.

COM 208. Introduction to Public Relations Writing (4). Integrated approach to media writing emphasizing public relations writing styles.

COM 226. Writing and Reporting for Convergence Media (4). Writing and research of journalistic stories for online media. Prerequisite: admission to either the communication studies, public relations, film and video studies, or journalism major.

COM 251. Small Group Dynamics (4).

Analysis and practice of communication principles affecting effectiveness of small group discussion. Includes theory and practice of leadership and problem solving in small groups. Prerequisite: COM 207.

COM 253. Interpersonal Communication (4). Investigation of theory, research, and practice of the role of communication in effective interpersonal relationships. Prerequisite: COM 207.

Prerequisite: COM 207.

COM 255. Emerging Leaders (2). Course is designed to develop student leaders on campus through leadership training, leadership experiences, self analysis, and familiarization with leadership opportunities at CWU.

COM 267. Screenwriting Fundamentals (4).

Introduction to the basic script format, the creative story and style elements, and the

- writing process steps for screenplays and teleplays. Focus on the narrative script development process from idea conception to first draft. COM 321 recommended. Prerequisites: ENG 102, FVS 250, and admission to the communication, English language and literature or film and video studies major.
- COM 270. Introduction to Public Relations** (4). The basic concepts of public relations; the tools and media used in communicating with the variety of publics. Prerequisite: COM 208.
- COM 280. Advertising Fundamentals** (4). It covers the basic elements, principles, theories, and practices of advertising. Students will learn advertising strategies, techniques, and integration of advertising with other communication mix elements.
- COM 290. Cooperative Field Experience** (1-6). Internship designed to explore career opportunities in the major. Open to all students. May be repeated for credit. Grade will either be S or U.
- COM 296. Individual Study** (1-6).
- COM 298. Special Topics** (1-6).
- COM 302. Intercultural Communication** (4). The objective of this course is to give the participants the skills and understanding necessary to improve communication with peoples of other nations and cultures. Prerequisite: sophomore standing or above.
- COM 305. Advertising Copywriting and Placement** (4). Preparation and placement of advertising in mass and selective media. Theory and techniques of advertising writing and media buying. Prerequisite: admission to either the communication studies, public relations, film and video studies, or journalism major.
- COM 306. Introduction to Convergent Media** (4). An introductory course in the design of convergent media tools. Students will learn interactive client/server based media, including coding, design, and interactive elements. Prerequisite: admission to either the communication studies, public relations, film and video studies, or journalism major.
- COM 308. Writing and Reporting for Print Journalism** (5). Students will learn how to conceive, report, pitch, and write news stories for print media and will learn how to cover a specialized news beat. Prerequisite: admission to either the communication studies, public relations, film and video studies, or journalism major.
- COM 309. Writing Broadcast Advertising** (4). Principles and techniques used in writing effective radio and television commercials, public service announcements, and promotional copy. A writing intensive course. Prerequisite: admission to either the communication studies, public relations, film and video studies, or journalism major.
- COM 310. Writing and Reporting for Broadcast Journalism** (5). Writing, news gathering, and reporting for the electronic media. Includes on-the-scene coverage and interviewing. Prerequisite: admission to either the communication studies, public relations, film and video studies, or journalism major.
- COM 312. Introduction to Non-profit Leadership** (3). This course introduces key elements in non-profit organization leadership and makes brief reviews of various non-profit management topics, such as strategic missions, board development, leadership roles, fundraising, staffing, performance evaluation and accountability, non-profit marketing, and legal issues.
- COM 315. Studies in Communication** (1). Specialized topics in communication to increase practical communication skills. May be repeated for credit. Grade will either be S or U. By permission.
- COM 321. Visual Communication** (4). Understanding the communication of visual messages for an audience, production of visual images in print, video, and digital forms. Prerequisite: admission to either the communication studies, public relations, film and video studies, or journalism major.
- COM 322. Introduction to Studio Production** (4). An introduction to the production elements of a television show, with an emphasis on the function and operation of studio lighting, audio, and cameras. Prerequisites: COM 321 and admission to either the communication studies, public relations, film and video studies, or journalism major.
- COM 327. Scriptwriter in Development and Production** (4). Combined lecture/workshop, overview of the creative, communicative, and collaborative responsibilities expected of a scriptwriter in development and production. Students explore the challenges of this profession, as well as solutions to typical problems. Prerequisite: COM 267 and admission to the communication or film and video studies major.
- COM 330. Media Aesthetics** (5). An examination of the major aesthetic elements involved in visual storytelling for film and television, including; light, color, 2D and 3D space, time/motion, and sound. Prerequisites: COM 321 and admission to a communication major.
- COM 333. Communication Ethics** (3). The study of ethical issues in communication. Prerequisite: COM 201.
- COM 336. Convergent Media Design** (4). Practical approaches in information design for convergent media. Focus on industry standard applications and techniques. Prerequisites: COM 306, COM 321, and admission to a communication major.
- COM 340. Public Communication: Theory and Practice** (4). Survey of rhetorical theory and practice from ancient to modern times. Examination of classical, renaissance, and modern historical periods and transitions to current theories of communication. Prerequisite: admission to either the communication studies, public relations, film and video studies, or journalism major.
- COM 341. Introduction to Field Production** (4). Principles and techniques of location production and visual storytelling for journalism and film. Prerequisites: COM 321 and admission to a communication major.
- COM 342. Broadcast News Producing and Reporting** (4). Principles and techniques used in producing newscasts and field reports for broadcast news, with emphasis on television medium. Recommended: COM 310 and COM 341.
- COM 345. Business and Professional Speaking** (4). Oral communication in career and professional settings with focus on public presentations, briefings, and persuasion.
- COM 346. Production Management for Film and Video** (4). Theory, discussion, and practical application of planning and management fundamentals during preproduction, production, and postproduction of narrative and/or documentary programs. Prerequisites: either COM 201 or FVS 250. COM 322 or COM 341 are also recommended.
- COM 347. Copy Editing** (4). The editing process; edit copy for content and mechanics; write headlines and cutlines. Prerequisites: COM 208 and admission to either the communication studies, public relations, film and video studies, or journalism major.
- COM 348. Publication Design** (3). Publication design, the theories of graphics, headlines, and text. Management of the design process. Prerequisite: admission to either the communication studies, public relations, film and video studies, or journalism major.
- COM 350. Persuasion and Culture** (4). Role of persuasion in society, elements of human motivation, techniques, and appeals of the persuader. Prerequisite: admission to either the communication studies, public relations, film and video studies, or journalism major.
- COM 351. Visual Anthropology** (4). Provides methodological, theoretical, and practical background to produce and evaluate imagery in films and video; guidelines and practice of image presentation/manipulation in anthropological and social contexts. COM 351 and ANTH 351 are equivalent courses; students may not receive credit for both. Prerequisites: either ANTH 130, ART 225, COM 321, or COM 330.
- COM 353. History of Narrative Film** (4). A history of the development of narrative film as an art form and cultural medium, with primary focus on Hollywood cinema. COM 353 and ENG 353 are equivalent courses; student may not receive credit for both. Prerequisite: FVS 250.
- COM 354. History of Television** (4). Historical survey of television as an entertainment, information, and art medium. Emphasis on understanding the cultural, social, political, technological, and economic conditions of production; the examination of television as text itself;

- and TV's impact on audiences. COM 354 and ENG 354 are equivalent courses; students may not receive credit for both. Prerequisites: either COM 201 or FVS 250.
- COM 355. History of Documentary (4).** Survey of documentary history from 1895 to present. Focus on philosophy of documentary approach, overview of the most important topics and issues, and development of critical standards in the genre. COM 355 and ENG 355 are equivalent courses; students may not receive credit for both. Prerequisites: either COM 201 or FVS 250.
- COM 356. Writing for Screen Genre (4).** An introduction to the story, style comedic or dramatic elements that distinguish major genres, the role of genre in the Hollywood production system, and the impact of genre on the viewing public as assessed by critical theories. Prerequisite: COM 267 and admission to the communication or film and video studies major.
- COM 357. Scriptwriting for Serial Media (4).** Scriptwriting for the basic genres of serial television and the web. Includes study of serial script, structure, story, character development, and dialog. Prerequisite: COM 267, and admission to the communication or film and video studies major.
- COM 362. Mediation and Conflict Resolution (4).** Communication and decision-making strategies for conflict resolution. Negotiating agreement and mediating differences in interpersonal and organizational settings. Prerequisite: admission to either the communication studies, public relations, film and video studies, or journalism major.
- COM 365. Organizational Communication (4).** Function, forms, and patterns of communication in organizations. Effects of organizational structures and dynamics on communication. Methods of evaluating communication policies and practices as an aid to organizational management. Prerequisite: admission to either the communication studies, public relations, or journalism major.
- COM 367. Narrative Screenwriting (4).** Writing screenplays in combination with the study of models and techniques. COM 367 and ENG 367 are equivalent courses; students may not receive for both. Prerequisites: either COM 201 or FVS 250.
- COM 369. Mass Media and Society (4).** Relationship of the mass media to social institutions; including philosophy, responsibilities, regulations, and criticism. Variable topic, may be repeated for up to 8 credits under a different title. COM 369 and SOC 369 are equivalent courses; students may not receive credit for both. May be repeated for credit.
- COM 370. Writing for Public Relations (4).** Practical instruction in persuasive writing, news releases, broadcast material, speeches, institutional messages, newsletter articles, employer publications, backgrounders, features, and corporate profiles. Prerequisites: COM 208, COM 270, and admission to either the communication studies, public relations, or journalism major.
- COM 375. Interviewing Principles and Techniques (4).** Examination of the basic principles and techniques of interviewing and their application in informational, employment, and persuasive/ counseling contexts. Extensive in-class and community experience in interviewing provided. Prerequisites: COM 207 and admission to a communication major.
- COM 380. Nonverbal Communication (4).** Fundamentals of nonverbal communication including codes, relationship to biology and culture, usage, and interrelationships. COM 380 and ANTH 380 are equivalent courses.
- COM 382. History of American Journalism (4).** Survey of American journalism since colonial times; emphasis on understanding the evolution of journalism in the United States and the changing technological, social, and cultural trends affecting print and broadcast journalism. Prerequisites: COM 201 and admission to a communication major.
- COM 388. Advertising Sales (4).** Examines the process of selling advertising, including product research, client relationship, managing accounts, making the pitch, and following through. Prerequisite: COM 280.
- COM 401. Language, Thought, and Communication (4).** Examination of human communication on an individual, interpersonal, and public level. Exploration of the relationship between communication theory and the practice of communication in various professional settings. Prerequisite: admission to either the communication studies, public relations, film and video studies, or journalism major.
- COM 402. Gender Communication (4).** Analysis of gender role development in females and males with focus on effective relationship development between sexes. Analysis and development of communication skills useful in cross-sex friendships, working relationships, and romantic/family relationships. Prerequisite: admission to either the communication studies, public relations, film and video studies, or journalism major.
- COM 403. Family Communication (4).** This course is designed to provide an overview of family dynamics and the processes that influence family communication and family functioning. FS 403, COM 403 and FS 503 are equivalent courses; students may not receive credit for both.
- COM 405. Advanced Advertising Copywriting (4).** Students develop advanced skills in writing copy, developing visual elements, and constructing advertisements and advertising campaigns. Prerequisite: COM 305.
- COM 406. Topics in Convergence Media (4).** Issues and skills in convergence media.
- Provides skills in advanced techniques and approaches to information distribution in convergence media. Topics will change from quarter to quarter. May be repeated up to 8 credits. Prerequisites: COM 336 and admission to either the communication studies, public relations, film and video studies, or journalism major.
- COM 408. Feature Writing (4).** Skills needed to conceive, report, and write a wide range of feature stories for newspapers, magazines, and online publications. May be repeated for credit. Prerequisites: COM 308 and admission to either the communication studies, public relations, or journalism major.
- COM 420. Media Buying and Placement (4).** Students learn the process by which companies purchase advertising, and how advertising buys are sold at the agency/corporate level. Students develop skills to calculate appropriate media buys. Prerequisite: COM 280.
- COM 422. Advanced Multi-camera Production (4).** The creative use of multi-camera techniques for studio and remote productions. Emphasis on directing, advanced lighting techniques, sound design, graphics, and remote truck equipment. Focus on dramatic formats, magazine-style, and large event productions. Prerequisites: COM 322 and admission to either the communication studies, public relations, film and video studies, or journalism major.
- COM 427. Grant Writing/Fund Raising (3).** Students will learn to write grants, conduct fund-raising efforts, and other forms of revenue generation in non-profit organizations. Prerequisites: COM 312 and ACCT 301.
- COM 431. Editing for Television and Film (4).** History, concepts, and techniques of editing for film and television. Hands-on learning by editing diverse scenes using Final Cut software. Combination of lecture and lab. Prerequisites: COM 341, COM 315, and admission to either the film and video studies, or the broadcast journalism major.
- COM 432. Directing TV and Film (4).** Examines director's role and responsibilities, process of translating the written word into image and action; basics of camera-actor blocking; editing dialogue scenes; organizing production venues and logistics of in-studio and on-location programs. Combined lecture/workshop. Prerequisites: COM 322, COM 341, and senior standing. COM 346 is also a recommended prerequisite.
- COM 440. Corporate Media Production (4).** A study of methods used in the conceptualization, design, and production of non-broadcast video programs. Consideration of management needs and training requirements. Prerequisites: COM 341 and admission to either the communication studies, public relations, film and video studies, or journalism major.

COM 441. Documentary Production (4).

Detailed analysis of the creative and technical elements of documentary production. Emphasizes “hands-on” application of production techniques for documentary storytelling from concept through to final product. Combined lecture/workshop. May be repeated for credit. Prerequisites: COM 341 and admission to either the communication studies, public relations, film and video studies, or journalism major. COM 363 and ENG 363 is also a recommended prerequisite.

COM 442. News Watch Reporting (2). Gather, write, and report news stories for newscasts and public affairs programs on Ellensburg Community Television cable channel 2, and CWU-TV, cable channel 15. Recommended: COM 341. Concurrent enrollment allowed in COM 342. May be repeated up to 6 credits. Prerequisite: COM 310 and admission to the communications or film and video study major.

COM 446. Convergence Publishing (2). Gather, write, and report news and feature stories for the web. May be repeated for credit. Prerequisite: admission to either the communication studies, public relations, film and video studies, or journalism major.

COM 450. Advanced Public Speaking (4). Preparation and delivery of specialized forms of public address. Writing speeches for others, advanced forms of style and support, and speeches for special occasions. Prerequisite: COM 340 or COM 345, and admission to the communications major.

COM 451. Communication Analysis and Research (4). Theory and practice in and study of methodology for gathering and analyzing data on human communication. Behavior identification, instrument types and uses, and assessment strategies. Prerequisites: COM 401 and admission to a communication major.

COM 452. Applied Video Production (1-2). Assist in producing newscasts, public affairs, and/or entertainment programs for Ellensburg Community Television, and KCWU-TV. May be repeated up to 6 credits. Prerequisite: COM 322.

COM 456. History and Practice of Convergent Gaming (4). Course emphasizes the design and practice of role-playing games with a significant focus on computer-based Massive Multi-user Online Role Play Games (MMORPGs). The course will look at the economics, culture, art, design, and history of the rapidly growing Role Playing Games market. Prerequisite: admission to either the communication studies, public relations, film and video studies, or journalism major.

COM 457. Narrative Screenwriting II (5). Combined lecture/workshop providing in-depth study of the theory and practice of developing a screenplay and teleplay writing style. Topics include mood and tone, scene structure and description, gender, age, subgroup

communication and dialog techniques, non-verbal communication, and rewriting. Prerequisite: COM 367, and admission to the communication, English language and literature, or film and video studies major.

COM 460. Communication Law (4). Understanding legal issues for the communication professions including libel, slander, privacy, copyright, and First Amendment. Prerequisites: COM 201, COM 333, and admission to either the communication studies, public relations, film and video studies, or journalism major.

COM 462. NewsWatch Management (2). Administrative responsibilities for the production of NewsWatch and related public affairs programs on Ellensburg Community Television cable channel 2 and CWU-TV cable channel 15. May be repeated up to 4 credits. Prerequisite: COM 322, and COM 341, and COM 442 and admission to the communications or film and video study major.

COM 465. Communication and Organizational Leadership (4). This course builds on COM 365 and provides advanced study of communication within organizations and the role of communication in leadership. The course is designed for senior students who will apply previous course information to advanced projects and study. Prerequisite: COM 365 and admission to the communications major.

COM 466. Investigative Reporting (4). This class teaches the skills needed to conceive, report, and write investigative stories based on documents, data, interviews to be published in newspapers, magazines, and online publications. Prerequisites: COM 308 and admission to either the communication studies, public relations, or journalism major.

COM 467. Narrative Screenwriting III (5). Combined lecture/workshop providing in-depth study of the theory and practice of adaptations and alternative plots for screenplays and teleplays. Prerequisite: COM 457 and admission to the communication, English language and literature, or film and video studies major.

COM 468. Observer (1-2). Reporting and photo assignments on the campus newspaper. May be repeated up to 6 credits. Prerequisite: COM 208.

COM 469. Media and Cultural Studies (4). Detailed examination of the media from the perspectives and insights of critical theoretical approaches ranging from the Frankfurt School, to cultural studies, to post-modern theory. Emphasis on unlocking the domains of meaning, value, politics, and ideology in the development of entertainment and information technology industries. COM 469 and COM 569 are equivalent courses; students may not receive credit for both.

COM 470. Public Relations Strategies (5). Creation of a public relations program for an organization, agency, or institution.

Prerequisites: COM 370 and admission to either the communication studies, film and video studies, public relations, or journalism major.

COM 472. Global Public Relations (4). This course studies public relations from a global perspective. It provides an international point of view for public relations theories, strategies, and practices. It also compares cultures and investigates the interaction of cultures from a cultural, social, political, and legal perspective. Grade will either be S or U. Prerequisites: COM 370 and admission to either the communication studies, film and video studies, public relations, or journalism major.

COM 473. Corporate Reputation Management (4). Corporate reputation management is concerned with all of an organization's stakeholders and the multifaceted way in which an organization communicates (customers, investors, employees, etc.). Prerequisites: COM 270, COM 370, and admission to a communication studies major.

COM 474. Public Opinion (4). Monitoring, assessing, and managing public opinion. Prerequisite: admission to either the communication studies, public relations, film and video studies, or journalism major.

COM 475. Public Relations and Advertising Management (4). Application of theory and concepts to managing public relations and advertising accounts. Prerequisites: COM 470 and admission to either the communication studies, public relations, or journalism major.

COM 478. Advanced Newspaper Editing (3-6). Administrative responsibilities for students serving as editors of the campus newspaper. Variable credit with a maximum of 6 credits. May be repeated for credit. Prerequisites: COM 208, COM 347, and COM 468.

COM 485. Senior Seminar (4). A research project leading to a thesis. Prerequisites: COM 401 and admission to a communication major.

COM 486. Advanced Journalism Seminar (3). Issues and skills in specialized journalistic situations. Seminar topics will change from quarter to quarter. May be repeated up to 9 credits under a different topic. Prerequisites: COM 308 and admission to either the communication studies, public relations, or journalism major.

COM 487. Public Relations Professional Seminar (3). Advanced public relations seminar topics will change from quarter to quarter. May be repeated for credit. Prerequisites: COM 470 and admission to either the communication studies, public relations, or journalism major.

COM 489. Portfolio Assessment (1). End-of-program assessment activities. Preparation, presentation, and evaluation of a professional portfolio of work produced during the major. Prerequisites: senior standing and admission to either the communication studies, public relations, or journalism major.

COM 490. Cooperative Education (1-12).

Individual contract arrangement involving student, faculty, and cooperating agency to gain practical experience in communication. May be repeated for credit. Grade will either be S or U.

COM 491. Workshop (1-6).**COM 496. Individual Study** (1-6).**COM 498. Special Topics** (1-6).**COM 499. Seminar** (1-5).

COMPUTER SCIENCE DEPARTMENT

College of the Sciences
Ellensburg
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www.cwu.edu/~cs_dept

See website for how this program may be used for educational and career purposes.

Faculty and Staff**Chair**

James Schwing, PhD

Professors

Boris Kovalerchuk, PhD, artificial intelligence, simulation and optimization, computer architecture

James Schwing, PhD, parallel algorithms, user interface design, computer graphics, computer-aided design

Associate Professors

Razvan Andonie, PhD, neural networks, parallel and distributed computing, computational intelligence, data mining

Edward Gellenbeck, PhD, user interface design, web development, software engineering

Assistant Professor

John Anvik, PhD, software engineering, machine learning, computer supported collaborative work

Staff

Vacant, secretary

Zachary Geesaman, systems analyst

Department Information

The Department of Computer Science (CS) offers a degree program leading to the Bachelor of science in computer science. The department also jointly offers a program with the industrial engineering technology (IET) department in the College of Education and Professional Studies in computer engineering technology. Information related to the computer engineering technology program can be found in the IET section of the catalog.

The field of computer science can trace its beginnings and much of its foundation to both mathematics and engineering.

Because of this, studies in computer science range from theory through experimental techniques to engineering methodology. The purpose of the computer science curriculum is to expose students to aspects of each of these disciplines and foster an appreciation and understanding of them. To accomplish this, students are exposed to the broad theoretical basis of computer science as well as a strong laboratory component. The laboratory experience is more than simple programming. Rather, it is through the laboratories that students are introduced to both the experimental and the design aspects of computer science.

Using this philosophy as a base, the CS department has designed a curricular model that seeks to increase relevance to the real world. In particular, the senior project, a capstone course series- CS 480 and 481- adopts a theme that expands upon the experimental and design approach of typical computer science curricula. This capstone series addresses the creativity and productivity elements required for business and industry applications today. Students become engaged in projects that investigate each stage of transforming a creative idea into a productivity-enhancing system in a realistic context.

Standards for Admission

Admission to the computer science major or minor is selective. **A cumulative grade point average of 2.5 is required in the pre-admission requirements listed below.** Students should submit their application during the quarter in which they are completing the pre-admission requirements. Applications will be accepted through the last day of classes (i.e., the week before finals) of the fall, winter, and spring quarters for admission the following quarter. A completed application must include the standard major application form and an advisor-approved graduation plan.

Students should request admission to the computer science pre-major prior to completion of the pre-admission requirements.

Students must be accepted as a computer science major or minor prior to enrolling in computer science classes beyond CS 301 with the exception of CS 311. Students applying for admission to the major may register for courses for the following quarter but will be dropped if not admitted.

The computer science department believes that advising is one of the keys to success in an undergraduate program. To that end, majors and minors are required to meet with a faculty advisor every term in order to register. Pre-majors are also encouraged to meet with their designated faculty advisor each term. Advisors and advising times are listed with the CS office.

Pre-admission Requirements**General University Requirements**

ENG 101, Composition I: Critical Reading and Responding. 4
ENG 102, Composition II: Reasoning and Research 4

CS Core Requirements

CS 110, Programming Fundamentals I 4
CS 111, Programming Fundamentals II 4
CS 301, Data Structures 4
MATH 172, Calculus I 5

Pre-admission Total Credits: 25

Bachelor of Science**Computer Science Major**

In order to expose computer science majors to a broad theoretical base while emphasizing the laboratory experience, students will complete the CS core courses. To add depth and flexibility to their academic programs, students will work out a focus area with a major advisor. A specific focus may be developed in many areas of computer science; examples include: artificial intelligence, computer systems, information systems, scientific computing, and software engineering. A table of possible sequences for focus-area electives follow the core requirements.

Required Courses

Major Core Requirements 17
CS 112 - Foundations of Computer Science . . 4
CS 302 - Advanced Data Structures and File Processing 4
CS 311 - Computer Architecture I 4
CS 312 - Computer Architecture II 4
CS 325 - Technical Writing in Computer Science 3
CS 361 - Principles of Language Design I . . . 4
CS 362 - Principles of Language Design II . . 4
CS 392 - Lab Experience in Teaching Computer Science 1
CS 420 - Database Management Systems . . . 4
CS 427 - Algorithm Analysis 4
CS 446 - User Interface Design and Development 4
CS 470 - Operating Systems 4
CS 480 - Software Engineering 4
CS 481 - Software Engineering Project 4
CS 489 - Senior Colloquium 1
CS 492 - Laboratory Experience in Teaching Computer Science 2
MATH 260 - Sets and Logic 5
MATH 330 - Discrete Mathematics 5
Focus Area Electives 24

Total Credits: 106

Focus Area Electives List

Students may use additional courses as their focus area electives with the approval of their major advisor.

ACCT 251 - Financial Accounting (5)
ACCT 252 - Managerial Accounting (5)
BUS 221 - Introductory Business Statistics (5)

CS 250 - Web Development Technologies I (4)
 CS 370 - Introduction to the UNIX Operating System (4)
 CS 440 - Computer Graphics (4)
 CS 441 - Computer Graphics II (4)
 CS 450 - Computer Network and Data Communications (4)
 CS 455 - Artificial Intelligence (4)
 CS 456 - Data Mining (4)
 CS 457 - Computational Intelligence (4)
 CS 458 - Artificial Intelligence Project (2)
 CS 473 - Parallel Computing (4)
 CS 490 - Cooperative Education (1-12) (Maximum of 4 credits)
 CS 496 - Individual Study (1-6)
 ECON 201 - Principles of Economics Micro (5)
 EET 221 - Basic Electricity (5)
 EET 312 - Basic Electronics (5)
 EET 371 - Digital Systems (4)
 EET 372 - Advanced Digital Circuits (4)
 EET 375 - Microprocessor Applications (4)
 MATH courses at or above the level of 173
 MIS 386 - Management Information Systems (5)

Possible Focus Area Sequences

The table below summarizes typical focused sequences taken by students.

	AIS	Sys	IS	Sci	SW	Web
CS 250					X	X
CS 351						X
CS 352						X
CS 440					X	
CS 450					X	X
CS 455	X					
CS 456	X		X		X	X
CS 458	X					
CS 473					X	
CS 490					X	X
EET 221		X				
EET 312		X				
EET 371		X				
EET 372		X				
EET 375		X				
MATH 173	X	X		X		
MATH 265	X			X		
MATH 272				X		
MATH 273				X		
MATH 311	X					
MATH 376				X		
MATH 412				X		
ACCT 251			X			
ACCT 252			X			
ECON 201			X			
BUS 221			X			
MIS 386			X			

Computer Science Minor

This minor is designed for students who wish to investigate the basic core of the computer science discipline. This minor is appropriate for any student, including those in teacher education, seeking to enhance their technical computer science background.

Required Courses

CS 110 - Programming Fundamentals I 4
 CS 111 - Programming Fundamentals II 4
 CS 301 - Data Structures 4
 CS 311 - Computer Architecture I 4
 MATH 130 - Finite Mathematics 5
 MATH 154 - Pre-Calculus Mathematics II . . . 5
 MATH 260 - Sets and Logic 5

Total Credits: 31

Applied Computer Science Minor

This minor is designed for students who wish to integrate a computer science component into their curriculum. This minor is appropriate for any student who wishes to include an enhanced technical computer science background as part of their overall curriculum.

Required Courses

CS 110 - Programming Fundamentals I 4
 CS 111 - Programming Fundamentals II 4
 CS 301 - Data Structures 4
 MATH 130 - Finite Mathematics 5
 BUS 221 - Introductory Business Statistics . . 5
 OR
 MATH 154 - Pre-Calculus Mathematics II (5)
 Electives 12-14

At least one course will be in computer science. The other electives will be computer related and may be selected from the student's major with the approval of an advisor.

Total Credits: 34-36

Computer Science Courses

CS 101. Computer Basics (4). Integrated, project-based course using student-produced working materials in the form of a mini thesis. Microsoft Office tools are learned in a web-based practical application environment.

CS 105. The Logical Basis of Computing (4). Problem solving, algorithm development, complexity, computability. Representation of algorithms as computer programs, data, ecision and control inherent sources of error.

CS 110. Programming Fundamentals I (4). Fundamental concepts of programming from an object-oriented perspective. Classes, objects and methods, algorithm development, problem-solving techniques, basic control structures, primitive types and arrays.

CS 111. Programming Fundamentals II (4). Continuation of object-oriented programming concepts introduced in CS 110. Inheritance, exceptions, graphical user interfaces, recursion, and data structures. Prerequisites: CS 110 and MATH 153.

CS 112. Foundations of Computer Science

(4). Overview of the computer science profession including basic computer organization, algorithm development and analysis, computer data representation, computer applications, and social issues.

CS 250. Web Development Technologies

I (4). Techniques for web software development including XHTML, style sheets, scripting languages, web databases, PHP, and ethical issues. Prerequisite: CS 110.

CS 290. Cooperative Education (1-5). An individualized, contracted field experience with business, industry, government, or social service agencies. This contractual arrangement involves a student-learning plan, cooperating employer supervision, and faculty coordination. May be repeated for credit. Grade will either be S or U. By permission.

CS 298. Special Topics (1-6).

CS 301. Data Structures (4). Introduction to data structures, simple list processing, basic searching and sorting techniques, stacks, queues, and trees.

CS 302. Advanced Data Structures and File Processing (4). Sequential, random access and indexed file organizations; B-trees; external searching and sorting; I/O buffering. Prerequisites: CS 301 and MATH 172.

CS 311. Computer Architecture I (4).

Introduction to computer architecture, data representations, assembly language, addressing techniques.

CS 312. Computer Architecture II (4).

Introduction to the structure of computers. Digital circuits, central processing units, memory, input/output processing, parallel architectures.

CS 325. Technical Writing in Computer Science (3). Writing and editing technical material in computer science. Prerequisites: ENG 102 and CS 301.

CS 351. Web Development Technologies

II (4). Server-side technologies for web software development including programming languages, database access, e-commerce, testing, and ethical issues related to the web. Prerequisite: CS 250.

CS 352. Web Development Technologies

III (4). Advanced technologies for web software development, including XML and its related technologies: DTD, XML Schema, XSL, and XSLT, and other emerging technologies. Prerequisite: CS 351.

CS 361. Principles of Language Design

I (4). Topics will include evolution of programming languages, syntax and semantics, bindings, scoping, data types, assignment, control, and subprograms.

CS 362. Principles of Language Design

II (4). Topics will include abstract data types, parallel processing, object-oriented programming, exception handling functional programming, and logic programming. Co- or prerequisite: MATH 260. Prerequisite: CS 361.

CS 367. Advanced Visual Basic Programming (4). Visual basic programming and applications. Topics will include advanced data structures, error trapping and debugging, advanced VB and ActiveX controls, macros, and databases. Not intended for CS majors.

CS 370. Introduction to the UNIX Operating System (4). The fundamental requirements, features and functions of the UNIX operating system. A UNIX-compatible OS will be used as a working model. Installation, configuration, setup, shell operations, and program development with the UNIX operating system.

CS 392. Lab Experience in Teaching Computer Science (1). Supervised experience in developing procedures and techniques in teaching computer science. Grade will either be S or U.

CS 420. Database Management Systems (4). Logical aspects of database processing; concepts of organizing data into integrated databases; hierarchical, network, and relational approaches. Prerequisites: MATH 330, CS 302, and CS 325.

CS 427. Algorithm Analysis (4). Topics will include basic algorithmic analysis, algorithmic strategies, fundamental computing algorithms, basic computability, the complexity classes P and NP, and advanced algorithmic analysis.

CS 430. Introduction to Computer Security (4). Introduction to the principles of computer security. Discussion of threats, intrusion, trust, protection, access control, and cryptography and implementation of security, confidentiality, and integrity policies. Prerequisite: CS 312.

CS 440. Computer Graphics (4). Graphic I/O devices, two-dimensional and three-dimensional display techniques, display processors, clipping and windowing, hidden line removal, data structures for graphics. Prerequisites: CS 302 and 325.

CS 441. Computer Graphics II (4). Advanced graphics in 3-D with vector tools. Topics include: transformations, affine transformations, changing coordinate system, drawing scenes, modeling shapes, solid modeling, and smooth objects. Prerequisite: CS 440.

CS 442. Computer Vision (4). Computer vision includes image acquisition, preprocessing, segmentation (thresholding, edge- and region-based segmentation), shape representation, object recognition, motion analysis, object tracking, and 3-D scene reconstruction. Prerequisite: CS 302.

CS 446. User Interface Design and Development (4). The relationship of user interface design to human-computer interaction. Types of user interfaces, methods of evaluation, user-centered design and task analysis, programming tools and environments, and hardware devices.

CS 450. Computer Network and Data Communications (4). Device protocols; network configurations; encryption; data compression and security; satellite networks. Prerequisites: CS 301, 311, and 325.

CS 455. Artificial Intelligence (4).

Introduction to the principles of artificial intelligence. Pattern matching, knowledge representation, natural language processing, expert systems.

CS 456. Data Mining (4). Introducing concepts, models, algorithms, and tools for solving data mining tasks; decision trees, time series, bayesian methods, k-nearest neighbors, and relational databases. CS 456 and CS 556 are equivalent courses; students may not receive credit for both. Prerequisite: CS 420 and either MATH 311 or BUS 221.

CS 457. Computational Intelligence (4). Introducing concepts, models, algorithms, and tools for development of intelligent systems: artificial neural networks, genetic algorithms, fuzzy systems, swarm intelligence and hybridizations of these techniques. CS 457 and CS 557 are equivalent courses; students may not receive credit for both. Prerequisite: CS 302, CS 325, CS 362 and MATH 330.

CS 458. Artificial Intelligence Project (2). Implementation of a significant project relating to artificial intelligence. Prerequisites: CS 325 and 455.

CS 463. Design Patterns (4). Design patterns are reusable solutions to common problems when engineering computer software. Topics include the command pattern, visitor pattern, strategy pattern, and factory pattern. Prerequisite: CS 302.

CS 465. Compiler Design (4). Theory of compiler construction and computer language design; students write a compiler. Prerequisites: CS 325 and 362.

CS 470. Operating Systems (4). Topics will include principles of operating systems, concurrency, scheduling and dispatch, memory management, processes and threads, device management, security and protection, and file systems. Prerequisites: CS 302, 312, and 324.

CS 473. Parallel Computing (4). Major parallel architectures and languages. Parallel programming methodologies and applications. CS 473 and CS 573 are equivalent courses; students may not receive credit for both. Prerequisites: CS 325 and CS 470.

CS 474. Peer-to-Peer Systems (4). The course gives a broad overview of current techniques used within peer-to-peer distributed systems. Peer-to-peer mechanisms can be used to access any kind of distributed resources and offer new possibilities for Internet-based applications. Prerequisite: CS 302.

CS 480. Software Engineering (4). The software development process: user requirements, specifications, design, coding, testing, maintenance, documentation and management; students work in teams to develop large software projects.

CS 481. Software Engineering Project (4). Continuation of coding, testing, and implementation phases of project begun in CS 480. Prerequisites: CS 325 and 480.

CS 489. Senior Colloquium (1). Introduction to research in computer science through investigation of ethical and historical topics in the field. End-of-major assessment activities. Prerequisites: CS 325 and senior standing.

CS 490. Cooperative Education (1-12). An individualized contracted field experience with business, industry, government, or social service agencies. This contractual arrangement involves a student learning plan, cooperating employer supervision, and faculty coordination. May be repeated for credit. Grade will either be S or U. By permission.

CS 491. Workshop (1-6).

CS 492. Laboratory Experience in Teaching Computer Science (1-2). Supervised progressive experience in developing procedures and techniques in teaching computer science. May be repeated up to 15 credits. Grade will either be S or U.

CS 493. Practicum (1-5). Supervised progressive experience in management, operation, programming, or systems work in one of the university's computing centers. May be repeated for credit.

CS 495. Directed Research (1-6). May be repeated up to 12 credits. By permission.

CS 496. Individual Study (1-6).

CS 498. Special Topics (1-6).

CS 499. Seminar (1-5).

THE WILLIAM O. DOUGLAS HONORS COLLEGE

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Director
Matthew Altman, PhD

The William O. Douglas Honors College (DHC) is Central's interdisciplinary program for academically talented students. The program is divided into two parts: a core curriculum and an upper-division scholarship experience. The core curriculum is composed of a series of courses that emphasize how the arts, humanities, sciences, and social sciences converge in considering historically important questions. The upper-division scholarship experience involves additional, advanced courses and a culminating research project either in the arts and humanities or in the sciences. DHC also sponsors cultural field trips, guest lectures, and a number of other extracurricular activities.

The college is named for U.S. Supreme Court Justice William O. Douglas, a native of Yakima, Washington, and a great supporter of higher education. Following Justice

Douglas' example, the DHC encourages intellectual breadth, academic curiosity, and the application of scholarship to pressing social issues.

Students wishing to apply should contact the DHC office to find out about minimum qualifications and the application process. Students may apply to the honors college at any point in their college career.

DHC students must maintain a high level of academic achievement. A DHC student is in good standing when his or her cumulative grade point average (GPA) is 3.0 or higher. If a first-year DHC student's cumulative GPA falls below 3.0 and remains below 3.0 for two consecutive quarters, the student shall be placed on academic warning for one quarter. After the first year, a DHC student will be placed on academic warning if his or her cumulative GPA falls below 3.0 for one quarter. Any student placed on warning shall be suspended from the DHC if his or her cumulative GPA is not 3.0 or above the quarter following the warning. The DHC director has the discretion to waive and/or modify these standards for individual students as long as such modification does not affect the academic integrity of the DHC, as determined by the DHC director. A student who has been suspended from the DHC may reapply only if his or her cumulative GPA reaches 3.0 or higher.

For additional information, visit the DHC website (www.cwu.edu/~dhc/), stop by the office (Language and Literature Building, room 103), or call 509-963-1445.

Douglas Honors College Basic and Breadth Requirements

Required Courses

DHC 140 - Humanistic Understanding I	5
DHC 141 - Humanistic Understanding II	5
DHC 150 - Aesthetic Experience I	5
DHC 151 - Aesthetic Experience II	5
DHC 160 - Physical and Biological Systems I	5
DHC 161 - Physical and Biological Systems II	5
DHC 250 - Social and Behavioral Dynamics I	5
DHC 251 - Social and Behavioral Dynamics II	5
DHC 260 - Cultural Competence I	5
DHC 261 - Cultural Competence II	5
DHC 270 - Integrated Learning	5
UNIV 101 - Academic Advising Seminar	1
Total Credits:	56

Advising Seminar

NOTE: In accordance with university requirements, DHC students must take UNIV 101: Academic Advising Seminar as part of their general education coursework. Preferably, students taking UNIV 101 should take the section designated specifically for DHC students.

Foreign Language

NOTE: DHC applicants are normally expected to have met the competence requirements for foreign language prior to acceptance. Students who have not done so will be required to take classes through Foreign Language 153.

Mathematics

NOTE: DHC applicants are normally expected to have met the competence requirements for mathematics prior to acceptance. Students who have not done so will be required to take classes through MATH 154 or placement in MATH 172 or higher.

Interdisciplinary Honors Minor

A student who completed the following course regimen (35 credits) earns a DHC minor.

Select from the following:	5
DHC 140 - Humanistic Understanding I (5)	
DHC 141 - Humanistic Understanding II (5)	
Select from the following:	5
DHC 150 - Aesthetic Experience I (5)	
DHC 151 - Aesthetic Experience II (5)	
Select from the following:	5
DHC 160 - Physical and Biological Systems I (5)	
DHC 161 - Physical and Biological Systems II (5)	
Select from the following:	5
DHC 250 - Social and Behavioral Dynamics I (5)	
DHC 251 - Social and Behavioral Dynamics II (5)	
Select from the following:	5
DHC 260 - Cultural Competence I (5)	
DHC 261 - Cultural Competence II (5)	
Required Courses	
DHC 270 - Integrated Learning	5
DHC 380 - The History of Science	5
Total:	35

Upper-division Scholarship Experience

The upper-division scholarship experience involves additional, advanced courses, and a culminating research project either in the arts and humanities or in the sciences. Students may take either one of the upper-division scholarship experiences at any time, with or without the DHC core curriculum.

Arts and Humanities Honors

A student who completes the upper-division honors courses in the arts and humanities as well as a thesis/capstone project will earn the title *Arts and Humanities Honors Scholar*.

DHC 380 - History of Science	5
DHC 301 - Honors Seminar: Elements of Humanities Research	2
DHC 399 - Interdisciplinary Honors Seminar	5

DHC 401 - Honors Capstone Seminar	3
DHC 497 - Thesis and/or Creative Project	2

Total: 17

Science Honors Program

A student who completes the upper-division honors courses in the Science Honors Program as well as a science honors thesis will earn the title *Science Honors Scholar*.

DHC 380 - The History of Science	5
DHC 399 - Interdisciplinary Seminar	5
SHP 301 - Science Honors Junior Seminar: Elements of Scientific Research	2
SHP 401 - Science Honors Capstone Seminar	2
Undergraduate research credits in appropriate department (e.g., PHYS 495)	2
SHP 497 - Science Honors Thesis	1

Total: 17

Douglas Honors College Scholar

A student who completes both the core curriculum and one of the upper-division scholarship experiences will be designated a *Douglas Honors College Scholar* by the university.

Douglas Honors College Courses

DHC 140. Humanistic Understanding I (5).

Variable topic. Courses in the humanities focuses on the analysis and interpretation of human stories of the past, present, and future in order to understand the processes of continuity and change in individuals and cultures through both documented and imaginative accounts. May be repeated for credit. Prerequisite: admission to the Douglas Honors College.

DHC 141. Humanistic Understanding II (5).

Variable topic. Courses in the humanities focuses on the analysis and interpretation of human stories of the past, present, and future in order to understand the processes of continuity and change in individuals and cultures through both documented and imaginative accounts. May be repeated for credit. Prerequisite: admission to the Douglas Honors College.

DHC 150. Aesthetic Experience I (5). Variable topic.

Courses in this area explore questions about the nature of art; to understand, interrogate, and engage in the creative process; and to explore the connections between art, culture, and history. May be repeated for credit. Prerequisite: admission to the Douglas Honors College.

DHC 151. Aesthetic Experience II (5).

Variable topic. Courses in this area explore questions about the nature of art; to understand, interrogate, and engage in the creative process; and to explore the connections between art, culture, and history. May be repeated for credit. Prerequisite: admission to the Douglas Honors College.

DHC 160. Physical and Biological Systems I (5). Variable topic.

Courses in this area study physical and life systems, provide basic methods for rigorously describing

the natural world, or treat social, economic, technological, ethical, or other implications of natural phenomena. May be repeated for credit. Prerequisite: admission to the Douglas Honors College.

DHC 161. Physical and Biological Systems II (5). Variable topic. Courses in this area study physical and life systems, provide basic methods for rigorously describing the natural world, or treat social, economic, technological, ethical or other implications of natural phenomena. Students will perform scientific inquiry and experimentation in a laboratory setting. May be repeated for credit. Prerequisite: admission to the Douglas Honors College.

DHC 250. Social and Behavioral Dynamics I (5). Variable Topic. Courses focus on how individuals, cultures, and societies operate and evolve and introduce disciplined ways of thinking about individuals and groups. May be repeated for credit. Prerequisite: admission to the Douglas Honors College.

DHC 251. Social and Behavioral Dynamics II (5). Variable topic. Courses focus on how individuals, cultures, and societies operate and evolve and introduce disciplined ways of thinking about individuals and groups. May be repeated for credit. Prerequisite: admission to the Douglas Honors College.

DHC 260. Cultural Competence I (5). Variable topic. Courses focus on negotiating cultural differences by applying appropriate patterns of understanding and behavior in culturally diverse settings. Courses focus on one or more non-dominant cultures or peoples of the United States. May be repeated for credit. Prerequisite: admission to the Douglas Honors College.

DHC 261. Cultural Competence II (5). Variable topic. Courses focus on negotiating cultural differences by applying appropriate patterns of understanding and behavior in culturally diverse settings. Courses focus on comparative cultures across national and continental boundaries. May be repeated for credit. Prerequisite: admission to the Douglas Honors College.

DHC 270. Integrated Learning (5). Variable topic. Courses take an interdisciplinary approach to examining social, economic, technological, ethical, cultural, or aesthetic implications of knowledge. In addition to department courses that embrace multiple disciplines, these opportunities include learning community service learning and international studies courses. May be repeated for credit. Prerequisite: admission to the Douglas Honors College.

DHC 290. Cooperative Education (1-6). An individualized contracted field experience with business, industry, government, or social service agencies. Requires a student learning plan, cooperating employer supervision, and faculty coordination. May be repeated for credit. Grade will either be S or U. By permission.

DHC 296. Individual Study (1-6).

DHC 298. Special Topics (1-6).

DHC 301. Honors Seminar: Elements of Arts and Humanities Research (2). An exploration of arts and humanities research from a multidisciplinary perspective, including the formulation of a research question, organization of a research process, and preparation of DHC thesis or creative project proposal. By permission. Prerequisite: admission to the Douglas Honors College.

DHC 380. History of Science (5). Introduction to major themes in the history of science. Investigation of historical and scientific methods through the study of particular historical cases. May be repeated for credit. Prerequisites: junior standing and admission to the Douglas Honors College.

DHC 396. Individual Study (1-6).

DHC 398. Special Topics (1-6).

DHC 399. Interdisciplinary Honors Seminar (5). Interdisciplinary approach to examining current social, economic, ethical, and cultural issues. May be repeated for credit. Prerequisite: admission to the Douglas Honors College.

DHC 401. Honors Capstone Seminar (3). Skills and techniques for the presentation of the results of arts and humanities research. Students prepare drafts of their DHC thesis or artist's statement for their creative project as part of their coursework. By permission. Prerequisites: DHC 301 and admission to the Douglas Honors College.

DHC 421. Douglas Honors College Colloquium IV (2). Reading, discussing, and writing about the Great Books of the modern period. Courses must be taken in sequence. Prerequisites: DHC 323 and admission to the Douglas Honors College.

DHC 422. Douglas Honors College Colloquium IV (2). Reading, discussing, and writing about the Great Books of the modern period. Courses must be taken in sequence. Prerequisites: DHC 323 and admission to the Douglas Honors College.

DHC 423. Douglas Honors College Colloquium IV (2). Reading, discussing, and writing about the Great Books of the modern period. Courses must be taken in sequence. Prerequisites: DHC 323 and admission to the Douglas Honors College.

DHC 431. Douglas Honors College Lecture IV (1). Historical, stylistic, and biographical background relating to the works read in the corresponding colloquium. Concurrent enrollment in DHC 421, 422, or 423. Corequisite: DHC 421.

DHC 432. Douglas Honors College Lecture IV (1). Historical, stylistic, and biographical background relating to the works read in the corresponding colloquium. Concurrent enrollment in DHC 421, 422, or 423. Corequisite: DHC 422.

DHC 433. Douglas Honors College Lecture IV (1). Historical, stylistic, and biographical background relating to the works read in the corresponding colloquium. Concurrent enrollment in DHC 421, 422, or 423. Corequisite: DHC 423.

DHC 490. Cooperative Education (1-12). An individualized, contracted field experience with business, industry, government, or social service agencies. Requires a student learning plan, cooperating employer supervision, and faculty coordination. May be repeated up to 12 credits. Grade will either be S or U. By permission.

DHC 496. Individual Study (1-6).

DHC 497. Honors Thesis and/or Creative Project (2). Completion of honors thesis or creative project. Students must complete a thesis or creative project approved by their faculty advisor and the DHC director and present at the DHC presentation event to receive credit for the course. By permission. Prerequisites: DHC 301, 401, and admission to the Douglas Honors College.

DHC 498. Special Topics (1-6).

ECONOMICS DEPARTMENT

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Ellensburg
Shaw-Smyser Hall, room 413

509-963-2664

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www.cwu.edu/~cb/econ/

See the website for how these programs may be used for educational and career purposes.

Faculty Chairs

Robert J. Carbaugh, PhD, summer and fall quarters, Shaw-Smyser 428
Koushik Ghosh, PhD, winter and spring quarters, Shaw-Smyser, 427

Professors

Robert J. Carbaugh, PhD
Distinguished Professor of Research
Distinguished Professor of Teaching
Koushik Ghosh, PhD
David W. Hedrick, PhD
Peter J. Saunders, PhD
Distinguished Professor of Research
Roy Savoian, PhD

Associate Professors

Timothy P. Dittmer, PhD
Charles S. Wassell Jr., PhD

Assistant Professors

Thomas Tenerelli, PhD

Emeritus Faculty

Donald Cocheba, PhD
Distinguished Professor of Research
Wolfgang Franz, PhD
Distinguished Professor of Public Service
Gerald Gunn, PhD
Richard Mack, PhD
Distinguished Professor of Research

Staff

Shirley Hood, secretary senior

Department Information

Positions of responsibility in today's world are usually held by individuals who have the capacity to analyze complex problems and make intelligent decisions. Learning economics will help students think logically and improve their ability to use economic concepts to analyze "real world" problems and opportunities. In addition to preparation for business and government agency employment, an economics major is excellent preparation for law schools, master's of business administration programs, and graduate programs in economics, agricultural economics, and natural resource management. The economics department offers a bachelor of science degree in economics with specializations in managerial economics, general economics, and economic and business forecasting. Economics minors are offered to complement accounting, business administration, and other majors.

The BS economics major is comprised of the following components:

- Pre-admission courses providing necessary theoretical and quantitative skills to pursue studies in economics
- Core courses in both micro and macro economic theory
- A choice of supporting courses for each of the three economics major specializations

Transfer Credits

Equivalent lower-division (100-200 level) courses may be transferred toward meeting the pre-admission requirements for any BS degree in the College of Business.

Upper-division (300-400 level) courses may be transferred toward meeting the major requirements only with the approval of the department chair and the college dean or designee.

Transfer students must earn a minimum of 45 quarter credits at CWU to be eligible for the BS economics degree. Transfer students earning less than 45 quarter credits in their major at CWU must receive approval from the college dean prior to graduation.

Service to Other Majors

Students majoring outside the College of Business who are required to take courses in this college for either their major or minor will be eligible to enroll on a space-available basis. These students will be given priority over other non-college majors wishing to enroll in courses.

Bachelor of Science Economics Major with Specialization

Coursework counting toward the major cannot be taken credit/no credit by economics majors. Double majors are available. Interested students should consult with their

advisor or the department chair for details prior to enrolling.

The economics faculty has determined the following objectives which apply to all BS economics graduates:

- Students completing an economics degree will possess the tools which enable them to analyze and understand macro and micro economic problems and policies.
- Students will possess qualifications and knowledge which will help them to find employment in fields related to economics.
- Students will acquire and be able to use basic tools to enable them to carry out quantitatively oriented tasks in their employment or their field of graduate studies.
- Students completing the program should possess the communication and economic skills desirable in their future employment or graduate studies.

Economics Foundation Requirements

Students must apply and be admitted to the major. Admission will be determined by the grades earned in the economic foundation and appropriate specialization pre-admission courses.

Foundation Courses

BUS 221 - Introductory Business Statistics	5
ECON 201 - Principles of Economics Micro	5
ECON 202 - Principles of Economics Macro	5
MATH 130 - Finite Math	5
MATH 153 - Pre-Calculus Mathematics I	5
OR	
MATH 170 - Intuitive Calculus	
OR	
MATH 172 - Calculus I	
OR	
MATH 173 - Calculus II	

Economic Foundation Total Credits: 25

Business and Economic Forecasting Pre-admission Requirements

Economic Foundation Courses	25
ACCT 251 - Financial Accounting	5
ACCT 252 - Managerial Accounting	5
BUS 241 - Legal Environment of Business	5

Pre-admission Total Credits: 40

General Economics Pre-admission Requirements

Economic Foundation Courses	25
There are no additional pre-admission courses required.	

Pre-admission Total Credits: 25

Managerial Economics Pre-admission Requirements

Economic Foundation Courses	25
ACCT 251 - Financial Accounting	5
ACCT 252 - Managerial Accounting	5
BUS 241 - Legal Environment of Business	5

Pre-admission Total Credits: 40

Additional Admission Information

A cumulative grade point average of 2.5 in the above courses must be achieved with a minimum grade of C- (1.70) in each course. The credit/no credit option will not be accepted for any of these courses. The student must have earned a minimum cumulative GPA of 2.5 in all collegiate study. These criteria also apply to equivalent courses transferred from other institutions. Applicants must have also completed ENG 101 and 102.

Students who have met all the above requirements will be admitted unless the number of eligible applicants exceeds available spaces. In that case, acceptance will be competitive, based on a selection index. Students who have not met all of the above requirements may be admitted provisionally by permission of the college dean or designee.

Economic and Business Forecasting Specialization

This specialization is for students who seek careers involving research in economics and business, including forecasting.

Required Courses

Economics Foundation/Pre-admission Requirements	40
ECON 324 - Introduction to Econometrics	5
ECON 325 - Introduction to Forecasting	5
ECON 401 - Intermediate Microeconomic Analysis	5
ECON 402 - Intermediate Macroeconomic Analysis	5
ECON 406 - Economics Assessment	3
ECON 426 - Economic Research	5
FIN 370 - Introductory Financial Management	5
MGT 382 - Principles of Management	5
MIS 386 - Management Information Systems	5
MKT 362 - Essential Marketing Concepts	5
SCM 310 - Supply Chain Management	5
Select one of the following	4-5
ADMG 385 - Business Communications and Report Writing (5)	
COM 345 - Business and Professional Speaking (4)	
ENG 310 - Technical Writing (4)	

Total Credits: 97-98

General Economics Specialization

This specialization is recommended for students desiring the traditional Economics major. Highly recommended supporting courses: MATH 172, MATH 173, and FIN 370.

Required Courses

Economics Foundation/Pre-admission Requirements	25
ECON 310 - International Economics	5
ECON 324 - Introduction to Econometrics	5
ECON 330 - Money and Banking	5
ECON 332 - Public Finance	5

ECON 401 - Intermediate Microeconomic Analysis	5
ECON 402 - Intermediate Macroeconomic Analysis	5
ECON 406 - Economics Assessment	3
ECON 426 - Economic Research	5
MIS 386 - Management Information Systems	5
Select one of the following	4-5
ADMG 385 - Business Communications and Report Writing (5)	
COM 345 - Business and Professional Speaking (4)	
ENG 310 - Technical Writing (4)	
Department-approved electives selected from the following	10
Any 300- to 400-level economics courses; one accounting course (5) may be selected in place of one economics course.	

Total Credits: 82-83

Managerial Economics Specialization

This specialization is for students with an interest in both public and private sector employment and preparation for law school. Highly recommended supporting courses: MATH 170 or MATH 172. The managerial economics specialization can be used as part of a double major. See your advisor for details.

Required Courses

Economics Foundation / Pre-admission Requirements	40
ECON 352 - Managerial Economics	5
ECON 401 - Intermediate Microeconomic Analysis	5
ECON 402 - Intermediate Macroeconomic Analysis	5
ECON 406 - Economics Assessment	3
FIN 370 - Introductory Financial Management	5
Select one of the following	4-5
ADMG 385 - Business Communications and Report Writing (5)	
COM 345 - Business and Professional Speaking (4)	
ENG 310 - Technical Writing (4)	

Department-approved electives selected from the following	20
300- to 400-level Economics courses (except ECON 396, ECON 490, ECON 496) (15)	
Other 300- to 400-level accounting, business administration, and economics courses (5)	

Total Credits: 87-88

Additional Graduation Requirements for all Department Specializations

A cumulative grade point average of 2.25 in the above courses must be achieved with a minimum grade of C- in each course. The credit/no credit option will not be accepted for any of these courses. The student must

have earned a minimum cumulative GPA of 2.25 in all collegiate study. These criteria also apply to equivalent courses transferred from other institutions.

Economics Minor I

This minor is designed to accompany the business administration and accounting majors. Prior approval of electives by the economics advisor is required.

Required Courses

ECON 201 - Principles of Economics Micro	5
ECON 202 - Principles of Economics Macro	5
Select from the following	5
ECON 310 - International Economics (5)	
ECON 330 - Money and Banking (5)	
ECON 332 - Public Finance (5)	
ECON 401 - Intermediate Microeconomic Analysis (5)	
ECON 402 - Intermediate Macroeconomic Analysis (5)	
Additional Credits	10
Select 10 additional credits from the above list	
OR	
Other 300- to 400-level economics courses with departmental approval	

Total Credits: 25

Economics Minor II

This minor is designed for all majors with the exception of business administration and accounting. Prior approval of electives by the economics advisor is required.

Required Courses

ECON 201 - Principles of Economics Micro	5
ECON 202 - Principles of Economics Macro	5
Select from the following	5
ECON 310 - International Economics (5)	
ECON 330 - Money and Banking (5)	
ECON 332 - Public Finance (5)	
ECON 401 - Intermediate Microeconomic Analysis (5)	
ECON 402 - Intermediate Macroeconomic Analysis (5)	
Additional Electives	5
Select an additional 5 elective credits from the above list	
OR	
Other 300-400 level economics courses with departmental approval	

Total Credits: 20

Additional Graduation Requirements for Economics Minors I and II

A cumulative grade point average of 2.25 in the above courses must be achieved with a minimum grade of C- in each course. The credit/no credit option will not be accepted for any of these courses. The student must have earned a minimum cumulative GPA of 2.25 in all collegiate study. These criteria also apply to equivalent courses transferred from other institutions.

Economics Courses

ECON 101. Economic Issues (5). For the student who desires a general knowledge of economics. Applications of economic principles to current social and political problems. ECON 101 cannot be substituted for either ECON 201 or 202.

ECON 102. World Economic Issues (5). An introduction to current international issues related to international trade and finance, economic development, and comparative economic systems.

ECON 201. Principles of Economics Micro (5). The function of the market system in the allocation of scarce resources, determination of prices and output in competitive and monopolistic markets, and distribution of income. The role of government in the market economy.

ECON 202. Principles of Economics Macro (5). Organization of the U.S. economy, structure, and role of the monetary system, problems of employment and inflation, overall impact of government spending and taxation on the economy. Economic growth, world economic problems, and a comparison of capitalism with other economic systems. Prerequisite: ECON 201.

ECON 298. Special Topics (1-6).

ECON 310. International Economics (5). International trade and monetary theories; analyzing economic relationships and adjustments within and among trading nations; specialization, tariffs, balance of payments, and international monetary systems. Prerequisite: ECON 202.

ECON 324. Introduction to Econometrics (5). Computer application of statistical and mathematical techniques to business and economic problems. Prerequisites: ECON 201 and BUS 221.

ECON 325. Introduction to Forecasting (5). An introduction to methods employed in business and econometric forecasting. Topics include time series modeling, Box-Jenkins models, and seasonal adjustments. Covers data collection methods, graphing, model building, model interpretation, and presentation of results. Prerequisites: ECON 202 and either MATH 153, 154, 170, 172, or 173.

ECON 330. Money and Banking (5). The supply of money and the Federal Reserve System; financial intermediaries and financial instruments; macroeconomic theory and policy. Prerequisite: ECON 202.

ECON 332. Public Finance (5). Rationale of public sector; effect of government expenditure and taxation on resource allocation and income distribution; structure of federal, state, and local tax systems. Emphasis is on current policy problems. Prerequisite: ECON 202.

ECON 340. Development of Economic Thought (5). The historical development of economic concepts and their classification into schools of thought. Contributions to economics from medieval to modern time and relationships among various

economic, social, and political philosophies.
Prerequisite: ECON 202.

ECON 346. Comparative Economic Systems

(5). Compares the capitalist market economy to the centrally planned system and considers a variety of mixed systems. Economic structure and performance of select countries; emphasizes economies in transition and the Pacific Rim. Prerequisite: any economics course.

ECON 348. Economic History of the

United States (5). Economic factors in the development of the American nation from the European background to the present. ECON 348 and HIST 348 are equivalent courses; students may not receive credit for both.

ECON 352. Managerial Economics (5).

Application of microeconomic theories to managerial decisions and planning utilizing the case method. Prerequisites: ECON 202 and BUS 221.

ECON 355. Economics of Labor (5).

Economics of the labor market, labor, productivity, investment in human capital, manpower problems, and public policy. Prerequisite: ECON 202.

ECON 356. Government and Business (5).

The development and current status of relations between the U.S. government and business firms. Government regulation of competition and monopoly; subsidies and public enterprise. Prerequisite: ECON 201.

ECON 398. Special Topics (1-6).

ECON 401. Intermediate Microeconomic

Analysis (5). Markets as mechanisms for organizing and directing human activities; production of goods and services; the allocation of labor, capital, and natural resources to various productive activities; and the distribution of income. Relationship between microeconomics theory and contemporary thought, practical problems and government policies. Prerequisite: ECON 201.

ECON 402. Intermediate Macroeconomic

Analysis (5). Analysis and measurement of U.S. national income and product accounts; determinants of income, employment and prices under the Classical and Keynesian systems; problems of inflation, economic growth and stabilization policy. Prerequisite: ECON 202.

ECON 406. Economics Assessment (3). End-

of-program assessment activities including the taking of the Educational Testing Service exam in Economics. Preparation of resumes for future entry into the job market. Co- or prerequisites: ECON 401 and 402. Prerequisites: senior standing and acceptance to the economics major.

ECON 426. Economic Research (5).

Designed to familiarize students with an understanding of econometric theory and testing procedures. The course uses a time-series approach in econometric hypotheses testing. A completion of an economic research project is required. Prerequisites: ECON 202 and BUS 221.

ECON 462. Economics of Energy, Resources,

and Environment (5). Economic decision making related to issues of pollution, energy, resource use, and external effects. Benefit/cost analysis, cost effectiveness, and other economic methods. Prerequisite: ECON 201.

ECON 490. Cooperative Education (1-12). An

individualized, contracted field experience with business, industry, government, or social service agencies. This contractual arrangement involves a student learning plan, cooperating employer supervision, and faculty coordination. May be repeated for credit. Grade will either be S or U. By permission.

ECON 496. Individual Study (1-6).

ECON 498. Special Topics (1-6).

ECON 499. Seminar (1-5).

EDUCATIONAL FOUNDATIONS AND CURRICULUM DEPARTMENT

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www.cwu.edu/~education

See the website for how these programs may be used for educational and career purposes.

Faculty and Staff Chair

Barry Donahue, EdD

Graduate Programs Coordinator

Catherine Bertelson, PhD

Director of Field Experience

Rexton Lynn, EdD

Professors

Catherine Bertelson, PhD, educational technology

Rebecca S. Bowers, EdD, curriculum and instruction

Barry Donahue, EdD, philosophy, research design

Steven A. Schmitz, EdD, sociology,

philosophy, history, assessment, curriculum

David Shorr, PhD, early childhood education

Don B. Woodcock, PhD, policy and

management, multicultural, and American Indian education

Associate Professors

Kim M. Jones, PhD, curriculum and instruction

Mary Lochrie, EdD, classroom management, assessment, curriculum, and instructional planning

Ian Loverro, PhD, educational technology and communication

Steven Nourse, PhD, curriculum and instruction, supervision

Lee Plourde, PhD curriculum and instruction, supervision, administration

Assistant Professors

Yukari Amos, PhD, bilingual education

Gary Ballou, PhD, field supervision

Kelly Benson, EdD, leadership, law

Naomi Petersen, EdD, philosophy,

assessment, STEM, informal settings

Molly Ross, EdD, field supervisor

Lecturers

Alex Alexandrou, MA, field supervisor

Jerry St. George, MEd, field supervisor

Staff

Jan Case, program support supervisor

Linda Huber, secretary senior

Department Information

In order to be certified in the state of Washington, a student must complete the courses required in an endorsement area as well as the Professional Education Program. The Educational Foundations and Curriculum Department provides the courses and experiences necessary to complete the Professional Education Program.

Department Standards

All students completing an educational endorsement must maintain a 3.0 GPA or higher for the last 45 graded credits. Failure to maintain this level of achievement may result in suspension or expulsion from the Teacher Preparation Program. Students must also earn a minimum grade of C in all required Professional Education Program courses.

Admission Requirements

Students may not enroll in Professional Education Program courses other than EFC 210, EFC 310, and PSY 314 until they have been fully admitted into the Teacher Preparation Program. Please see the admission requirements for the Teacher Preparation Program at the Teacher Certification website, www.cwu.edu/~cert.

Exit Requirements

Students admitted into the Teacher Preparation Program are required to present a complete electronic portfolio demonstrating their content, pedagogical, and professional knowledge, skills, and dispositions as a partial fulfillment of their graduation requirements. Please see the exit requirements for the Teacher Preparation Program.

Pre-admission Observation Experience

In special circumstances, this experience may be completed concurrent with the first three weeks of EFC 210. However, because it will generally not be possible for students

to find placements and complete their observation within this time period- students are strongly encouraged to complete their Pre-admission Observation Experience prior to enrolling in EFC 210.

Student Teaching

Students must complete a minimum of 16 quarter credits of student teaching on an all-day basis for one quarter. To qualify for certification to teach in more than one specialization, students must meet all requirements listed in the catalog for each specialization. All prerequisites in the course description for student teaching must be completed.

1. One quarter in residence at CWU is required before a student may be assigned to student teaching, unless an exception is approved by the chair of the Department of Educational Foundations and Curriculum.
2. Students must be endorsed for student teaching by their major and minor departments. The endorsement requires completion of 75 percent of the major and minor areas prior to student teaching. See major and minor departments for advising.
3. Most student teaching assignments will be made at centers outside Kittitas County.
4. While student requests for choice of student teaching centers and grade levels will be considered, final responsibility for student teaching placement rests with the director of field experiences.
5. Student teachers wishing to enroll in additional coursework during their student teaching experience must obtain the approval of the director of field experiences.
6. A minimum GPA of 3.0 for the last 45 quarter credits is required prior to applying for student teaching.
7. Fingerprint clearance from both the Washington State Patrol and the FBI must be on file in the office of the dean of the College of Education and Professional Studies (CEPS) prior to applying for student teaching. Clearance must be valid for the entire period in which students will be in the classroom.
8. Applications for certification must be on file in the office of the dean of CEPS one quarter prior to student teaching.
9. At the time of application submission, students must provide proof of purchase of \$1M of liability insurance for student teaching, valid for the quarter in which student teaching will occur.
10. At the time of application submission, students must provide, West-E results or proof of having registered for a West-E test date that will occur prior to the first day of student teaching.

Professional Education Program

The purpose of the Professional Education Program is to prepare prospective teachers to become facilitators of learning within the school and community. The Professional Education Program curriculum provides opportunities to acquire the pedagogical knowledge and skills that allow students to demonstrate a positive impact on P-12 student learning. To this end, the program offers information about and experience in integrating research and pedagogy constructs for a spectrum of diverse learning situations.

See important information above under Pre-admission Observation Experience and Student Teaching.

Students should enroll for EFC 300 prior to their junior year.

Students should check the university catalog for course descriptions and prerequisite information. Some courses must be taken in sequence. Students should consult their advisor for assistance in developing an academic plan.

Required Courses

EDBL 401 - Principles and Practices for Educating Linguistically Diverse Students	3
OR	
EDBL 430 - Sheltering Instruction for Linguistically Diverse Students (3)	
EDSE 302 - Introduction to Students with Exceptionalities	3
EFC 210 - Seminar	1
EFC 310 - Orientation to Teaching	3
EFC 315 - Educational Assessment	3
EFC 320 - Multicultural Education	3
EFC 330 - Field Experience	2
EFC 340 - Methods of Instruction	3
EFC 350 - Classroom Management	3
EFC 416 - Educational Technology	3
EFC 440 - Education Law	3
EFC 480 - Student Learning	16
PSY 314 - Human Development and the Learner	4
Total Credits: 50	

Education Curriculum and Supervision Courses

EDCS 296. Individual Study (1-6).

EDCS 298. Special Topics (1-6).

EDCS 299. Seminar (1-5).

EDCS 300. Pre-autumn Field Experience (4).

A laboratory experience course in the first phase of Option I in the teacher preparation program. The course deals with the opening of school, professional relationships, school/community relationships, school district organization, instructional support, and resource services. Students are assigned in off-campus centers for approximately four weeks prior to fall quarter. Grade will either be S or U. Prerequisite: conditional or full admission to the Teacher Preparation Program.

EDCS 309. Civic Engagement (2). Student will use program of study content knowledge to improve a community situation. UNIV 309 and EDCS 309 are equivalent courses; students may not receive credit for both. May be repeated for credit. Grade will either be S or U.

EDCS 311. Teaching: Classroom Management and Assessment (5).

Basic principles of curriculum planning, classroom management/guidance techniques, and classroom assessment. Prerequisites: PSY 314, either EFC 310 or EDF 301A, and full admission to the Teacher Preparation Program.

EDCS 312. Educational Statistics (4). Use and interpretation of elementary statistical techniques.

EDCS 316. Educational Technology (3).

Students will explore a variety of concepts and resources related to the appropriate and effective integration of technology/media in school settings. BSED 316 and EDCS 316 are equivalent courses; students may not receive credit for both. Prerequisites: PSY 314, either EFC 310 or EDF 301A, and full admission to the Teacher Preparation Program. CS 101 or IT 101 are also recommended prerequisites.

EDCS 392. Practicum (3-5). Practical experience in a state-approved K-12 educational setting. Grade will either be S or U.

EDCS 396. Individual Study (1-6).

EDCS 398. Special Topics (1-6).

EDCS 424. Reading in the Content Fields

(3). For intermediate and secondary school teachers. Focuses on the techniques needed by students to become efficient readers in various subject areas. Prerequisites: PSY 314, either EFC 310 or EDF 301A, and full admission to the Teacher Preparation Program.

EDCS 431. Multicultural Education (3). A course addressing cultural differences/diversity (e.g., ANTH 130, ETS 101, or SOC 365) is recommended prior to enrolling in EDCS 431. Race, nationality, minority groups, income groups, urban and rural groups, and methods of teaching and measuring intergroup relations. Prerequisite: conditional or full admission to the Teacher Preparation Program.

EDCS 442. Student Teaching (16). Student teaching is a full-time, one-quarter course. Students must meet all electronic portfolio/dispositional survey requirements. Students must attend the seminar, which accompanies the student teaching experience. The seminar will meet a total of 20 clock hours during the quarter, normally at a time other than school hours, and at a place designated by the university supervisor. All assignments for student teaching are made through the office of field experiences. In order to qualify for certification to teach in more than one specialization, students must meet all requirements as listed in the undergraduate catalog for each specialization. Students

must demonstrate their competence by student teaching a full quarter for each specialization for which they wish to be endorsed. Students will spend a minimum of 75 percent of the experience in a classroom associated with the major course of study. Grade will either be S or U. By permission. Prerequisites: PSY 314, either EFC 310 or EDF 301A, and full admission to the Teacher Preparation Program.

EDCS 444. Educational Issues and Law (3). Major legal and ethical issues confronting educators, including implications for identifying and reporting child abuse. Co- or prerequisites: EFC 310 or EDF 301A. Prerequisite: application to Teacher Preparation Program

EDCS 490. Cooperative Education (1-12). An individualized, contracted field experience with business, industry, government, or social service agencies. This contractual arrangement involves a student learning plan, cooperating employer supervision, and faculty coordination. May be repeated for credit. Grade will either be S or U. By permission.

EDCS 491. Workshop (1-6).

EDCS 492. Practicum (1-15). Experience working in educational settings. Students may accumulate no more than 15 hours of practicum credit. Grade will either be S or U.

EDCS 493. Classroom Management and Discipline (2). Course addresses effective classroom management techniques to promote positive impact on P-12 learners. Prerequisites: EDLT 308 and EDLT 309, six reading minor courses, and full admission to the Teacher Preparation Program.

EDCS 496. Individual Study (1-6).

EDCS 498. Special Topics (1-6).

EDCS 499. Seminar (1-5).

Education Foundation Courses

EDF 100. Improvement of Basic Reading Skills (1-2). Credits will not be allowed toward meeting graduation requirements. XE

EDF 201. Tutoring Methods I (1). Principles of individualized instruction for student paraprofessional tutors. Structuring tutorials, fundamental learning strategies, assessment strategies, communication skills, and integration of content mastery/ learning skills.

EDF 202. Tutoring Methods II (1). Principles of individualized instruction for student paraprofessional tutors. Learning strategies, motivational theory and techniques, tutoring students with disabilities, cross-cultural communication.

EDF 296. Individual Study (1-6).

EDF 298. Special Topics (1-6).

EDF 299. Seminar (1-5).

EDF 301A. Introduction to Teacher Education (1). Provides an overview of state regulations/ requirements regarding teachers and K-12 students and CWU's framework for addressing these and other accrediting standards. Course required of

teacher preparation students otherwise exempt from completing CWU's EFC 310. Prerequisites: application to the Teacher Preparation Program and a transfer equivalent to EFC 310.

EDF 396. Individual Study (1-6).

EDF 398. Special Topics (1-6).

EDF 490. Cooperative Education (1-12). An individualized, contracted field experience with business, industry, government, or social service agencies. This contractual arrangement involves a student learning plan, cooperating employer supervision, and faculty coordination. May be repeated for credit. Grade will either be S or U. By permission.

EDF 496. Individual Study (1-6).

EDF 498. Special Topics (1-6).

EDF 499. Seminar (1-5).

Education Foundation and Curriculum Courses

EFC 210. Seminar (1). Discussion of field observation and program planning for prospective teachers. By permission. Prerequisite: prior completion of pre-admission observation.

EFC 310. Orientation to Teaching (3). Teaching as a career and essential features of preparation. Study of the teacher's role and function in the school; characteristics of good teachers; preparation for professional competencies and certification; the American public school system; and the responsibilities of schools in a democratic society. Co- or prerequisite: EFC 210.

EFC 315. Educational Assessment (3). The assessment/ planning/ instruction cycle. Standards-based assessment. Reliability, validity, bias. Basic statistics used in test construction and interpretation. Construction of classroom tests: multiple-choice, short answer, essay, etc. Performance, portfolio, and effective assessment. Prerequisites: EDF 210 and full admission to the Teacher Preparation Program.

EFC 320. Multicultural Education (3). Exploration of marginalized groups and the implications for change in education. Examination of foundational elements of and approaches to multicultural education as the underpinning to the development of cultural competence. Prerequisite: EFC 310 and admission to the Teacher Preparation Program.

EFC 330. Field Experience (2). A laboratory experience for prospective teachers. The opening of school, professional relationships, school/ community relationships, school district organization, instructional support, and resource services. Students are assigned in off-campus centers for approximately two weeks prior to fall quarter. Grade will either be S or U. Prerequisite: EFC 310 and admission to the Teacher Preparation Program.

EFC 340. Methods of Instruction (3). Introduction to basic methods of

classroom instruction. Development of a comprehensive curriculum unit plan. Methods appropriate for subject and grade level in lab and field experience. Prerequisite: EFC 310 and admission to the Teacher Preparation Program. Co- or prerequisite: EFC 315, EFC 320, and EFC 330.

EFC 350. Classroom Management (3).

Development of values, confidence, assertiveness skills, and decision-making skills in classroom management. Development of a comprehensive management plan for first year teaching. Includes a field experience component. Prerequisites: EFC 340 and PSY 314, and admission to the Teacher Preparation Program.

EFC 416. Educational Technology (3).

Concepts and resources related to appropriate and effective integration of technology and media in school settings. CS 101 or IT 101 recommended prior to enrollment. Prerequisite: EFC 340 and admission to the Teacher Preparation Program.

EFC 440. Education Law (3). Major legal issues confronting educators, including students and teacher rights, due process, torts, and the identification and reporting of child abuse. Prerequisite: EFC 340 and admission to the Teacher Preparation Program.

EFC 480. Student Teaching (16). Teacher candidates must demonstrate their competence by student teaching a full quarter in their major endorsement area. Includes 20 hours of seminar at a time and place designated by the university supervisor. See Student Teaching Requirements in this catalog, and the Student Teaching Handbook for other requirements and policies. Prerequisite: admission to the Teacher Preparation Program and completion of the Professional Education Program with grades of C or higher. SCED 325 may be substituted for EFC 350, and SCED 487, may be substituted for EFC 416.



ENGLISH DEPARTMENT

College of Arts and Humanities
Ellensburg
Language and Literature Bldg., room 423

509-963-1546

Fax: 509-963-1561

www.cwu.edu/~english

See the website for how these programs
may be used for educational and career
purposes.

Faculty and Staff

Chair

George Drake, PhD

Professors

Laila Abdalla, PhD, English Medieval and
Renaissance literature
Liahna Armstrong, PhD, American literature,
popular culture, film
Patricia Callaghan, DA, rhetoric, world
literature, English education
Toni Culjak, PhD, American, world and
multicultural literature, film
Bobby Cummings, PhD, rhetoric, English
education, computer composition
Loretta Gray, PhD, applied linguistics,
composition, TESOL
Charles Xingzhong Li, PhD, linguistics,
TESOL, linguistic approaches to literature
Teresa Martin, PhD, English education,
women's literature
Steven Olson, PhD, American literature, film
Paulus Pimomo, PhD, British literature, post
colonial studies
Joseph Powell, MFA, creative writing, modern
poetry
Gerald J. Stacy, PhD, English Renaissance
literature
Christine A. Sutphin, PhD, Victorian
literature, English novel, women's literature

Associate Professors

George Drake, PhD, British literature, literary
theory
Christopher Schedler, PhD, American and
multicultural literature
Katharine Whitcomb, MFA, creative writing

Assistant Professors

Karen Gookin, MA, general education,
technical writing
Virginia Mack, PhD, general education, Irish
literature
Lisa Norris, MFA, creative writing

Emeritus Professors

Philip B. Garrison, MA, non-fiction, poetry
writing, world, and Chicano literature
Mark W. Halperin, MFA, poetry writing, folk
literature, modern poetry
John L. Vifian, PhD 18th century literature,
English novel

Senior Lecturers

Stephanie Dringenberg, MA
Ruthi Erdman, MA
Arlo Fleming, MA
Patricia Garrison, MA
Lila Harper, PhD
Robert Schnelle, MA

Lecturers

Steven A. Brooks, MA
Shari Foster, MA
Colin Hester, MFA
Karen Hull, MA
Marisa Humphrey, MA
Melissa Johnson, MA
Anne Joiner, MA (Des Moines)
Kevin Leaverton, MA
Polyxeni Tenerelli, PhD

Staff

Theresa Stevens, secretary supervisor

Department Information

The Department of English offers undergraduate and graduate courses in American, British, and world literature, English language and linguistics, English education, film study, and professional and creative writing. The study of English helps students to develop and enhance skills in critical analysis and written and oral communication. English program graduates pursue a variety of careers, including business, education, government, law, publishing, and writing.

Departmental Honors in English

The honors program in English recognizes the superior scholarship of qualified majors. To qualify for the program, students must have a minimum GPA of 3.4 overall and 3.7 in English and be recommended by three faculty members. In addition to their regular course of study, qualified students complete an individual study course culminating in an honors paper. A student whose honors paper is accepted will graduate with departmental honors in English. For additional details, consult the department website.

Bachelor of Arts in English

(NOTE: Students seeking a BA degree must complete one year college/university study or two years high school study of a single foreign language.)

Bachelor of Arts English Language and Literature Major

The study of literature trains students in reflective reading, theoretically based inquiry, critical analysis, and effective verbal and written expression. Students are taught to analyze literary works as representations of literary genres and in historical and cultural contexts as well as to examine literary

influence and explore literature through the lens of critical theory. Majors are expected to complete English 302 and English 303 prior to enrolling in other upper-division major requirements.

Required Courses

ENG 302 - Poetry and Poetics 5
ENG 303 - Principles of English Studies 5
ENG 320 - English Grammar 5
ENG 363 - Shakespeare 5
ENG 489 - Senior Colloquium 2

Select two literacy forms courses 10

ENG 380 - Studies in Drama (5)
ENG 453 - Studies in Fiction (5)
ENG 454 - Studies in Nonfiction (5)
ENG 455 - Studies in Poetry (5)

Select one language and linguistics

course 5
ENG 304 - English Linguistics (5)
ENG 423 - History of the Language (5)

Select two literature and history courses. . 10

ENG 371 - Literature and History I (5)
ENG 372 - Literature and History II (5)
ENG 373 - Literature and History III (5)
ENG 374 - Literature and History IV (5)

Select one critical studies course 5

ENG 415 - Critical Studies in American
Literature (5)
ENG 417 - Critical Studies in World
Literature (5)
ENG 419 - Critical Studies in British
Literature (5)

Select two literature and culture

courses 10
ENG 330 - African American
Literature (5)
ENG 331 - Latina/o Literature (5)
ENG 332 - American Indian
Literature (5)
ENG 333 - Asian American Literature (5)
ENG 334 - American Indian Oral and
Non-Fiction Literature (5)
ENG 335 - Women's Literature (5)

Approved Electives 10

Select 10 credits of English literature,
language, writing or film studies
(Elective credits may be taken from any
English literature, language, or film
studies course at the 300 level or above.
No more than 5 credits of film studies
may be counted as elective credits in
the English language and literature
major.)

Total Credits: 72

English: Writing Specialization

The specialization combines a liberal arts background in literature with specialized writing courses in creative writing (fiction, poetry, creative nonfiction, screenwriting), business writing, professional writing, scientific and technical writing, editing, and publishing. Students in this specialization are expected to complete ENG 301 and ENG 303 prior to enrolling in other upper-division major requirements.

Required Courses

ENG 263 - Introduction to Creative Writing	5
ENG 301 - Introduction to Professional Writing	5
ENG 302 - Poetry and Poetics	5
ENG 303 - Principles of English Studies	5
ENG 320 - English Grammar	5
ENG 323 - Writing and Editing for Publication	5
ENG 489 - Senior Colloquium	2
Approved Writing Electives	25
Select 27 credits from a combination of creative writing, professional writing and editing, and practicum courses, of which at least 2 credits are a practicum. At least 2 credits of which must come from a practicum course. At least one 400-level elective class is required.	

Creative Writing Courses:

ENG 364 - Fiction Writing (5)
ENG 365 - Poetry Writing (5)
ENG 366 - Creative Nonfiction Writing (5)
ENG/COM 367 - Narrative Screenwriting (4)
ENG 464 - Advanced Fiction Writing (5)
ENG 465 - Advanced Poetry Writing (5)
ENG 466 - Advanced Creative Nonfiction Writing (5)
ENG/COM 467 - Advanced Narrative Screenwriting (5)
ENG 468 - Contemporary Writers Colloquium (5)
TH 313 - Writing for Children's Theatre (3)
TH 330 - Introduction to Playwriting (4)
TH 430 - Script Writers Workshop (4)

Professional Writing and Editing Courses:

ADMG 385 - Business Communications and Report Writing (5)
COM 201 - Media and Culture (4)
COM 208 - Intro to Public Relations Writing (4)
COM 347 - Copy Editing (4)
COM 348 - Publication Design (4)
ENG 310 - Technical Writing (4)
ENG 402 - Writing Center Theory and Practice (5)
ENG 404 - Advanced Technical Writing (5)
IT 248 - Web Fundamentals (2)
IT 288 - Business Presentation Applications (2)
LAJ 410 - Legal Writing (4)

Practicum Courses:

COM 468 - <i>Observer</i> (1-2)
ENG 485 - <i>Manastash</i> (2)
ENG 490 - Cooperative Education (1-12)

Literature, Language, and Film Courses . . . 15

Select 15 credits of literature, language, and film courses at or above the 300 level. No more than 5 credits of film studies may be counted as elective credits in the writing specialization.

Total Credits: 74**Bachelor of Arts
English/Language Arts
Teaching Major**

This major satisfies the endorsement for English/language arts. Majors must complete the Teacher Preparation Program requirements for secondary certification available through the Department of Education Foundations and Curriculum. Majors are expected to complete ENG 302 and ENG 303 prior to enrolling in other upper-division major requirements. English 422, 430, 488 and 492 are required prior to student teaching. English 430, 488 and 492 must be taken concurrently. All other major requirements must be completed before enrollment in or taken concurrently with ENG 488. Enrollment in ENG 488 is by permission.

Required Courses

ENG 222 - Multicultural Literature for Teachers	5
ENG 302 - Poetry and Poetics	5
ENG 303 - Principles of English Studies	5
ENG 304 - English Linguistics	5
ENG 320 - English Grammar	5
ENG 363 - Shakespeare	5
ENG 422 - Teaching Young Adult Literature	5
Prerequisite: admission to Teacher Preparation Program and 15 credits of professional sequence.	
ENG 430 - Teaching Writing in the Secondary School	5
Prerequisite: EDCS 311 and 28 credits in English.	
ENG 488 - Teaching Portfolio	2
Requires concurrent enrollment in ENG 430 and ENG 492.	
ENG 492 - Practicum	3
Requires concurrent enrollment in ENG 430 and ENG 488.	

Select one literacy forms course 5

ENG 380 - Studies in Drama (5)
ENG 453 - Studies in Fiction (5)
ENG 454 - Studies in Nonfiction (5)
ENG 455 - Studies in Poetry (5)

Select two literature and history courses. . 10

ENG 371 - Literature and History I (5)
ENG 372 - Literature and History II (5)
ENG 373 - Literature and History III (5)
ENG 374 - Literature and History IV (5)

Select one writing course 5

ENG 263 - Introduction to Creative Writing (5)
ENG 364 - Fiction Writing (5)
ENG 365 - Poetry Writing (5)
ENG 366 - Creative Nonfiction Writing (5)

Select one critical studies course. 5

ENG 415 - Critical Studies in American Literature (5)
ENG 417 - Critical Studies in World Literature (5)
ENG 419 - Critical Studies in British Literature (5)

Total Credits: 70**English Language and
Literature Minor**

As with the English major, the English minor trains students in reflective reading, theoretically based inquiry, critical analysis, and effective verbal and written expression. The skills developed in the English minor readily complement a wide variety of majors across the university.

Required Courses

ENG 302 - Poetry and Poetics	5
ENG 303 - Principles of English Studies	5
Approved Electives	20
Select 20 credits of literature or language course at the 300 level or above.	

Total Credits: 30**Creative Writing Minor****Required Courses**

ENG 302 - Poetry and Poetics	5
Select 20 credits of creative writing courses 20	
ENG 263 - Introduction to Creative Writing (5)	
ENG 364 - Fiction Writing (5)	
ENG 365 - Poetry Writing (5)	
ENG 366 - Creative Nonfiction Writing (5)	
ENG/COM 367 - Narrative Screenwriting (4)	
ENG 464 - Advanced Fiction Writing (5)	
ENG 465 - Advanced Poetry Writing (5)	
ENG 466 - Advanced Creative Nonfiction Writing (5)	
ENG/COM 467 - Advanced Narrative Screenwriting (5)	
ENG 468 - Contemporary Writers Colloquium (5)	
TH 313 - Writing for Children's Theatre (3)	
TH 330 - Introduction to Playwriting (4)	
TH 430 - Script Writers Workshop (4)	

Select one literature course

at the 300 level or above 5

Total Credits: 30**Linguistics Minor**

The linguistics minor allows students to gain a broader understanding of language and language acquisition. It draws on multiple disciplines and complements a wide range of majors.

Required Courses

ENG 304 - English Linguistics	5
ENG 320 - English Grammar	5
And one of the following:	
ENG 432 - Phonetics and Phonology	5
ENG 437 - Pedagogical Grammar and Discourse	5
Select 10 credits approved electives from the following or other courses by advisement. 10	
ANTH/ENG 180 - Introduction to Linguistics (5)	
ANTH 381 - Language in Culture (4)	
ANTH 382 - Descriptive Linguistics (4)	

ANTH/WS 384 - Language and Gender (4)
 COM 302 - Intercultural Communication (4)
 EDBL 433 - Educational Linguistics (3)
 EDBL 438 - Teaching English as a Second Language (3)
 EDBL 440 - Development of Literacy with Linguistically Diverse Students (3)
 ENG 423 - History of the English Language (5)
 ENG 435 - Linguistics, Literature, and TESOL (5)
 ENG 496 Individual Study (1-6)
 FNLA 481 - Methods and Materials for Language Teaching (4)
 FNLA 482 - Foreign and Second Language Acquisition (4)
 FNLA/ANTH 483 - Sociolinguistics (4)

Total Credits: 25

Professional Writing Certificate

The professional writing certificate allows students to develop their writing skills for professional and business environments. Courses will be offered online as well as in the classroom to serve professionals already working in careers as well as students planning to begin professional or business careers. Students will learn the rhetorical requirements for specific forms of written communication, including letters, memos, reports, proposals, promotional materials, and press releases. They will also learn to edit their own writing for clarity, correctness, and style.

Required Courses

ENG 301 - Introduction to Professional Writing 5
 ENG 310 - Technical Writing 4
 COM 347 - Copy Editing 4
 COM 370 - Writing for Public Relations 4

Total Credits: 17

English Courses

ENG 100T. Transitional English (4). A study of academic written English with review of sentence and paragraph-level skills, such as word usage, sentence structure, organization, grammar, and mechanics with a reading component to improve comprehension of academic English; students will learn to write unified, coherent paragraphs and short compositions. Credits will not be allowed toward meeting bachelor's degree requirements.

ENG 101. Composition I: Critical Reading and Responding (4). Develops skills necessary for academic writing, including summarizing, reading sources critically and responding to them, synthesizing multiple perspectives, and using academic writing conventions. Required of all students except those who have passed an exemption examination. Students must earn a minimum grade of C- or above to

enroll in ENG 102. Prerequisite: appropriate test scores or have satisfactorily completed Transitional English.

ENG 102. Composition II: Reasoning and Research (4). Develops skills in research-based academic argument through assignments involving evaluation, analysis, and synthesis of multiple sources. Prerequisite: ENG 101 with a grade of C- or better.

ENG 105. The Literary Imagination: An Introduction to Literature (5). Human experience as it is imagined, interpreted, and made significant in the poetry, prose, fiction, and drama of the major writers of the world. This is a General Education writing course- Arts and Humanities - Literature and the Humanities Prerequisite: ENG 101 with a grade of C- or better.

ENG 180. Introduction to Linguistics (5). Backgrounds, developments, and relation to other fields of study. ANTH 180 and ENG 180 are equivalent courses; students may not receive credit for both.

ENG 222. Multicultural Literature for Teachers (5). Prospective secondary English language arts teachers will read and respond to various genres of multicultural/world literature and develop methods and assignments for teaching texts that invite students to think critically and use evidence to support their viewpoints. Prerequisites: ENG 101, ENG 102, ENG 105 and admission to the English/language arts teaching major.

ENG 247. Multicultural Literature (5). Literary themes examined through the comparison of works from various cultures. This is a General Education writing course- Arts and Humanities - Literature and the Humanities. Prerequisite: ENG 101 with a grade of C- or better.

ENG 263. Introduction to Creative Writing (5). An introduction to the creative writing genres: poetry, fiction, screenwriting, and creative nonfiction. Examines the rhetorical forms and expectations of each in a workshop format.

ENG 296. Individual Study (1-6).

ENG 298. Special Topics (1-6).

ENG 299. Seminar (1-5).

ENG 301. Introduction to Professional Writing (5). Study in writing purposes, styles and genres. Prerequisites: ENG 101 and ENG 102.

ENG 302. Poetry and Poetics (5). Offers practice in the interpretive reading of poetry, focusing on the elements of poetry and poetic theory.

ENG 303. Principles of English Studies (5). Provides critical reading and writing strategies necessary to studies in English; introduces the expectations and requirements of the major.

ENG 304. English Linguistics (5). Students learn to perform linguistic analysis of aspects of English and to use linguistic concepts to examine literary texts.

ENG 310. Technical Writing (4). Practice

in writing and editing technical reports. Prerequisites: ENG 101, ENG 102, and at least junior standing.

ENG 320. English Grammar (5). A review of the concepts, terminology, and historical development of traditional grammar, the parts of speech and their functions in sentences, the elements of the sentence, and its various patterns.

ENG 323. Writing and Editing for Publication (5). This class addresses writing for publication, prepares students with publication strategies, as well as examines what editors look for and what their job entails. Prerequisite: ENG 320.

ENG 330. African American Literature (5). Study of literature by African Americans.

ENG 331. Latina/o Literature (5). Study of literature by Latina/o writers.

ENG 332. American Indian Literature (5). Study of literature by American Indians.

ENG 333. Asian American Literature (5). Study of literature by Chinese, Japanese, Korean, Vietnamese, and other Asian/American writers.

ENG 334. American Indian Oral and Nonfiction Literature (5). An examination of American Indian oral and nonfiction literature, including myth, legend, oratory, ritual and ceremony, and forms of autobiography, including coup tales, boarding school narratives, etc.

ENG 335. Women's Literature (5). Examines women's literature in light of contemporary feminist literary theories. By permission. Prerequisites: ENG 302, and ENG 303.

ENG 344. Film Theory and Criticism (5). The study of film as an art form, a technological system, an industry, and a social force. Prerequisite: FVS 250.

ENG 347. Global Perspectives in Literature (5). An introduction to contemporary non-western and third world literature. This is a General Education writing course- Arts and Humanities - Literature and the Humanities Prerequisites: ENG 101 with a grade of C- or better and sophomore standing or above.

ENG 353. History of Narrative Film (4). A history of the development of narrative film as an art form and cultural medium, with primary focus on Hollywood cinema. ENG 353 and COM 353 are equivalent courses; students may not receive credit for both. Prerequisite: FVS 250.

ENG 354. History of Television (4). Historical survey of television as an entertainment, information, and art medium. Emphasis on understanding the cultural, social, political, technological, and economic conditions of production; the examination of television as text itself; and TV's impact on audiences. ENG 354 and COM 354 are equivalent courses; students may not receive credit for both. Prerequisites: either COM 201 or FVS 250.

ENG 355. History of Documentary (4). Survey of documentary history from 1895 to present. Focus on philosophy of documentary approach, overview of

the most important topics and issues, and development of critical standards in the genre. ENG 355 and COM 355 are equivalent courses; students may not receive credit for both. Prerequisites: either COM 201 or FVS 250.

ENG 360. World Cinema (5). An overview of world cinema, with attention to the national film cultures of important film-producing countries (such as India, France, Japan), and a comparison of international films with mainstream Hollywood cinema.

ENG 363. Shakespeare (5). Intensive study of selected Shakespeare plays and poetry. May be repeated up to 10 credits under a different subtitle. Prerequisite: ENG 302 and ENG 303 and this course is open to English majors or minors only.

ENG 364. Fiction Writing (5). An introduction to the varieties of literary fiction being written today, the techniques and strategies for writing fiction, as well as developing criteria for evaluating the effectiveness of student stories. Prerequisite: ENG 263.

ENG 365. Poetry Writing (5). A workshop that introduces the varieties of forms, styles, voices, and strategies for writing poetry. Emphasizes reading professional models and the development and application of criteria for evaluating and revising poems. Prerequisite: ENG 263.

ENG 366. Creative Nonfiction Writing (5). A workshop that considers the varieties and forms of the creative essay and its historical evolution. Emphasizes reading professional models, the uses of research, and the development and application of criteria for evaluating and revising essays. Prerequisite: ENG 263.

ENG 367. Narrative Screenwriting (4). Writing screenplays in combination with the study of models and techniques. COM 367 and ENG 367 are equivalent courses; students may not receive credit for both. Prerequisites: either COM 201 or FVS 250.

ENG 371. Literature and History I (5). Historical and critical studies in literature from the classical era through the Renaissance. May be repeated up to 10 credits under a different subtitle. Prerequisite: ENG 302 and ENG 303 and this course is open to English majors or minors only.

ENG 372. Literature and History II (5). Historical and critical studies in literature from the mid-17th century through the mid-19th century. May be repeated up to 10 credits under a different subtitle. Prerequisite: ENG 302 and ENG 303 and this course is open to English majors or minors only.

ENG 373. Literature and History III (5). Historical and critical studies in literature from the nineteenth century through the mid-twentieth century. May be repeated up to 10 credits under a different subtitle. Prerequisite: ENG 302 and ENG 303 and this course is open to English majors or minors only.

ENG 374. Literature and History IV (5). Historical and critical studies in literature from the 20th century through the present. May be repeated up to 10 credits under a different subtitle. Prerequisite: ENG 302 and ENG 303 and this course is open to English majors or minors only.

ENG 380. Studies in Drama (5). Intensive study of representative examples of drama. ENG 380 and TH 380 are equivalent courses; students may not receive credit for both. May be repeated up to 15 credits. Prerequisite: ENG 302, ENG 303 and this course is open to English majors or minors only.

ENG 391. Workshop (1-5).

ENG 398. Special Topics (1-6).

ENG 402. Writing Center Theory and Practice (5). Explore the benefits and techniques of one-on-one peer consulting. Study language skills and improve understanding of writing in various genres, contexts, and cultures. Consult with student writers in the University Writing Center, observing others consultations, reflecting, and improving one-on-one skills. Prerequisite: ENG 102 with a grade of B or better.

ENG 404. Advanced Technical Writing (5). Practice in designing, constructing, evaluating, and testing technical documents for specific purposes and organizational cultures. Prerequisite: ENG 310.

ENG 414. Focused Studies in World Literature (4). Intensive study of a group of texts focused by theme, author, theoretical approach, or social, and historical context. Open to English majors or minors only. May be repeated for credit. Prerequisites: ENG 302 and ENG 303.

ENG 415. Critical Studies in American Literature (5). Intensive study of a group of texts focused by theme, author, theoretical approach, or social and historical context. May be repeated for credit under a different subtitle. Prerequisites: ENG 302, ENG 303 and this course is open to English majors or minors only.

ENG 417. Critical Studies in World Literature (5). Intensive study of a group of texts focused by theme, author, theoretical approach, or social and historical context. May be repeated for credit under a different subtitle. Prerequisites: ENG 302, ENG 303 and this course is open to English majors or minors only.

ENG 418. Literary and Critical Theory (5). An investigation of the theory and practice of various critical perspectives and strategies as they inform the study of literary texts. By permission. Prerequisites: ENG 302, and ENG 303.

ENG 419. Critical Studies in British Literature (5). Intensive study of group texts focused by theme, author, theoretical approach, or social and historical context. May be repeated for credit under a different subtitle. Prerequisite: ENG 302 and ENG 303, and admissions to English major or minor.

ENG 422. Teaching Young Adult Literature (4). A study of literature written for middle-level and early-high-school students. This class is required prior to student teaching. Prerequisites: ENG 302, ENG 303, 15 credits from any combination of EFC 310, EDF 302, EDCS 300, 300A, 424, 431, 444, PSY 314, 315, or EDCS/BSED 316, and admission to the Teacher Preparation Program.

ENG 423. History of the English Language (5). In this course, students examine the systematic, evolutionary nature of language by focusing on the development of the English language.

ENG 424. Teaching Reading and Viewing in High School (4). Course focuses on the theory and practice of teaching reading and viewing strategies appropriate for print and non-print texts in high school classrooms.

ENG 430. Teaching Writing in the Secondary School (5). Theory into practice course on teaching writing including writing process strategies, content pedagogy, instructional planning, assessment, best practices, and standards-based instruction. This class is required prior to student teaching. Prerequisites: EDCS 311 and 28 credits of English courses. Must enroll concurrently in ENG 492 and ENG 488.

ENG 432. Phonetics and Phonology (5). Study of English phonetics and phonology as well as pronunciation pedagogy. Prerequisite: ENG 304 and ENG 320.

ENG 434. Discourse Analysis (4). Linguistic approaches to literature with an emphasis on poetry and prose. Prerequisite: ENG 304.

ENG 435. Linguistics, Literature, and TESOL (5). Linguistic approaches to literature with an emphasis on poetry and prose. Prerequisite: ENG 304 and ENG 320.

ENG 437. Pedagogical Grammar and Discourse (5). Study of English grammar, grammar instruction, and discourse analysis. Prerequisite: ENG 304 and ENG 320.

ENG 453. Studies in Fiction (5). Extensive reading and analysis of prose fiction. May be repeated up to 15 credits under a different subtitle. Prerequisite: ENG 302 and ENG 303 and this course is open to English majors or minors only.

ENG 454. Studies in Nonfiction (5). Extensive reading and analysis of literary nonfiction. May be repeated under a different subtitle. Prerequisite: ENG 302, ENG 303, and admission to an English major or minor.

ENG 455. Studies in Poetry (5). Intensive study of representative example of poetry. May be repeated under a different subtitle. May be repeated up to 15 credits. Prerequisite: ENG 302 and ENG 303 and this course is open to English majors or minors only.

ENG 461. Studies in Film and Culture (5). A critical examination of how American films both construct and appropriate images of American racial, ethnic, and cultural minorities. Course explores images of minorities created by the dominant culture from silent film era to contemporary movies

and compares these constructions to those created by minority filmmakers. May be repeated for credit.

ENG 462. Studies in Film and/or Television Genres (5). An examination of a film and/or television genre: history, aesthetics, cultural context, social significance, and critical methodologies. May be repeated for credit. Prerequisite: FVS 250.

ENG 463. Studies in the Film Auteur (5). In-depth examination of the major cinematic works of a selected auteur director, such as Hitchcock, Chaplin, Kurosawa, W. Allen, Zhang Yimou, etc., with attention to major stylistic and thematic practices. May be repeated for credit. Prerequisite: FVS 250.

ENG 464. Advanced Fiction Writing (5). Intensive workshop further developing the techniques of writing literary fiction: weaving together character development, plot, dialogue, exposition, setting, and thematic structure. Emphasizes the development of criteria for evaluating and improving literary fiction, as well as reading professional models to learn technique. Prerequisite: ENG 364.

ENG 465. Advanced Poetry Writing (5). Intensive workshop further examining the genres within poetry, as well as experimenting with forms, discursive structures, and voice; revising for economy and precision; exploring metrical effects. Prerequisite: ENG 365.

ENG 466. Advanced Creative Nonfiction Writing (5). Intensive workshop further developing the techniques of writing creative nonfiction: researching, editing, assimilating features of fiction and poetry, and experimenting with structure, voice, and style. Reading professional models to learn technique. Prerequisite: ENG 366.

ENG 467. Advanced Narrative Screenwriting (4). Intensive workshop oriented toward techniques for creating or rewriting an original or adapted script for film/TV. Emphasizes narrative development, detailed script analysis and character motivation. Creation of a feature-length script for film or TV using the craft of the screenwriter to convey mood, energy, character, structure, and intent. Prerequisites: either COM 309 or ENG 367.

ENG 468. Contemporary Writers Colloquium (5). Genre specific seminar (poetry or fiction) with writing workshop element, featuring a schedule of visiting writers. Students will read work by visiting writers, develop critical thinking about craft, attend readings, explore contemporary publishing issues, and write both analytical papers and creative work. May be repeated up to 16 credits. Prerequisites: ENG 364 or ENG 365.

ENG 480. Survey of Linguistics (4). Linguistic concepts and the relation between linguistics and other fields of study. Open to seniors and graduate students only. ANTH 480 and ENG 480 are equivalent courses; students may not receive credit for both. Prerequisite: senior standing.

ENG 485. Manastash (2). Students will select and edit manuscripts for publication in, as well as design and construct, the Manastash literary journal. May be repeated to a maximum of 8 credits under different titles. Prerequisites: ENG 301 and ENG 303.

ENG 488. Teaching Portfolio (2). Students prepare an end-of-program E-Portfolio which illustrates their mastery of major program and professional sequence competencies. Grade will either be S or U. Prerequisite: full admission to the Teacher Preparation Program.

ENG 489. Senior Colloquium (2). Students prepare an end-of-major portfolio which illustrates their competence in interpreting and composing. Grade will either be S or U. Prerequisite: 48 credits of English courses.

ENG 490. Cooperative Education (1-12). An individualized, contracted field experience with business, industry, government, or social service agencies. Requires a student learning plan, cooperating employer supervision, and faculty coordination. May be repeated up to 12 credits. Grade will either be S or U. By permission.

ENG 491. Workshop (1-10).

ENG 492. Practicum (2). Practice planning instruction, teaching, and assessing learning. Grade will be either S or U. Corequisite: ENG 430. Prerequisites: ENG 311, 28 credits in English, and conditional or full admission to the Teacher Preparation Program.

ENG 496. Individual Study (1-6).

ENG 498. Special Topics (1-6).

ENG 499. Seminar (1-5).

ENVIRONMENTAL STUDIES PROGRAM

College of the Sciences
Ellensburg
Science 207D

509-963-2164

Fax: 509-963-1050

www.cwu.edu/~enst

See website for how this program may be used for educational and career purposes.

Director

Anne Johansen, PhD

Program Information

The Environmental Studies Program at CWU was established over 30 years ago to provide an interdisciplinary approach to the study of environmental issues. The program is administered through the College of the Sciences and has options for both a major (BS) in five areas of specialization and two minors, including a minor in energy studies. The program core features team-taught courses including General Education courses that are taught by faculty from multiple disciplines.

Bachelor of Science Environmental Studies Major

The major in environmental studies provides students with an understanding of the natural science of environmental issues as well as the social, political, and economic factors that contribute to policy and planning decisions. Through this major, students will gain the necessary professional and technical skills for entry into successful environmental careers or for graduate studies in environmental fields. The major offers five specialization options in environmental biology, environmental chemistry, environmental geology, environmental geography, and environmental policy.

Requirements for Major (BS) in Environmental Studies

- The requirements for the major in environment studies have three parts:
- Foundational courses in supporting disciplines. Some of these courses also serve as prerequisites for courses within the specializations. These foundational courses must be completed before students take ENST 304
- A core requirement consisting of six interdisciplinary ENST courses, two upper-level electives, and a capstone experience outside of the classroom (research, internship, service learning, or study abroad)
- A specialization consisting of 6-9 courses that focus on one area of study

Requirements for a double major with BS in environmental studies

The following double major combinations will have the environmental studies specialization course requirements waived for the BS degree in environmental studies; all environmental studies foundation and core course requirements must be completed. Required courses for the first degree major may not be used to fulfill upper-division environmental studies elective requirements (7-10 credits).

Bachelor Degree (Disciplinary)

Bachelor Degree (Environmental Studies)

BS Environmental Geological Sciences

BS Environmental Studies: Environmental
Geology Specialization

BS Biology

BS Environmental Studies: Environmental
Biology Specialization

BS Chemistry

BS Environmental Studies: Environmental
Chemistry Specialization

BS Public Policy

BS Environmental Studies: Environmental
Policy Specialization

The interdisciplinary major in public policy (BS) may be combined with the environmental studies specialization in environmental policy by completing the specific course requirements for both majors. Students who combine majors in public policy and environmental studies with a specialization in environmental policy will receive a bachelor of science degree in public policy and a bachelor of science degree in environmental studies. As some public policy requirements and electives count toward both degrees or majors, the actual additional coursework needed to fulfill the requirements of the second degree or major may be as low as 19 credits.

Students may complete more than one specialization within the environmental studies major. To be eligible for a second specialization, a minimum of 20 unique credits must be completed. Unique means the credits have not been used as part of any other environmental studies specialization.

Foundational Courses (Required)

BIOL 101/101LAB- Fundamentals of Biology	
OR BIOL 181/181LAB - General Biology I	
OR BIOL 200 - Plants in the Modern World	5
CHEM 101/101LAB - Contemporary Chemistry	
OR CHEM 111/111LAB - Introduction to Chemistry	
OR CHEM 181/181LAB - General Chemistry I	5
GEOG 101 - World Regional Geography	
OR GEOG 107 - Introduction to Physical Geography	
OR GEOL 101/101LAB - Physical Geology	
OR GEOL 102/102LAB - Geology of National Parks	
OR GEOL 108 - Introduction to Environmental Geology	5
ANTH 130 - Introduction to Cultural Anthropology	
OR GEOG 108 - Introduction to Human Geography	5
ECON 101 - Economic Issues	
OR ECON 201 - Principles of Economics	
Micro	5

Total Foundation Credits: 25

Core Courses (Required)

ENST 201 - Earth as an Ecosystem	
OR ENST 202 - Ecosystems, Resources, Populations, and Culture	5
ENST 210 - The Global Environment from a Local Perspective	4
ENST 303 - Environmental Management	5
ENST 304 - Environmental Methods and Analysis	5
ENST 330 - Environmental Leadership and Advocacy	
OR ENST 455 - Environmental Literature	3-5
ENST 444 - Environmental Policy Formulation	4
ENST 495 or other 495 Senior Research	
OR ENST 490 - Cooperative Education	
OR UNIV 309 - Civic Engagement	
OR Study Abroad	3-5

Select two from the following:7-10

ANTH 398/498 - Special Topics (1-6)	
ANTH/GEOG 440 - Ecology and Culture (4)	
BIOL 302 - Human Ecology (5)	
BIOL 362 - Biomes of the Pacific Northwest (4)	
CMGT 452 - LEED in Sustainable Construction (4)	
ECON 462 - Economics of Energy, Resources and Environment (5)	
GEOG 303 - Introductory GIS (5)	
GEOG/IET 442 - Alternative Energy Resources and Technology (5)	
GEOG 448 - Geographic Approaches to Environmental Resource Analysis (5)	
GEOG 498 - Special Topics (1-6)	
GEOL 302 - Oceans and Atmosphere (4)	
GEOL 380 - Environmental Geology and Natural Hazards (4)	
HIST 454 - American Environmental History (5)	
PHIL 306 - Environmental Ethics (5)	

Total Core Credits: 37-44

Select one of the following specializations:

Environmental Biology Specialization

*BIOL 181 and CHEM 181/181LAB are required as foundational courses for this specialization.	
BIOL 182 - General Biology II	5
BIOL 183 - General Biology III	5
BIOL 213 - Quantitative Methods in Biology	4
BIOL 360 - General Ecology	5
CHEM 182/182LAB - General Chemistry II	5
CHEM 183/183LAB - General Chemistry III	5
Choose one field course from:4-5	
BIOL 362 - Biomes of the Pacific Northwest (4)	
BIOL 377/377LAB - Regional Natural History (5)	
BIOL 462 - Wildlife and Fisheries Ecology (5)	
BIOL 463 - Limnology (5)	
BIOL 464 - Terrestrial Plant Ecology (5)	
BIOL 466 - Conservation Biology (5)	
BIOL 467 - Biological Field Methods (5)	

Total Specialization Credits: 33-34

Environmental Chemistry Specialization

*CHEM 181/181LAB are required as foundational courses for this specialization.	
CHEM 182/182LAB - General Chemistry II	5
CHEM 183/183LAB - General Chemistry III	5
CHEM 332 - Quantitative Analysis	5
CHEM 345 - Environmental Chemistry	5
MATH 154 - Precalculus	5
Select one course from:.....5	
GEOL 425 - Environmental Geochemistry (5)	

BIOL 220 - Introductory Cellular Biology (5)	
BIOL 332 - Introductory Microbiology (5)	
CHEM 452 - Instrumental Analysis (5)	

Total Specialization Credits: 30

Environmental Geology Specialization

*GEOL 101/101LAB or GEOL 102/101LAB or GEOL 108 are required as foundational courses for this specialization.	
GEOL 200 - Earth Evolution and Global Change	5
GEOL 302 - Oceans and Atmosphere	4
GEOL 380 - Environmental Geology and Natural Hazards	4
GEOL 386 - Geomorphology	5
GEOL 445 - Hydrogeology	5
MATH 154 - Precalculus Mathematics II	5
Choose one field course from:.....4-5	
GEOL 210 Introduction to Geological Field Methods (4)	
GEOL 377/377LAB - Regional Natural History (5)	
GEOL 410 - Snow Sciences: The Physics of Avalanches (4)	

Total Specialization Credits: 32-33

Environmental Geography Specialization

*GEOG 107 is required as foundational courses for this specialization.	
Choose three of the following physical geography courses:.....15	
GEOG 361 - Soils (5)	
GEOG 382 - Hydrology (5)	
GEOG 386 - Geomorphology (5)	
GEOG 388 - Climatology (5)	
GEOG 389 - Biogeography (5)	
GEOG 453 - Riparian and Wetlands Analysis (5)	
Choose two of the following techniques courses:.....10	
GEOG 303/403 - Introduction to GIS (5)	
GEOG 409 - Quantitative Methods in Geography (5)	
GEOG 410 - Airphoto Interpretation (5)	
GEOG 430 - Remote Sensing (5)	
Choose one of the following courses:5	
GEOG 450 - Arid Environments (5)	
GEOG 451 - Mountain Environments (5)	
GEOG 452 - Coastal Environments (5)	
GEOG 454 - Forest Environments (5)	
GEOG 479 - Geography of the West (5)	

Total Specialization Credits: 30

Environmental Policy Specialization

ECON 201 is required as a foundation course.	
ECON 462 - Economics of Energy, Resources, and Environment	5
ENST 460 - Environmental Law	5
GEOG 445 - Natural Resource Policy	4
POSC 320 - Public Administration	5
POSC 325 - Introduction to Public Policy	3
POSC 429 - Research Seminar in Public Policy	3

Select one of the following research tools

courses: 5

BUS 221 - Introductory Business

Statistics (5)

MATH 311 - Statistical Concepts and

Methods (5)

PSY 362 - Introductory Statistics (5)

SOC 364 - Data Analysis in Sociology (5)

Select two of the following courses:8-10

GEOG 303 - Introductory GIS (5)

GEOG 305 - Introduction to Land Use

Planning (5)

GEOG 373 - Water Resources (4)

POSC 318 - Political Parties and Interest

Groups (5)

GEOG 346 - Political Geography (4)

GEOG / ANTH 440 - Ecology and

Culture (4)

GEOG 442 - Alternative Energy Resources

and Technology (5)

GEOG 443 - Energy Policy (5)

GEOG 448 - Geographic Approaches to

Environmental Resource Analysis (5)

GEOG 481 - Urban Geography (5)

GEOL 380 - Environmental Geology and

Natural Hazards (4)

HIST 454 - American Environmental

History (5)

PHIL 306 - Environmental Ethics (5)

SOC 338 - Political Sociology (5)

SOC 380 - Social Ecology (5)

Total Specialization Credits: 38-40

Total Credits: 90-109

Environmental Studies Minor

The environmental studies minor is designed primarily to serve undergraduate education and environmental literacy. Research and graduate education, and community education and service are other goals. Top priority is given to providing a large number of students with the opportunity to assess the nature, scope, and complexities of present and impending environmental problems. Other objectives include the provision of public education programs on environmental issues and the stimulation of interdisciplinary research on environmental problems. The development of expertise as an environmental specialist requires specialized work which can be pursued through the environmental studies major.

Required Courses

ENST 201 - Earth as an Ecosystem 5

OR ENST 202 - Ecosystems, Resources,
Population, and Culture (5)

ENST 210 - The Global Environment from a

Local Perspective 5

ENST 303 - Environmental Management ... 5

Select two of the following courses7-10

ENST 304 - Environment Methods and

Analysis (5)

ENST 310 - Energy and Society (5)

ENST 330 - Environmental Leadership and

Advocacy (5)

ENST 444 - Environmental Policy

Formulation (4)

ENST 455 - Environmental Literature (3)

Department-approved elective3-5

Total Credits: 25-30

Students choosing an environmental studies minor will propose an upper-division elective course in consultation with, and subject to, the pre-approval of the ENST Director. This elective course must be taken for a grade and be in a department outside the student's major. The following courses, however, will automatically be accepted without pre-approval provided they meet the other elective requirements: any other ENST course, ANTH/GEOG 440, BIOL 360, ECON 462, GEOG 445, HIST 454, SOC 380, POSC 320, or CHEM 345.

The minor requires that students finish with a minimum 2.0 GPA for their 25-30 program credits, and students must also earn at least a C- in each of the six courses that comprise their ENST program.

Energy Studies Minor

Students interested in investigating energy issues are encouraged to pursue the following interdisciplinary minor. The minor provides:

1. An introduction to the technical concepts and language relevant to energy
2. An investigation of current and projected energy use patterns and their associated environmental conflicts
3. A study of the legal, institutional, and economic factors that influence energy policy

With the approval of the director of environmental studies, the student will select appropriate electives to meet personal and professional goals.

Required Courses

ENST 310 - Energy and Society 5

GEOG/IET 442 - Alternative Energy

Resources and Technology 5

GEOG 443 - Energy Policy 5

GEOG/ENST/BIOL/IET 490 - Cooperative

Education 2

PHYS 111 - Introductory Physics 4

PHYS 111LAB - Introductory Physics

Laboratory 1

Select from the following courses 5

IET 101 - Modern Technology and

Energy (5)

ECON 101 - Economic Issues (5)

ECON 201 - Principles of Economics

Micro (5)

Select one of the following courses4-5

CMGT 452 - LEED in Sustainable

Construction (4)

ECON 462 - Economics of Energy,

Resources and Environment (5)

SCED 301 - Interdisciplinary Science

Inquiry (5)

Total Credits: 31-32

Environmental Studies Courses**ENST 201. Earth as an Ecosystem (5).**

Introduction to the concept of our planet as a finite environment with certain properties essential for life. The dynamic nature of the Earth's physical, chemical, geological, and biological processes and their interrelated "systems" aspects furnishes the thrust of this treatment.

ENST 202. Ecosystems, Resources,

Population, and Culture (5). The physical and cultural dimensions of environmental problems with particular emphasis given to the interaction between ecosystems, basic resources, population dynamics, and culture.

ENST 210. Global Environment from

a Local Perspective (4). Students will collect, analyze, and synthesize original field data in natural and social sciences on environmental issues relevant to global and local communities. Prerequisites: either ENST 201 or 202.

ENST 298. Special Topics (1-6).**ENST 303. Environmental Management (5).**

Development of attitudes and perceptions of our environment. Examination of the economic, political, and legal mechanisms and philosophical perspectives useful in managing the environment. Prerequisites: ENST 201 or ENST 202.

ENST 304. Environmental Methods and

Analysis (5). Introduction to qualitative and quantitative methods in the social and natural sciences with emphasis on practical application to a variety of examples in the environment. Prerequisite: ENST 210.

ENST 310. Energy and Society (5).

Through classroom and field experience, students will examine society's use of, and dependence upon, energy. Students will become more discerning citizens, able to take part in local, national, and global energy discussions. Prerequisite: sophomore standing or above.

ENST 330. Environmental Leadership and

Advocacy (5). Examines environmental groups, leadership models, and methods of environmental advocacy. Prerequisite: junior standing or above.

ENST 398. Special Topics (1-6).**ENST 444. Environmental Policy**

Formulation (4). Students will work together in interdisciplinary teams to formulate and justify policy measures they think appropriate to meet some environmental problem investigated. Prerequisite: ENST 201 or ENST 202, and ENST 303.

ENST 455. Environmental Literature (3).

Survey of literary works that thematically explore human relationships with place and environment. Sampling of various themes and genres, with a focus on Pacific Northwest.

ENST 460. Environmental Law (5).

Introduction to the content of U.S. environmental law and the principal legal approaches to deal with environmental

problems including common-law, statutory, regulatory, and economic-incentive systems. Prerequisite: junior standing or above.

ENST 490. Cooperative Education (1-12). An individualized, contracted field experience with business, industry, government, or social service agencies. This contractual arrangement involves a student learning plan, cooperating employer supervision, and faculty coordination. May be repeated for credit. Grade will either be S or U. By permission.

ENST 491. Workshop (1-6).

ENST 495. Senior Research (3-5).

Independent student research in environmental studies project under supervision of faculty sponsor. May be repeated up to 12 credits. By permission.

ENST 496. Individual Study (1-6).

ENST 498. Special Topics (1-6).

ENST 499. Seminar (1-5).

Related courses regularly offered in other departments include: ANTH 341 Native American Cultures of the Pacific Northwest, ANTH 347 Native American Cultures of North America, ENG 330 African America since 1865, and SOC 365 Minority Groups.

ETHNIC STUDIES PROGRAM

College of the Sciences
Ellensburg
Farrell Hall, room 440

509-963-1305

Program Director

Nelson Pichardo, PhD, Sociology

Ethnic Studies Minor

Ethnic studies is a discipline that incorporates the social sciences and the humanities to explore the comparative approaches to the study of minority groups in the United States. The central mission of an ethnic studies program is to increase the understanding of racial and cultural diversity of American society and the dynamics of interethnic relationships. At the university, the ETS program is interdisciplinary, offering courses from other disciplines with a core in ethnic studies. In addition to the minor program, it provides important services to teacher preparation and general education requirements.

Required Courses

ETS 101 - Ethnic Awareness 5
ETS 354 - Minority Experiences 5
OR
SOC 365 - Minority Groups (5)
SOC 386 - Seminar on Racism 5

Subtotal Credits: 15

Approved Electives 9-15

AIS 101 - Pre-contact Period of American Indians, Pre-AD 1492 (5)

AIS 102 - Contact Period of American Indians (5)

AIS 103 - Emergence of Contemporary American Indians (5)

ANTH 341 - Native American Cultures of the Pacific Northwest (4)

ANTH 342 - Hispanic Cultures of the Western U.S. (4)

ANTH 347 - Native American Cultures of North America (4)

ANTH 355 - Culture, Person, Self (4)

ANTH 356 - Gender Roles in Cross-Cultural Perspective (4)

COM 302 - Intercultural Communication (4)

ENG 247 - Multicultural Literature (5)

ENG 330 - African American Literature (5)

ENG 331 - Latina/o Literature (5)

ENG 332 - American Indian Literature (5)

ENG 333 - Asian American Literature (5)

ENG 334 - American Indian Oral and Non-Fiction Literature (5)

PHIL 320 - American Indian Philosophy (5)

PHIL 357 - Race, Class, and Gender: Philosophical Perspectives (5)

RELS 320 - American Indian Spirituality (5)

SOC 305 - American Society (5)

SOC 354 - Minority Experience (5)

SOC 356 - Sociology of Gender (5)

SOC 366 - Sociology of American Indians (5)

SOC 445 - Social Inequality (5)

TH 382 - Ethnic Drama (5)

Ethnic Studies Courses 3-6

Total Credits: 27-36

Ethnic Studies Courses

ETS 101. Ethnic Awareness (5). Awareness and understanding of the problems facing the American people in the area of race and ethnic relations, primarily focusing on ethnic minorities. The nature and scope of relationships between minority groups and the majority in the United States. This is a General Education writing course-Social and Behavioral Science -Perspectives on the United States.

ETS 296. Individual Study (1-6).

ETS 298. Special Topics (1-6).

ETS 299. Seminar (1-5).

ETS 311. The Asian American (3). An overview of demographics, history, cultures, and experiences of Asian Americans in the U.S. society. Prerequisite: ETS 101.

ETS 350. Survey of Chicano Studies (5). A historical, economic, and political survey of the Chicano experience in the U.S. from 1540 to the present with regional emphasis on the American Southwest.

ETS 354. Minority Experiences (5).

Explanations will be identified for institutional racism common to the history and character of American minorities. ETS 354 and SOC 354 are equivalent courses; students may not receive credit for both.

ETS 398. Special Topics (1-6).

ETS 471. Issues in American Indian Education (5). A course to give students

a broad understanding of the process for educating American Indians in traditional American Indian societies and in modern society, with emphasis on the present status of American Indian education and its potential development through specialized programs.

ETS 490. Contracted Field Experience (1-12).

An educational plan designed to integrate classroom study with planned, supervised, and evaluated employment experience linking academic programs with students' career goals and interests. May be repeated for credit. Grade will either be S or U. By permission.

ETS 491. Workshop (1-6).

ETS 496. Individual Study (1-6).

ETS 498. Special Topics (1-6).

ETS 499. Seminar (1-5).

FAMILY AND CONSUMER SCIENCES DEPARTMENT

College of Education and Professional Studies
Ellensburg
Michaelsen Hall, room 100

509-963-2766

Fax 509-963-2787

www.cwu.edu/~fandcs

See website for how this program may be used for educational and career purposes.

Faculty and Staff

Chair

Jan Bowers, PhD

Professors

Kimberlee Bartel, PhD, business and marketing

Jan Bowers, PhD, CEPS, family and consumer sciences education, career and technical education

Robert Perkins, EdD, business and marketing, recreation, leadership

Marla Wyatt, PhD, family and consumer sciences education

Associate Professors

Dorothy Chase, PhD recreation and tourism

Barbara Masberg, PhD, recreation and tourism

Assistant Professors

Kenneth Cohen, PhD, recreation and tourism

Duane Dowd, PhD, CLFE, family studies

Andrea Eklund, MA, fashion merchandising

John Hudelson, PhD, global wine studies

Amber Paulk, PhD, family studies, director of family resource center

Lecturers

Vivian Baglien, PhD, family consumer sciences education

Karen Bergh, MEd, family consumer sciences education

Richard DeShields, MA, family studies
Jaff Hagler, MA, recreation and tourism
Ximenia Hedrick, MA, interior design
Jodi Hctor, BS, recreation and tourism
Connie Kolokotronis, MS, interior design
Amy Mumma, MBA, global wine studies
Peggy Roberts, MA, family studies
Lynn Whelan, fashion merchandising

Emeritus Professors

Joan Amby, PhD, family studies
Willa Dene Powell, PhD, family and consumer sciences education
Carolyn Schactler, MS, apparel design
William Vance, EdD, recreation and tourism

Staff

Sheri Hubbard, grant program coordinator
Alex Lange, secretary senior

Department Information

The Department of Family and Consumer Sciences' programs lead to baccalaureate degrees in family and consumer sciences, career and technical education teaching, fashion merchandising, family studies, global wine studies, and recreation and tourism, recreation, or tourism management specialization.

Students may complete a minor in any of the following areas: apparel design, family and consumer sciences, family and consumer sciences education, family studies, fashion merchandising, program development, recreation management, tourism management, and wine trade and tourism.

Admission Policy for Family and Consumer Sciences

- A completed Family and Consumer Sciences (FCS) major application form must be signed by a program advisor after an initial advising meeting. The advisor will submit it to the FCS chair for approval.
- Freshmen are encouraged to apply. All majors must hold a 2.3 cumulative GPA upon attaining sophomore standing (45 credits).
- Students must earn a minimum grade of C- in each course counted toward fulfilling major and minor requirements.
- Students must have a 2.3 minimum cumulative GPA in the major and minor to exit the program.
- Students seeking a degree in family and consumer sciences career and technical education teaching major, business and marketing education career and technical education, or global wine studies should see specific requirements in the appropriate program section of this catalog.
- For information on teacher certification for marketing education or business education, contact Professor Kim Bartel or Professor Rob Perkins.

Bachelor of Science Family Studies Major

Program Director

Marla Wyatt, PhD

Faculty

Amber Paulk, PhD

The bachelor of science family studies major is an interdisciplinary study of interpersonal and family relationships. The major has a strong emphasis on community involvement and practical application. Graduates are well prepared for career opportunities in family service agencies, parent education programs, family counseling centers, other family life education settings, or advanced study in family relations. Students wishing to declare a major in family studies must be incoming freshmen or have a cumulative GPA of 2.3. Family studies majors may not take 300- to 400-level FS courses until they have completed the following requirements: a 2.5 cumulative GPA, completed a minimum of three hours of FS courses with a grade of C or better. The application for upper-division status must be completed with the student's academic advisor in family studies.

Required Courses

FCSC 371 - Consumer Awareness	3
FCSG 220 - Leadership in Human Development	4
FCSG 320 - Program Management and Planning	4
FS 101 - Skills for Marriage	4
FS 234 - Introduction to Family Studies	4
FS 235 - Relationships and Personal Development	3
FS 305 - Junior Seminar	1
FS 320 - Theories of Family Dynamics	4
FS 336 - Parent Education and Guidance	3
FS 337 - Human Sexuality	4
FS 405 - Senior Seminar	1
FS 419 - Research in Family Studies	4
FS 433 - Family Life Education	4
FS 439 - Families and Public Policy	4
OR	
LAJ 311 - Family Law (4)	
FS 490 - Cooperative Education	3
PSY 314 - Human Development and the Learner	4
PSY 454 - The Helping Interview	3
UNIV 309/509 - Civic Engagement	12
Department-approved electives	8

Total Credits: 77

Bachelor of Science Family and Consumer Sciences Career and Technical Education Teaching Major

Program Director

Marla Wyatt, PhD

This bachelor of sciences teaching major satisfies the endorsement for family and

consumer sciences teaching for career and technical education.

Special requirements:

Students wishing to obtain a teaching certificate in family and consumer sciences education will:

- Complete the family and consumer sciences career and technical education teaching major
- Successfully complete FCSG 205 before being fully admitted to the major
- Have a university-level cumulative GPA of at least 2.3 for full admission to this major and a 3.0 minimum cumulative GPA in the major to exit the program and to graduate from CWU with teacher certification
- Earn a grade of C in each course counted toward fulfilling major requirements
- Apply, be accepted into, and complete the Teacher Preparation Program
- Student teach in a CTE-approved program
- Hold a valid first aid card with CPR
- Complete 2,000 hours of paid work experience in the last six years
- Provide documentation of occupational safety

Required Courses

FCSA 351 - Sociocultural Aspects of Apparel	4
FCSA 355 - Consumer Textiles	4
FCSC 371 - Consumer Awareness	3
FCSC 472 - Life Management	5
FCSE 326 - Curriculum in Career and Technical Education for Family and Consumer Sciences	3
FCSE 422 - Impact of Education Reform on FCS	2
FCSE 426 - Methods and Materials of Teaching Family and Consumer Sciences	3
FS 232 - Child Development	3
FS 234 - Introduction to Family Studies	4
FS 336 - Parent Education and Guidance	3
FS 337 - Human Sexuality	4
FCSG 205 - FCS Entry Assessment	1
FCSG 320 - Program Management and Planning	4
FCSG 405 - FCS Exit Assessment	1
FCSH 367 - Family Housing	3
NUTR 101 - Introduction to Human Nutrition	5
NUTR 240 - Introduction to Foods	2
NUTR 240LAB - Introduction to Foods Laboratory	2
OCED 410 - Career and Technical Education School to Work Programs	4
Choose two of the following	6-7
FCSA 280 - Basic Clothing Construction (3)	
FS 235 - Relationships and Personal Development (3)	
FCSH 166 - Applied Creativity (3)	
PSY 447 - Psychology of Adolescence (4)	

Total Credits: 66-67

Students in this major should consult the general catalog for course planning and must meet course requirements as outlined in the general catalog to graduate.

This bachelor of sciences teaching major satisfies the state endorsement for family and consumer sciences teaching for career and technical education.

All students in this major must apply, be accepted into, and complete the Teacher Preparation Program, student teach in a CTE-approved program, hold a valid first aid card with CPT, complete 2,000 hours of paid work experience in the last six years, and provide documentation of occupational safety.

Bachelor of Arts Family and Consumer Sciences Major

Program Director
Marla Wyatt, PhD

The BA in family and consumer sciences comprises a general introduction to the broad areas of family and consumer sciences and, with an appropriate minor, can provide students with a well-rounded preparation for life or for further advanced study. This major requires a minor or double major. Students must have a cumulative GPA of at least 2.3 for full admission to this major and a 2.5 GPA for graduation.

Required Courses

FCSA 351 - Sociocultural Aspects of Apparel	4
FCSA 355 - Consumer Textiles	4
FCSC 371 - Consumer Awareness	3
FCSC 472 - Life Management	5
FS 232 - Child Development	3
FS 234 - Introduction to Family Studies	4
FS 336 - Parent Education and Guidance	3
FS 337 - Human Sexuality	4
FCSG 205 - FCS Entry Assessment	1
FCSG 405 - FCS Exit Assessment	1
FCSH 367 - Family Housing	3
NUTR 101 - Introduction to Human Nutrition	5
NUTR 240 - Introduction to Foods	2
NUTR 240LAB - Introduction to Foods Laboratory	2

Choose two of the following:	6-7
FCSA 280 - Basic Sewing (3)	
FS 235 - Relationships and Personal Development (3)	
FCSH 166 - Applied Creativity (3)	
FCSG 320 - Program Management and Planning (4)	

Total Credits: 50-51

Family and Consumer Sciences Education Minor

This minor does not meet endorsement requirements to teach family and consumer sciences.

Required Courses

FCSA 351 - Sociocultural Aspects of Apparel	4
FCSC 371 - Consumer Awareness	3
FCSE 426 - Methods and Materials of Teaching Family and Consumer Sciences	3
FS 234 - Introduction to Family Studies	4

FS 232 - Child Development	3
FS 336 - Parent Education and Guidance	3
NUTR 101 - Introduction to Human Nutrition	5

Total Credits: 25

Family Studies Minor

Required Courses

FS 101 - Skills for Marriage	4
FS 235 - Relationships and Personal Development	3

FS Elective Courses

Any Courses with FS prefix	15
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Total Credits: 22

Family and Consumer Sciences Minor

In consultation with a faculty advisor, students select a minimum of 20 credits of coursework as appropriate to individual interests and professional goals. The planned course of study must have the signature of both the student and the faculty advisor before submission to the department chair for approval.

Program Development Minor

Students take a series of courses addressing the strategies and techniques of planning and managing a program for events, training, education, seminars, entertainment, or meetings.

Required Courses

FCSG 220 - Leadership in Human Development	4
FCSG 230 - Program and Event Budgeting	2
FCSG 320 - Program Management and Planning	4
FCSG 379 - Professionalism and Internship Planning	3
FCSG 419 - Applied Research and Evaluation	3
FCSG 420 - Program Promotion and Advertising	5
Choose one course from the following:	2-3
UNIV 309 - Civic Engagement (2)	
FCSG 490 - Cooperative Education (2)	
EDCS 509 - Civic Engagement (3)	

Total Credits: 23-24

Bachelor of Science Fashion Merchandising Major

Program Director
Andrea Eklund, MA

Program Information

The fashion merchandising major is designed to help the student gain the knowledge needed to recognize industry trends, analyze market and consumer behavior, and evaluate retail needs. Guest speakers, industry field trips, and attending trade shows allow students to have contact with fashion industry professionals. Students

also gain additional hands-on professional experience during summer internships. Quarterly meetings with the faculty advisor assures the student is on track academically to achieve their professional goals.

To be admitted to a major or minor in the Fashion Merchandising Program, students must meet the admission requirements for majors and minors in the Department of Family and Consumer Sciences.

Required Courses

ADMG 271 - Business Math Applications	4
BSED 146 - Basic Accounting	5
FCSA 181 - Fashion Show Production	2
FCSA 280 - Basic Sewing Techniques	3
FCSA 289 - NW Field Experience in Apparel and Textiles	3
FCSA 301 - Introduction to the Fashion Industry	4
FCSA 351 - Sociocultural Aspects of Apparel	4
FCSA 353 - Sewn Product Analysis	3
FCSA 355 - Consumer Textiles	4
FCSA 379 - Internship Planning	1
FCSA 389 - Fashion Trend Analysis	3
FCSA 452 - History of Fashion	4
FCSA 487 - Fashion Merchandising Exit Assessment	1
FCSA 489 - Retail Buying	4
FCSG 419 - Applied Research and Evaluation	3
FCSG 490 - Cooperative Education	10
IT 258 - Spreadsheet Applications	3
RMT 330 - Principles of Retailing	4
RMT 340 - Principles of Selling	4
Department-approved electives	10

Total Credits: 79

Fashion Merchandising Minor

Required Courses

FCSA 181 - Fashion Show Production	2
FCSA 280 - Basic Sewing Techniques	3
FCSA 301 - Introduction to the Fashion Industry	4
FCSA 351 - Socio-cultural Aspects of Apparel	4
FCSA 353 - Sewn Product Analysis	3
FCSA 355 - Consumer Textiles	4
FCSA 389 - Fashion Trends Analysis	3
FCSA 489 - Retail Buying	4
RMT 330 - Principles of Retailing	4

Total Credits: 31



Apparel Design Minor

A minor in apparel design is administered jointly by the Fashion Merchandising Program and the Department of Theatre Arts. It is designed to enable students with career interests in this field to gain experience in the competency areas expected of apparel designers. This minor allows the student to learn to apply the basic principles of design and creativity in developing apparel. Students will study the application of artistic and creative design elements, selection, and use of fabrics and textiles, and the techniques for transforming design concepts into garments in order to create a final saleable product for a target market.

Required Courses

FCSA 280 - Basic Sewing Techniques	3
OR	
TH 261 - Costume Technology (3)	
FCSA 301 - Principles of Fashion Merchandising	4
FCSA 355 - Consumer Textiles	4
FCSA 389 - Fashion Trend Analysis	3
FCSA 388 - Apparel Construction II	3
OR	
TH 361 - Stage Costuming (3)	
FCSA 488 - Fashion Line Development	3
TH 340 - Introduction to Theatre Design	3
TH 461 - Costume Design	4
TH 465 - Costume and Fashion Drawing	3

Total Credits: 30

Bachelor of Science Global Wine Studies

Program Director

Amy Mumma, MBA

Faculty

John Hudelson, PhD

This Interdisciplinary Program provides students with a broad understanding of the global wine industry. The program prepares graduates for careers in winery and vineyard management, wine merchandising, wholesale, retail, e-commerce, distribution, marketing, import/export, hospitality, entrepreneurship, consulting, and more.

In the major, students complete 50 major core credits to acquire a broad base of knowledge and skills related to wine, wine business issues, and the global wine industry. Students also complete a minor, 25 to 36 credits, in one of several complementary academic areas. Students will also gain valuable experience by participating in a required international field experience and an internship with a wine-related business, either in the U.S. or abroad.

Admission Requirements

Students must complete the pre-admission requirements prior to admission into the degree program. An overall minimum 2.5 GPA will be required for admission. Students must fill out an application that

includes an essay of motivation and goals. Upon approval of the application, an in-person or telephone interview will be conducted between the advisor for the global wine studies major and the prospective student. Permission of the major advisor is required. Upon admittance to the program students must agree to sign a written statement regarding professional conduct and responsibility.

Student must be at least 21 years old before enrolling in courses that involve tasting wine (GWS 302 - Fundamentals of Viticulture and Enology, GWS 304 - Wine Marketing and Branding, GWS 406 - Professional Wine Analysis, GWS 408 - Advanced Sensory Analysis and GWS 410 - Wine Faults.)

Special Requirements

Students will be expected to spend significant amounts of time outside the classroom on projects, field trips, and assignments. Students must earn a cumulative GPA of 2.7 in the global wine studies core courses.

Financial Obligations

Because this is a self-supported program: no tuition waiver programs apply. Additional course fees and continuing education tuition apply. Tuition for GWS classes may be higher than regular CWU tuition.

Pre-admission Requirements

CHEM 111/111LAB - Introduction to Chemistry / Lab	5
GEOG 101 - World Regional Geography	5

Choose one of the following: 5

HUM 101 - Exploring Cultures in the Ancient World (5)	
OR	
HUM 102 - Exploring Cultures from 16th through 19th Centuries (5)	
OR	
HUM 103 - Exploring Cultures in Modern and Contemporary Societies (5)	

Total Credits: 15

Global Wine Studies Core Courses

ACCT 301 - Financial Accounting Analysis	5
GWS 302 - Fundamentals of Viticulture and Enology	4
GWS 303 - Major Wine Regions of the World	4
GWS 304 - Wine Marketing and Branding	4
GWS 402 - Issues in Viticulture and Enology	5
GWS 403 - The Global Wine Industry	5
GWS 404 - International Wine Trade	5
GWS 406 - Professional Wine Analysis	3
GWS 408 - Advanced Sensory Analysis	4
GWS 410 - Wine Faults	3
GWS 490 - Cooperative Education (Internship)	6
INTL 410 - Agriculture, Field Experience	3

Total Credits: 51

Select one of the following minors: 25-36

Administrative Management Communications
Foreign Languages
International Studies
Organizational Communications
Recreation Management
Retail Management and Technology
Spanish
Tourism

Wine Trade Professional Certificate

This certificate program focuses on the business and trade aspects of the wine industry. Topics covered include the business of wine, world wine regions, trade structures, wine marketing, wine merchandising, viticulture, winemaking, wine styles, and professional evaluation techniques. Graduates are prepared for wine-related careers in sales and merchandising, distribution, marketing, import/export, consulting, hospitality, and more.

This certificate program is a 10-week, intensive program and all four courses must be taken. Students will be expected to spend significant amounts of time outside the classroom working on projects, field trips, and assignments.

Pre-admission Requirements

Students must complete the pre-admission requirements prior to admission into the certificate program. Applicants must:

1. Be at least 21 years of age prior to the first day of class
2. Have a high proficiency with written and oral English language
3. Have successfully completed at least 45 quarter credits (or 30 semester credits) of courses from an accredited college or university, including at least two college-level English composition courses
4. Have an overall minimum college GPA of 2.5 (on a 4.0 scale)
5. Fill out and submit the certificate program application, including a written essay of personal motivation and goals
6. Sign and submit the written statement regarding personal and professional conduct and responsibility with regard to the use of alcohol
7. Submit a CWU CAPS report and/or all previous college/university transcripts. International students must additionally provide a TOEFL iBT score of 71 or higher, or successfully complete Level 5 of the CWU UESL (University English as a Second Language) program. The completed application will be reviewed by the program advisor. Upon approval of the application, an in-person or telephone interview will be conducted between the program advisor and the prospective student. Permission of the advisor is required for admission.

Special Requirements

Students will be expected to spend significant amounts of time outside the classroom working on projects and assignments. Students must obtain a grade of B- or above in all four courses to receive the certificate.

Financial Obligations

Because this is a self-supported program: no tuition waiver programs apply. Additional course fees and continuing tuition apply. Tuition for GWS classes may be higher than regular CWU tuition.

Required Courses

GWS 302 - Fundamentals of Viticulture and Enology	4
GWS 303 - Major Wine Regions of the World	4
GWS 304 - Wine Marketing and Branding ..	4
GWS 406 - Professional Wine Analysis	3

Total Credits: 15

Wine Trade and Tourism Minor

Program Director

Dorothy Chase, PhD

This cross-disciplinary program prepares individuals for employment in many areas of the wine industry, including tourism, hospitality services, retailing, wine sales, marketing, and tasting room and event management.

Admission Requirements

Admission to the minor requires admission to the Wine Trade Professional Certificate Program. Students must be 21 years of age or older and must apply for acceptance into the program. Permission of the GWS certificate advisor is required.

Financial Obligations

Because the Global Wine Study (GWS) courses are in a self-supported program: no tuition waiver programs apply for GWS courses. Additional course fees and continuing education tuition apply. Tuition for GWS classes may be higher than regular CWU tuition. Tuition for the FCSG and RT courses will be at the regular CWU tuition rate and waivers can be applied to the FCSG and RT courses.

Required Courses

GWS 302 - Fundamentals of Viticulture and Enology	4
GWS 303 - Major Wine Regions of the World	4
GWS 304 - Wine Marketing and Branding	4
GWS 406 - Professional Wine Analysis	3
RT 371 - Tourism Essentials	3
RT 374 - Festivals and Events Catering	3
OR	
RT 405/505 - Hospitality Catering (3)	

Choose from the following courses

with advisement	8
FCSG 230 - Program and Event Budgeting (2)	
FCSG 320 - Program Management and Planning (4)	
RT 330 - Sustainable Resources for Recreation and Tourism (3)	
RT 373D - Convention and Meeting Management (5)	
RT 373E - Resort Management (5)	
RT 386 - International Travel II (3)	
RT 471 - Tourism Planning and Sustainable Development (3)	
RT 473 - Air Travel and Tourism (3)	
RT 480 - Tourism Administration (4)	
RT 484 - Legal Liability and Risk Management (3)	
RT 490 - Cooperative Education (3-4)	

Total Credits: 29

Bachelor of Science Recreation and Tourism

Program Director

Dorothy Chase, PhD

Faculty

Kenneth Cohen, PhD
Barbara Masberg, PhD
Robert Perkins, EdD

The Recreation and Tourism Program (RT) prepares students for positions in one of the top three industries in Washington State and the world's number-one industry. Professional positions are numerous. The following list is a sampling of the types of professional positions currently held by RT graduates: city parks and recreation director, recreation manager, front office and training manager, director of youth programs, guest services manager, and winery marketing manager, among others.

To be admitted to a major or minor in the RT program, students must meet the admission and exit requirements for majors and minors in the Department of Family and Consumer Sciences. To graduate, majors and minors must meet the department graduation requirements.

Special Requirements

- The elective area will include 14 credits of RT prefix courses. Elective courses must be pre-approved by an advisor prior to registration for course(s).
- Students are required to complete 6 credits of RT 292 Practicum and 12 credits RT 490 Cooperative Education/ Internship. An additional 4 credits of RT 292 or 8 credits of RT 490 may be applied to the elective area with prior advisor approval.
- Students should plan to complete RT 490 Cooperative Education during the summer term.

Recreation and Tourism Core Requirements

FCSG 220 - Leadership and Human Development	4
FCSG 230 - Program and Event Budgeting ..	2

FCSG 320 - Program Management and Planning	4
FCSG 379 - Internship Planning and Development	3
FCSG 419 - Applied Research and Evaluation	3
FCSG 420 - Program Advertising and Promotion	5
HRM 381 - Management of Human Resources	5
IT 258 - Spreadsheet Applications	3
IT Applications Course	3
(Approved by Advisor)	
RT 201 - Introduction to Recreation and Tourism	3
RT 292 - Practicum	6
RT 309 - Facility Planning and Sustainable Design	3
RT 330 - Sustainable Resources for Recreation and Tourism	3
RT 350 - Tourism and Recreation for Special Groups	2
RT 484 - Legal Liability and Risk Management	3
RT 490 - Cooperative Education	12

Recreation and Tourism Core Credits: 64

Bachelor of Science Recreation and Tourism Tourism Management Specialization

The student with a specialization in tourism management may choose a career in travel- and tourism-related industries, including hotels, resorts, convention centers, cruise lines, airlines, visitor centers, casinos, tour companies, meeting and event planning, and others.

Required Courses

Recreation and Tourism Core	64
RT 371 - Tourism Essentials	3
RT 480 - Tourism Administration	4
ACCT 301 - Financial Accounting Analysis ..	5
OR	
BSGD 146 - Basic Accounting (5)	
Department-approved electives	21

Total Credits: 97

Recreation Management Specialization

The recreation management specialization prepares students for entry-level supervisory and managerial positions with government parks and recreation departments, YMCAs and Boys and Girls Clubs, armed forces recreation, university recreation and intramural sports, camping and outdoor recreation.

Required Courses

Recreation and Tourism Core	64
RT 222 - Recreation Programming and Activities	3
RT 382 - Community Recreation	3
RT 488 - Recreation Management	4
Social Science course approved by advisor ..	3
Department-approved electives	20

Total Credits: 97

Recreation and Tourism Minors

Students who have a major in another area may desire to diversify their abilities by choosing to complete a minor program in tourism management or community recreation. These minors complement numerous major programs expanding career opportunities.

Recreation Management Minor

Required Courses

FCSG 220 - Leadership and Human Development	4
FCSG 230 - Program and Event Budgeting ..	2
RT 201 - Introduction to Recreation and Tourism	3
RT 222 - Recreation Programming and Activities	3
RT 292 - Practicum	6
RT 382 - Community Recreation	3
RT 484 - Legal Liability and Risk Management	3
RT 488 - Recreation Management	4
Department-approved electives	3

Total Credits: 28

Tourism Management Minor

Required Courses

RT 292 - Practicum	6
RT 337 - Tour and Interpretive Program Development	3
OR	
RT 379 - Cruise Line Industry (3)	
OR	
RT 473 - Air Travel and Tourism (3)	
RT 371 - Tourism Essentials	3
RT 373D - Convention and Meeting Management	5
OR	
RT 373D - Resort Management (5)	
RT 480 - Tourism Administration	4
Department-approved electives	8

Total Credits: 27

Consumer Management Courses

FCSC 298. Special Topics (1-6).

FCSC 371. Consumer Awareness (3).

Consumer aids, protection, and information; problems of quality and quantity. Consumer decisions, how consumption influences the market.

FCSC 398. Special Topics (1-6).

FCSC 472. Life Management (5). Study of family in human ecosystem. Emphasis on physiological and psychological well-being and management of resources. Solve practical family problems.

FCSC 491. Workshop (1-6).

FCSC 498. Special Topics (1-6).

FCSC 499. Seminar (1-5).

Family and Consumer Sciences Education Courses

FCSE 298. Special Topics (1-6).

FCSE 326. Curriculum in Career and Technical Education for Family and

Consumer Sciences. (3). Instructional organization and classroom procedure in vocational family and consumer sciences programs.

FCSE 398. Special Topics (1-6).

FCSE 422. Impact of Education Reform on FCS (2). Student will use program of study content knowledge to improve a community situation. Prerequisite: FCSE 326.

FCSE 426. Methods and Materials of Teaching Family and Consumer Sciences (3). Application of the philosophy, purposes, teaching techniques, and assessment of family and consumer sciences programs in the secondary schools. Prerequisites: FCSE 326 and EDCS 311.

FCSE 491. Workshop (1-6). Course content identified by title in the university class schedule. May be repeated for credit under different titles.

FCSE 498. Special Topics (1-6).

FCSE 499. Seminar (1-5).

Family and Consumer Sciences General Courses

FCSG 205. FCS Entry Assessment (1). This course consists of self-assessment and assessment by the faculty of writing skills, speaking skills, visual/graphic skills, and knowledge of theory and research. Grade will either be S or U.

FCSG 220. Leadership in Human Development (4). This highly interactive (challenge course, community service) course focuses on developing students' leadership skills that provide a base for improved communication in both personal and professional situations.

FCSG 230. Program and Event Budgeting (2). Budget processes, terminology, and formats will be covered along with the preparation of basic budgets for events and programs.

FCSG 296. Individual Study (1-6).

FCSG 305. Family and Consumer Sciences Student Leadership (1). Students engage in leadership development through identifying, organizing, conducting and assessing course activities. Elective credit for major. May be repeated up to 6 credits. Grade will either be S or U.

FCSG 320. Program Management and Planning (4). A holistic approach to program management. Content deals with planning, organizing, and controlling programs. For example: special events, recreation, product development, construction, and business.

FCSG 379. Professional Development and Internship Planning (3). Students will explore career options and networks within their industry, develop materials for a job search, and acquire skills related to professionalism.

FCSG 405. FCS Exit Assessment (1). During last quarter of their program, students are assessed on writing skills, speaking skills, visual/graphic skills, and knowledge of theory and research. Grade will either be S or U. Prerequisite: FCSG 205.

FCSG 419. Applied Research and Evaluation

(3). Basics of research design including problem identification, research and evaluation similarities and differences, sampling, survey development, methods and application, implementation, data analysis, and review of published research.

FCSG 420. Program Promotion and Advertising (5). Provides students with

skills through practical exercises, lectures, demonstrations, and examples to enable them to use marketing concepts and tools to develop effective campaigns.

FCSG 490. Cooperative Education (1-12). An individualized, contracted field experience with business, industry, government, or social service agencies. This contractual arrangement involves a student learning plan, cooperating employer supervision, and faculty coordination. May be repeated for credit. Grade will either be S or U. By permission.

FCSG 496. Individual Study (1-6).

Family Studies Courses

FS 101. Skills for Marriage (4). Designed to provide preparation for marriage and other long-term committed relationships. Teaches relational skills (e.g., communication and conflict management) and critically examines the role of marriage in contemporary society.

FS 232. Child Development (3).

Developmental characteristics of children with emphasis from conception to eight years. Includes observation techniques. FS 232 and EDEC 232 are equivalent courses; students may not receive credit for both.

FS 234. Introduction to Family Studies (4).

Origins and historical development of families, cultural variations, contemporary trends. Draws upon information and insight from numerous root disciplines to explore family structure and function.

FS 235. Relationships and Personal Development (3). Development of

interpersonal relationships from initial encounters to stable commitments. Major focus on interaction patterns in intimate relationships. FS 235 and PSY 235 are equivalent courses; students may not receive credit for both.

FS 298. Special Topics (1-6).

FS 305. Junior Seminar (1). Preparation for practicum/internship and service learning. This course is required of any family studies major in a volunteer, practicum, or internship experience. Prerequisite: family studies majors only.

FS 310. Contemporary Family Issues (4). An introduction to social issues that impact family life. Current issues pertaining to individual and family relationships are assessed from an interdisciplinary perspective. This is a General Education writing course-Social and Behavioral Sciences-Foundations of Human Adaptations.

FS 320. Theories of Family Dynamics (4). Internal dynamics of family functioning,

including processes by which families deal with change, stress, and conflict. Major theoretical orientations to the study of family, and an introduction to the scientific process. Prerequisite: FS 101 and FS 234, and admission to a family studies major.

FS 332. Theories in Child Development (4).

Assists the student in formulating his or her own general assumptions about the nature of child development through study of various theoretical viewpoints and current issues. FS 332 and EDEC 332 are equivalent courses; students may not receive credit for both.

FS 333. Culture and Marriage (4). The reciprocal relationships between the biophysical and cultural components in mating, nurturing and sexual access. Cross-cultural patterns in marriage. FS 333 and ANTH 333 are equivalent courses; students may not receive credit for both.

FS 334. Family Problems and Mediation (4).

Problems arising out of the interaction of family members. Mediation techniques, family policy, and theories and ethics in studying families. FS 334 and FS 554 are equivalent courses; students may not receive credit for both.

FS 335. Divorce and Remarriage (3). Personal, family, and legal aspects of divorce and remarriage; historical antecedents and trends. Prerequisite: FS 234.

FS 336. Parent Education and Guidance

(3). Study of parent education models and methods of teaching parent education in community and school settings. Prerequisite: FS 234.

FS 337. Human Sexuality (4). The biophysical, psychosocial, and behavioral aspects of sexuality with emphasis on making responsible sexual decisions and promoting healthy relationships. This is a General Education writing course-Social and Behavioral Sciences-Foundations of Human Adaptations. Prerequisite: sophomore standing or above.

FS 344. Expressive Therapies (5). Expressive therapies (visual arts, music, theatre, dance, etc.) to expand multi-modal opportunities to grow, transform, and heal. Course provides brief experiential demonstrations and applications of theory in contexts of personal and professional work. By permission.

FS 398. Special Topics (1-6).

FS 403. Family Communication (4). This course is designed to provide an overview of family dynamics and the processes that influence family communication and family functioning. FS 403, COM 403 and FS 503 are equivalent courses; students may not receive credit for both.

FS 405. Senior Seminar (1). Seminar on professionalism, ethics, and professional networking. Course required for any student in a family studies practicum or internship. Grade will either be S or U. Co- or prerequisite: FS 305.

FS 419. Research in Family Studies (4).

Methods of research used in studying families and relationships, including

measurement, research design, ethics, sampling, and casual inference. Students will complete a research project emphasizing application of material. FS 419 and FS 519 are equivalent courses; students may not receive credit for both. Prerequisite: FS 101 and FS 234.

FS 431. Principles of Sexuality Education (3).

Principles and content for sex education in school and community settings. Prerequisite: FS 337.

FS 433. Family Life Education (4). The broad objectives, trends, methods and materials of family life education programs in various settings. FS 433 and FS 533 are equivalent courses; students may not receive credit for both. Prerequisite: FS 234

FS 435. Family Gerontology (4). A review of the research literature on families in later life, focusing on family interactions and building family strengths. Prerequisite: FS 234.

FS 439. Families and Public Policy (4). Impact of governmental policies on families; policy implications of changes in the structure and composition of families. FS 439 and FS 539 are equivalent courses; students may not receive credit for both. Prerequisite: FS 101 and FS 234.

FS 490. Cooperative Education (1-12). A contracted field experience with business, industry, government, or social service agency. Requires a cooperative learning agreement. May be repeated up to 20 credits. Grade will either be S or U. By permission.

FS 491. Workshop (1-6).

FS 498. Special Topics (1-6).

FS 499. Seminar (1-5).

Interior Design Courses

FCSH 166. Applied Creativity (3). The creative process; blocks to creativity, creative problem solving, principles and elements of design in housing and interiors.

FCSH 265. Interior Design Fundamentals

(4). The design process, space planning, color analysis, evaluating existing spaces, style trends, and scale drawings. Prerequisite: FCSH 166.

FCSH 298. Special Topics (1-6).

FCSH 366. History of Housing and

Furniture I (3). Survey of historic interiors, cabinetmakers, decorative arts, furniture from the antiquity to the middle of the 1700s.

FCSH 367. Family Housing (3). An evaluative study of the design, quality, and cost of housing environment.

FCSH 392. Housing Practicum (6-12). Work study experience in various aspects of the housing profession. May be repeated up to 12 credits. Prerequisite: FCSH 265.

FCSH 398. Special Topics (1-6).

FCSH 464. Bath Design (4). Fundamental skills and knowledge are applied to a design problem related to functional, structural, and aesthetic qualities of interior environments, specifically residential bathroom design.

FCSH 465. History of Housing and

Furniture II (3). Survey of historic interiors, cabinetmakers, decorative arts, furniture from the late 1700s to the present.

FCSH 466. Housing Issues (4). Cultural factors and social responsibility in housing; evaluating special needs in space planning; economic/ environmental issues in family and group housing.

FCSH 467. Furnishings (5). The different manufacturing and marketing processes of furniture will be explored. Underlying concepts and preparations of documents used by designers for furniture purchases and resale.

FCSH 480. Kitchen Design (4). Fundamental skills and knowledge are applied to a design problem related to functional, structural, and aesthetic qualities of interior environments, specifically residential kitchen design. Prerequisite: FCSH 392.

FCSH 485. Residential Lighting (4).

Students will be introduced to the lighting and electrical systems that affect the interior environment and acquire a working knowledge of architectural lighting planning and electrical drawings. Prerequisite: FCSH 392.

FCSH 491. Workshop (1-6).

FCSH 492. Housing Practicum (6-12). A work study course including practical experience in a phase of housing of the student's choice, accompanied with a seminar. May be repeated up to 12 credits. Prerequisites: FCSH 265.

FCSH 498. Special Topics (1-6).

FCSH 499. Seminar (1-5).

Fashion Merchandising and Textiles Courses

FCSA 181. Fashion Show Production (2).

Preparation, production, and evaluation of special fashion-related events. Professional learning experiences will include modeling techniques, organization, and directing procedures. May be repeated up to 4 credits.

FCSA 280. Basic Sewing Techniques

(3). Basic clothing construction theory, techniques, and teaching methods covering basic garment components: collars, sleeves, bodices, pleats, etc.

FCSA 289. Northwest Field Experience in Apparel and Textiles (3). An applied study of clothing, textiles, fashion merchandising, and design through regional field visits to meet with fashion professionals within a range of careers. By permission.

FCSA 298. Special Topics (1-6).

FCSA 301. Introduction to the Fashion Industry (4). Overview of the history, structure, and operation of the fashion industry. Provides knowledge and skills for effective development in understanding the dynamics of the fashion industry.

FCSA 351. Sociocultural Aspects of Apparel

(4). Clothing in relation to individual and group behavior patterns; personal and social meanings attributed to dress; and cultural patterns of technology, aesthetics,

ritual, morality, and symbolism. The influence of cultural ideals and standards on dress. Prerequisites: PSY 101, SOC 107, and ANTH 107.

FCSA 353. Sewn Product Analysis (3).

Investigation of apparel quality through identification of product standards and specifications, performance, appearance, design, and production. Prerequisite: FCSA 280 and FCSA 355, and junior or senior standing.

FCSA 355. Consumer Textiles (4). Study of natural and synthetic textiles: generic classification, fiber-forming substances, morphology, fabrication, finishing and dyeing processes, properties, and performances. Ten dollar material fee.

FCSA 379. Internship Planning (1-5). This course is designed for internship planning.

FCSA 388. Apparel Construction II (3).

Fundamental concepts of flat pattern and draping design theories and techniques. Design and execution of draped and flat patterned samples and garment structures will be required. Includes translation of garment ideas from conception through production and merchandising. Prerequisites: FCSA 280 and admission to the fashion merchandising major or minor.

FCSA 389. Fashion Trend Analysis (3).

Fashion forecasting; reflecting the acceptance or rejection of trends; analysis of socio-economic, demographic, media, and fashion influences. Students will have an opportunity to travel to market. Prerequisites: either FCSA 301 or MKED 301.

FCSA 398. Special Topics (1-6).

FCSA 452. History of Fashion (4). Historical changes in fashion and costume design from Egyptian period through Eastern civilization to present. Social, political, and religious influences on fashions. FCSA 452 and TH 452 are equivalent courses; students may not receive credit for both.

FCSA 485. International Merchandising

(4). Emphasis on international retailing and global trade. Focus on cross-cultural differences, work environments, policies, and regulations. FCSA 485 and RMT 485 are equivalent courses; students may not receive credit for both. Prerequisite: RMT 330.

FCSA 487. Fashion Merchandising Exit Assessment (1).

During the last quarter of their program, students are assessed on program outcomes and portfolios are created for internship and job interviews. Grade will either be S or U.

FCSA 488. Fashion Line Development

(3). Production of an apparel line from conceptualization to completion. Design concepts will be executed through storyboards, identification of target market, merchandising strategy, and completion of muslin samples. A final project of three original designs will be showcased at the annual fashion show. Prerequisites: FCSA 280, either FCSA 388 or TH 361, and admission to the fashion merchandising major or minor.

FCSA 489. Retail Buying (4). Principles of buying and selling merchandise; analysis of consumer demand, stock inventories and open-to-buy. Prerequisite: RMT 330.

FCSA 490. Cooperative Education (1-12). An individualized, contracted field experience with business, industry, government, or social service agencies. This contractual arrangement involves a student learning plan, cooperating employer supervision, and faculty coordination. 40 hours required per credit. May be repeated up to 20 credits. Prerequisite: FCSA 379.

FCSA 491. Workshop (1-6).

FCSA 498. Special Topics (1-6).

FCSA 499. Seminar (1-5).

Global Wine Studies Courses

GWS 202. A Social History of Beer, Wine, and Distilled Spirits (4). This course looks at alcohol production/consumption from early societies to its present-day industry. Students debate health issues of alcohol, environmental issues, and quality of life issues associated with the wine, beer, and spirits.

GWS 302. Fundamentals of Viticulture and Enology (4). Fundamentals of viticulture and enology, techniques and practices, wine styles, and grape varieties. Health issues associated with wine, basics of wine, and food pairing.

GWS 303. Major Wine Regions of the World (4). Major wine regions of the world. Identification of major grape varieties and wine styles, label regulations, and legal issues. Viniculture and winemaking regulations, climate, soils, and other factors affecting each region.

GWS 304. Wine Marketing and Branding

(4). Regulations and legalities, marketing, branding, public relations, consumer behavior, and business planning in the wine industry.

GWS 402. Issues in Viticulture and Enology (5). Advanced techniques in viticulture and enology practices, costs, risks, and projections involved in viticulture and winemaking, quality control, and quality assurance. By permission. Prerequisite: GWS 302.

GWS 403. The Global Wine Industry (5).

Traditional and emerging wine regions: globalization, classification and legal systems, trade structures, international agreements, consumption habits, patterns, and trends. By permission. Prerequisite: GWS 303.

GWS 404. The International Wine Trade

(5). Accounting and finance, global supply chain, distribution, retail, intellectual property rights, legal issues, wine auctions and investments, journalism, and ratings. By permission. Prerequisites: GWS 304 and ACCT 301.

GWS 406. Professional Wine Analysis

(3). Evaluation and assessment of global wines. Component format for organoleptic properties including appearance, aroma, and palate. May be repeated for credit. By

permission. Prerequisites: students must be 21 years of age or older.

GWS 408. Advanced Sensory Analysis (4).

Assessment of viticulture and winemaking techniques in wine, identification of provenance, fraud, age, and potential for investment. By permission.

Prerequisites: GWS 402, GWS 406, and students must be 21 years of age or older.

GWS 410. Wine Faults (3). Chemical, physical, and biological faults and flaws found in wine from the vineyard, winery, distribution, retail, and consumer. Product recalls and legalities of faulty wines. By permission. Prerequisites: GWS 402, GWS 406, and students must be 21 years of age or older.

GWS 490. Cooperative Education (1-12). An individualized, contracted field experience with business, industry, or government agencies in the wine industry. A learning agreement is created to identify and plan the directed and supervised study. Grade will either be S or U. By permission. Prerequisites: admission to the global wine studies major and students must be 21 years of age or older.

GWS 491. Workshop (1-6).

GWS 492. Field Experience (1-6). By permission. Prerequisite: admission to the global wine studies major.

GWS 498. Special Topics (1-6).

GWS 499. Seminar (1-6).

Recreation and Tourism Courses

RT 201. Introduction to Recreation and Tourism (3).

History, organizational structures, goals and objectives, policies and procedures within agencies, organizations, and businesses in the private, voluntary, government, and tourism sectors.

RT 222. Recreation Programming and Activities (3).

The essential skill of recreation programming will be developed. Games and activities appropriate for playgrounds, camps, and community centers are learned, along with socialization, education, trust building, and outdoor adventure. Prerequisite: admission to the recreation tourism major or minor.

RT 272. Front Office (3). Examines the room divisions and front office functions critical to hotel operations. Includes the guest cycle, personnel supervision, sales techniques in the reservation process, and hotel organization and operation.

RT 275. Career Development (2). Students will explore career options and networks within the tourism industry and develop materials for a job search.

RT 286. International Travel I (3). Overview North and South America destinations and their travel, tourism, hospitality, and recreation industries. Touristic importance including economic, political, population, geography, social systems, and cultural characteristics. May be repeated for credit.

RT 292. Practicum (1-3). Forty on-the-job hours of practical experience per 1 credit hour earned. Four additional hours may

be applied toward the recreation tourism elective area. A minimum of one credit must be taken as a service-learning activity. May be repeated for credit.

RT 296. Individual Study (1-6).

RT 298. Special Topics (1-6).

RT 299. Seminar (1-5).

RT 300. Challenge Course Leadership (4).

Students will develop leadership skills using the challenge course. Specifically, students will learn and use facilitation techniques to improve group and individual interaction.

RT 309. Facility Planning and Sustainable Design (3). This course takes a sustainable

development and design approach to studying the key principles and technical concepts associated with recreation and tourism areas and facilities. These principles include community needs assessment and potential environmental impacts.

Prerequisites: RT 201 and admission to the recreation tourism major or minor.

RT 330. Sustainable Resources for Recreation and Tourism (3). The framework of

sustainability is used to examine how values, policy, management, and practices direct and affect the use of recreation and tourism areas that are both natural resource-based and part of the built environment.

RT 337. Tour and Interpretive Program Development (3). Methods, techniques, and

skills used in the planning, development, and presentation of resource based interpretive programs and visitor tours. This course will include theoretical understanding of the interpretive process and practice of new skills.

RT 350. Tourism and Recreation for Special Groups (2). Distinguishing needs of

special populations, mentally ill, disabled, aged, and others. Attention to the ADA. Observations of selected population groups.

RT 371. Tourism Essentials (3). Students will survey the global travel and tourism system, including consumer demand and motivations, tourism suppliers and intermediaries, modes of travel, visitor attractions, marketing and entrepreneurship, destinations, and impacts of tourism on people and communities. Prerequisite: RT 201.

RT 373A. Supervision in the Hospitality Industry (3). Basics of supervising

programs, personnel, and facilities with emphasis on practical supervisory skill development.

RT 373D. Convention and Meeting Management (5). Students will be

presented with the mechanics of planning and managing meetings and conventions of a business nature.

RT 373E. Resort Management (5).

Presentation of management topics applied to the hospitality industry.

RT 374. Festivals and Events (3). Students will learn the purposes, mechanics, and leadership skills required for planning and executing community festivals and special events of a social nature.

RT 377. The Gaming and Casino Industry

(3). An overview of the casino industry including: traditional casinos, riverboats, historical perspective, legal, social, cultural and economic impacts, Native American gaming, regulation and control of gaming, and future trends in gaming industry.

RT 379. Cruise Line Industry (3). An

overview of the cruise industry including: cruise lines, ships, history of cruising, human resource practices, marketing, design, terminology, and future trends.

RT 380. Supervision in the Hospitality Industry (3). Basics of supervising

programs, personnel, and facilities with emphasis on practical supervisory skill development.

RT 381. Recreational Sports Management

(3). Organization and implementation of recreational sports programs in community recreation settings. Emphasis on facilities, personnel, materials and supplies, tournament bracketing and other practical considerations.

RT 382. Community Recreation (3).

Preparation for positions in community-based organizations to include non-profits and municipalities, grant writing, board-staff relations, community capacity building, and social marketing. Prerequisite: junior standing.

RT 386. International Travel II (3). Overview

of selected Europe and Africa destinations and their travel, tourism, hospitality, and recreation industries. Touristic importance, including economic, political, population, geography, social systems, and cultural characteristics.

RT 393A. Leisure Service Agency Visitation: Public Recreation Agencies (1-3). Field

visits, usually from two to three days in duration. Review of facilities, programs, and clientele with agency leader/supervisor/manager. May be repeated for credit under different titles.

RT 393M. Leisure Service Agency Visitation: Community Centers (1-3).

Field visits, usually from two to three days in duration. Review of facilities, programs, and clientele with agency leader/supervisor/manager. May be repeated for credit under different titles.

RT 393N. Rt Vis: Destinations (1-3). Field

visits, two to three days in duration. Review of facilities, programs and clientele with agency leader/supervisor/manager. May be repeated up to 3 credits under different titles.

RT 393Q. Leisure Service Agency Visitation: Transportation (1-3). Field visits, usually

from two to three days in duration. Review of facilities, programs, and clientele with agency leader/supervisor/manager. May be repeated for credit under different titles.

RT 398. Special Topics (1-5).

RT 405. Hospitality Catering (3). Basics of off-

premise catering including menu planning, budgeting, logistics, and marketing. NUTR 405, RT 405, and RT 505 are equivalent courses; students may not receive credit for more than one.

RT 431. Resident Camp Programming (3).

Methods, techniques, and skills used in the organization and operation of a resident camp program.

RT 471. Tourism Planning and Sustainable Development (3). The planning process

is studied in connection with the development of sustainable tourism, taking into consideration the impacts of development on the economic, social, fiscal, environmental, and political fabric of communities. Prerequisite: RT 201.

RT 473. Air Travel and Tourism (3). Examines

the airline industry, its components and methods of operation; the interaction with other segments of the industry. Procedures for working with the airlines. Prerequisite: RT 201.

RT 474. Hotel Operations Analysis (2).

Analysis of hotel performance and forecasting, with tools typically used in a lodging environment. RT 474 and RT 574 are equivalent courses; students may not receive credit for both.

RT 475. Professionalism in Tourism (2).

Students will develop skills related to professionalism in the tourism industry along with assessing themselves in order to successfully enter their careers. Prerequisite: admission to the recreation and tourism major or minor.

RT 479. Cruise Line Workshop (2). Students

will learn the ports, ports of call, and cruise lines of the Pacific Northwest. A visitation will be made to selected cruise offices and ports. By permission. Prerequisite: RT 379.

RT 480. Tourism Administration (4).

Contemporary problems and issues, basic applied research, organizational development, policy formulation, human resources, inventory, and program personnel evaluation processes. Prerequisites: RT 302, either HRM 381 or MGT 380, senior standing, and admission to the recreation and tourism major or minor.

RT 484. Legal Liability and Risk Management (3). Aspects of personnel law

and premises liability in public, private, and non-profit education, human, and social services organizations. Procedures for managing risks. RT 484 and PE 484 are equivalent courses; students may not receive credit for both.

RT 486. International Travel III (3). Overview

of selected Asia, Australia, and South Pacific destinations and their travel, tourism, hospitality, and recreation industries. Touristic importance including economic, political, population, geography, social systems, and cultural characteristics.

RT 487. Outdoor Recreation Issues (3). This

course addresses recent and breaking issues in the outdoor recreation field. The course involves readings and discussions in both the classroom and field environments. Prerequisite: RT 330.

RT 488. Recreation Management (4).

Contemporary issues, basic applied evaluation, organizational development, policy formulation, human resources,

inventory, and program planning.

Prerequisites: RT 302, senior standing, and admission to the recreation and tourism major or minor.

RT 490. Cooperative Education (1-12). An individualized, contracted field experience with business, industry, government, or social service agencies. A learning agreement is created by the student to identify and plan the directed and supervised study under the guidance of a tourism mentor. Forty hours required per credit. May be repeated for credit. Grade will either be S or U. By permission. Prerequisites: admission to the recreation and tourism major or minor, a minimum GPA of 2.25 in the major.

RT 491. Workshop (1-6).

RT 496. Individual Study (1-6).

RT 498. Special Topics (1-6).

RT 499. Seminar (1-5).

FILM AND VIDEO STUDIES PROGRAM

College of Arts and Humanities

Ellensburg

Bouillon Hall, room 225

509-963-1067

www.cwu.edu/~fvs

See website for how this program may be used for educational and career purposes.

Faculty and Staff

Program Director

Michael R. Ogden, PhD, communication

Professors

Liahna Armstrong, PhD, English

Patricia Callaghan, DA, English

Toni Culjak, PhD, English

Kelton Knight, PhD, foreign languages

Stella Moreno, PhD, foreign languages

Michael R. Ogden, PhD, communication

Steven Olson, PhD, English

Michael J. Smith, MFA, theatre arts

Associate Professors

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Roxanne Easley, PhD, history

Robert Fordan, MA, communication

Matt Manweller, PhD, political science

Lene Pederson, PhD, anthropology

Dieter Romboy, PhD, foreign languages

Assistant Professors

Christina Barrigan, MFA, theatre arts

Steven Jackson, MA, communication

Maria Sanders, MA, communication

Christopher Schedler, PhD, English

Program Information

The Film and Video Studies Program is an innovative, interdisciplinary, undergraduate program leading to a BA in film and video studies. Students complete a sequence of core

courses and choose a specialization in either critical studies or production. Students may choose to complete both specializations, but may count only the core requirements toward both specializations. Minors are available in critical studies and visual literacy.

Program Standards

A film and video studies specialization or minor can be selected by students using the normal major or minor declaration process and with assistance from a faculty advisor. Any student who has taken COM 201 and FVS 250 and passed with a combined B average or better and has a minimum CWU grade point average of 2.4 or higher may be admitted to this program. Students must maintain a 2.4 GPA or higher with a minimum grade of C- in all courses counted toward fulfilling the film and video studies major or minor requirements.

Majors, Specializations, Minors, and Certificates

The Film and Video Studies Program provides students the opportunity to pursue a course of study in either the critical study or the production and technical aspects of the moving image. The program employs a scholarly, creative, and professional approach to the study of both film and television and seeks to help each student discover his or her talent as an independent critic, artist, and communicator. It also provides an education in the history and theory of film, television, and digital media art forms and basic learning experiences in production within the context of a liberal arts education.

The film and video studies specializations require a sequence of core courses. Students are strongly encouraged to complete the core, except FVS 489, prior to the beginning of their junior year. After completing the core, students will be required to choose a specialization in either critical studies which examines the history, theory, and aesthetics of both film and television (52 credits) or production (52 credits), which exposes students to the fundamentals of the production processes in film and video, including studio and field production, digital media, documentary, writing, directing, photography, sound recording, and editing. Students may choose to complete both specializations; however, they may count only the core requirements toward both specializations. Minors are available in critical studies and visual literacy.

The program encourages students to look at moving images from the vantage point of other disciplines. To this end, the film and video studies program includes courses from a number of other departments and programs on campus, including anthropology, communication, English, foreign languages, philosophy, political science, religious studies, sociology, and theatre arts.

Bachelor of Arts

(NOTE: Students seeking a BA degree must complete one year college/university study or two years high school study of a single foreign language.)

Bachelor of Arts

Film and Video Studies Major

Film and Video Studies Core Requirements

COM 201 - Media and Culture	4
COM 321 - Visual Communication	4
COM 330 - Media Aesthetics	5
ENG 344 - Film Theory and Criticism	5
FVS 250 - Introduction to Film and Video Studies	5
FVS 489 - Senior Colloquium	2

**Total Film and Video Studies
Core Credits: 25**

Critical Studies Specialization

The critical studies specialization explores the history, theory, and criticism of film and television. Students examine cinema's role as a unique 20th century art form and the contributions of moving image media as cultural practices of enduring social significance. In the critical studies specialization, they explore film and television texts in relation to the world these texts represent; not only the meanings of these texts but also the processes by which these meanings are constructed. Students will develop the skills to analyze the power and responsibility of American and international film and television and new media technologies from formal, aesthetic, historical, social, and ideological perspectives.

Required Courses

Film and Video Studies Core	25
COM/ENG 353 - History of Narrative Film	4
COM/ENG 354 - History of Television	4
ENG 360 - World Cinema	5
ENG 461 - Studies in Film and Culture	5
ENG 462 - Studies in Film and/or	

Television Genres	5
ENG 463 - Studies in the Film Auteur	5

Select two (2) International Cinema

courses	8
AST 465 - Indian Cinema (4)	
AST 466 - Asian Cinema (4)	
CHIN 461 - Chinese Cinema (4)	
FR 460 - French Cinema (4)	
GERM 464 - German Cinema (4)	
JAPN 462 - Japanese Cinema (4)	
RUSS 463 - Russian Cinema (4)	
SPAN 446 - Hispanic Cinema (4)	

Elective Courses in Critical Studies

Course credits taken above not used to satisfy a requirement may be used as elective credits.

Students may repeat the following variable topic courses with different topics: ENG 461, ENG 462, and ENG 463.

COM/ENG 355 - History of Documentary (4)	
COM 369 - Mass Media and Society (4)	

COM 469 - Media and Cultural Studies (4)
 ENG/COM 367 - Narrative Screenwriting (4)
 ENG/COM 467 - Advanced Narrative Screenwriting (5)
 FVS 490 - Cooperative Education (1-12)
 FVS 491 - Workshop (1-6)
 FVS 492 - Practicum (2)
 FVS 496 - Individual Study (1-6)
 FVS 498 - Special Topics (1-6)
 FVS 499 - Seminar Credits: (1-6)
 PHIL 402 - Ethics and Film (5)
 POSC 441 - Politics and Film (5)
 RELS 402 - Religion and Film (5)
 TH 166 - Theory of Play Production (3)

Total Credits: 75

Production Specialization

The production specialization is designed to build specific skills in media production from a strong foundation of general knowledge in film and television. Students can choose from a wide range of courses that offer both introductory as well as more advanced study in all aspects of mediated storytelling, from writing and producing to directing, cinematography, and editing. The production specialization emphasizes exploration of the student's personal creative voice through hands-on productions. This process allows students to develop skills in all areas of the craft, exploring both the creative and technical aspects of film/video production.

All students in the production specialization begin by making short programs, then progress to more complex productions while learning the collaborative nature of film/video production through crew experiences. Students are encouraged to experiment with traditional narrative structures, documentary, multi-camera television production, and/or new media as the curriculum and their interests dictate. Student projects can range from traditional films to the most intensely personal experimental works.

To complete the learning experience and help students prepare for the job market, all students pursuing the production specialization are strongly encouraged to take advantage of internship opportunities and to compile a portfolio. FVS 489 - Senior Colloquium and FVS 490 - Cooperative Education are designed to facilitate this goal. Those students wishing to continue on to film school may also want to complete an independent film or video production project. FVS 492 - Practicum is designed to fill this role.

Required Courses

Film and Video Studies Core..... 25
 COM 322 - Introduction to Studio Production 4
 COM 341 - Introduction to Field Production 4
 COM 346 - Production Management for Film and Video 4

Select one of the following 4
 ENG 263 - Introduction to Creative Writing (5)
 TH 330 - Playwriting (4)
Select one of the following 4
 COM 357 - Scriptwriting for serial Television (4)
 ENG/COM 367 - Narrative Screenwriting (4)
Select one of the following 4
 COM 431 - Editing for Television and Film (4)
 COM 432 - Directing Television and Film (4)
Select one of the following 4
 COM 422 - Advanced Multi-camera Production (4)
 COM 440 - Corporate Media Production (4)
 COM 441 - Documentary Production (4)
Select one of the following 4
 COM 353/ENG - History of Narrative Film (4)
 COM/ENG 354 - History of Television (4)
 COM/ENG 355 - History of Documentary (4)
Select Six Credits from the following 6
 COM 452 - Applied Video Production (1-2)
 FVS 490 - Cooperative Education (1-12)
 FVS 492 - Practicum (2)
Elective Courses in Production 12
 Course credits taken above not used to satisfy a requirement may be used as elective credits.
 ANTH 351 - Visual Anthropology (4)
 COM 315 - Studies in Communication: Final Cut Pro (1)
 COM 369 - Mass Media and Society (4)
 COM 382 - History of American Journalism (4)
 COM 460 - Communication Law (4)
 COM 469 - Media and Cultural Studies (4)
 ENG 461 - Studies in Film and Culture (5)
 ENG 462 - Studies in Film and/or Television Genres (5)
 ENG 463 - Studies in the Film Auteur (5)
 ENG/COM 467 - Advanced Narrative Screenwriting (5)
 FVS 491 - Workshop (1-6)
 FVS 496 - Individual Study (1-6)
 FVS 498 - Special Topics (1-6)
 FVS 499 - Seminar (1-6)
 PHIL 402 - Ethics and Film (5)
 TH 144 - Foundations of Acting (3)
 TH 166 - Theory of Play Production (3)
 TH 244 - Basic Acting I (3)
 TH 268 - Lighting Technology (3)
 TH 329 - Directing I (3)
 TH 356 - Stage Sound (3)
 TH 368 - Stage Lighting (3)
 TH 430 - Script Writers Workshop (4)
 TH 475 - Acting for Film and Television (4)

Total Credits: 75

Critical Studies Minor

Required Courses

COM 201 - Media and Culture 4
 COM 321 - Visual Communication 4
 COM 330 - Media Aesthetics 5
 ENG 344 - Film Theory and Criticism 5
 FVS 250 - Introduction to Film and Video Studies 5
Select one of the following 4
 COM/ENG 353 - History of Narrative Film (4)
 COM/ENG 354 - History of Television (4)
 COM/ENG 355 - History of the Documentary (4)
Select one of the following 5
 ENG 461 - Studies in Film and Culture (5)
 ENG 462 - Studies in Film and/or Television Genres (5)
 ENG 463 - Studies in the Film Auteur (5)

Total Credits: 32

Film and Video Studies Courses

FVS 250. Introduction to Film and Video Studies (5). Overview of film and video studies, including film viewing and analysis, motion picture language, film genres, and production aspects. Emphasis on the social context, cultural influences, and aesthetic qualities of film. Prerequisite: ENG 101 with a grade of C- or better.

FVS 489. Senior Colloquium (2). Students prepare end-of-major portfolios, which illustrate the competence in critical and theoretical analysis of film and video production. Grade will either be S or U.

FVS 490. Cooperative Education (1-12). Practical experience in career fields in film and video studies. Individual contract field experience with business, industry, government, or non-profit organization. Requires a student learning plan, cooperating employer supervision, and faculty coordination. May be repeated up to 12 credits. Grade will either be S or U.

FVS 491. Workshop (1-6).

FVS 492. Practicum (2). Practice planning instruction, teaching, and assessing learning. May be repeated for credit. Grade will either be S or U. By permission. Prerequisite: major status.

FVS 496. Individual Study (1-6).

FVS 498. Special Topics (1-6).

FVS 499. Seminar (1-6).



FINANCE AND SUPPLY CHAIN MANAGEMENT DEPARTMENT

College of Business
Ellensburg (E)
Shaw-Smyser Hall, room 303
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CWU-Lynnwood (L)

509-963-2032

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See website for how this program may be used for educational and career purposes.

Faculty and Staff

Chair

Eldon Johnson, PhD (L)

Professors

Bruce Bagamery, PhD, finance (L)
Eldon Johnson, PhD, finance (L)

Associate Professors

Ozden Bayazit, PhD, supply chain management (L)
Gary Richardson, PhD, finance (E)
Michael Young, PhD, finance (E)

Assistant Professors

Ke Ke, PhD, supply chain management (D)
Yong Joo Lee, PhD, supply chain management (E)
Kun Liao, PhD, supply chain management (L)
Samuel Otim, PhD, management information systems (E)
Carlo Smith, PhD, supply chain management (E)
Fang Wang, PhD, finance (D)

Staff

Shirley Hood, secretary senior

Bachelor of Science in Business Administration Program

The Department of Finance and SCM and the Department of Management jointly support the bachelor of science in business administration-general business specialization and business minor. The department offers coursework leading to the bachelor of science in business administration (BSBA) degree. In addition to the university general education requirements, the BSBA major is comprised of three principal components:

- Pre-admission courses that provide foundation knowledge and skills needed for further study in business
- Business core courses that build on the pre-admission group and focus on decision making in the main functional areas of business
- Specialization courses that allow for advanced study in one of the functional areas.

Students matriculating in Ellensburg select a 25-credit specialization within the BSBA program in one of six areas: finance, general business, human resource management, management and organization, marketing management, or supply chain management. Students matriculating at a university center are limited to the 25-credit general business specialization.

Program Goals for BSBA

The departments have identified overall educational outcomes related to knowledge, values, and skills for all BSBA graduates.

Following are the outcomes for the bachelor of science in business administration (BSBA) programs:

1. Knowledge-based educational outcomes. Upon completion of the BSBA program, students should:
 - Have a working knowledge of business administration that will aid them in private, government, or non-profit careers and/or prepare them for additional study
2. Values-based educational outcomes. Upon completion of the BSBA program, students should:
 - Comprehend ethical issues and be able to apply an ethical decision-making framework to business decisions
3. Skills-based educational outcomes. Upon completion of the BSBA program, students should:
 - Function effectively when in teams both as a leader and as a member
 - Demonstrate effective oral communication skills
 - Demonstrate effective written communication skills
 - Apply quantitative and qualitative critical thinking skills to develop, access, and use information to analyze business problems and propose feasible solutions

Transfer Credits and Prior Learning Assessment

Equivalent lower-division (100-200 level) courses may be transferred toward meeting the pre-admission requirements. Upper-division (300- to 400-level) courses may also be transferred toward meeting the business core and specialization requirements, but only with the approval of the department chair and the college dean (or designee).

Repeat Policy

Business administration courses may be repeated only once.

Service to Other Majors

Students majoring outside of the College of Business who are required to take courses in this college for either their major or minor will be eligible to enroll on a space-available basis. These students will be given priority over other non-college majors wishing to enroll in upper-division courses.

Bachelor of Science Business Administration Major

BSBA Program Admission Requirements

Students must apply and be accepted into the major prior to beginning 300- or 400-level business coursework. At the time of application, the 40 credits of pre-admission coursework should be substantially completed. Application forms are available in the department offices. Applicants must participate in a mandatory orientation activity as part of the application process. The completed form must be accompanied by transcripts that reflect all prior college work.

Admission shall be based on grades earned in the following courses:

ACCT 251 - Financial Accounting 5
ACCT 252 - Managerial Accounting 5
BUS 221 - Introductory Business Statistics . . 5
MATH 130 - Finite Mathematics 5
BUS 241 - Legal Environment of Business . . 5
ECON 201 - Principles of Economics Micro . 5
ECON 202 - Principles of Economics Macro . 5
MATH 153 - Pre-Calculus Mathematics I . . . 5
OR
MATH 154 - Pre-Calculus
Mathematics II (5)
OR
MATH 170 - Intuitive Calculus (5)
OR
MATH 172 - Calculus I (5)
OR
MATH 173 - Calculus II (5)

Pre-admission Total Credits: 40

Additional Admission Information

A cumulative grade point average of 2.5 in the above courses must be achieved with a minimum grade of C- (1.70) in each course. The credit/no credit option will not be accepted for any of these courses. The applicant must have completed ENG 101/102. These criteria apply to equivalent courses transferred from other institutions.

Students who have met all of the above requirements will be admitted unless the number of applicants exceeds available space. In that case, acceptance will be competitive, based on a selection index.

Additional BSBA Graduation Requirements

The following special rules apply to students seeking the BSBA major:

- Students must earn a minimum cumulative GPA of 2.25 in the 99-100 credit in-the-major coursework to be eligible for a degree. In addition, the department requires a minimum GPA of 2.25 in the 59-

60 credit upper-division component of the in-the-major total.

- Transfer students must complete at least 40 College of Business credits at CWU to be eligible for the BSBA degree, including MGT 489.
- The BSBA program requires a single specialization of at least 25 credits. Occasionally a student requests a second specialization. To be eligible for a second specialization, a minimum of 20 unique credits must be completed. Unique in this sense means the credits have not been used as part of any other BSBA specialization.

Pre-admission Requirements 40

Business Core Requirements

FIN 370 - Introductory Financial Management	5
MGT 382 - Principles of Management	5
MGT 489 - Strategic Management	5
MIS 386 - Management Information Systems	5
MKT 362 - Essential Marketing Concepts	5
SCM 310 - Supply Chain Management	5

Business Core Total Credits: 30

Communication Requirement

Select from the following.....4-5	
ADMG 385 - Business Communications and Report Writing (5)	
COM 345 - Business and Professional Speaking (4)	
ENG 310 - Technical Writing (4)	

Specialization Requirements 25

- Select one of the following three areas:
- Finance
 - General Business
 - Supply Chain Management

Total Credits: 99-100

Finance Specialization

Advisors

Bruce Bagamery, PhD
Eldon Johnson, PhD
Gary Richardson, PhD
Fang Wang, PhD
Michael Young, PhD

Finance builds on the business core and focuses on decision making in three interrelated areas: managerial finance, investments, and financial markets, and institutions. The business core and finance specialization courses provide academic preparation for a wide variety of entry-level positions in managerial finance and the financial services industry.

Required Courses

ECON 330 - Money and Banking	5
FIN 470 - Intermediate Financial Management	5
FIN 475 - Investments	5

Select a minimum of 10 credits from the following..... 10

- (With no more than 5 credits from ECON classes)
- BUS 490 - Cooperative Education Credits: (1-6) or one other course approved in advance by a financial advisor (5)

ECON 310 - International Economics (5)	
ECON 332 - Public Finance (5)	
ECON 352 - Managerial Economics (5)	
FIN 474 - Personal Financial Planning (5)	
FIN 476 - Advanced Investments (5)	
FIN 477 - International Finance (5)	
FIN 478 - Management of Financial Institutions (5)	
FIN 479 - Derivative Securities and Risk Management (5)	

Finance Specialization Total Credits: 25

General Business Specialization

Advisors

All full-time faculty in the department.

This specialization is intended for the student who wishes to tailor a “unique” set of specialization courses to his or her needs or for the student who desires a broad-based “generalist” track within the business administration major. Twenty-five upper-division elective credits are required including at least 20 credits must be business (BUS), finance (FIN), human resource management (HRM), management (MGT), marketing (MKT), management information systems (MIS), or supply chain management (SCM) courses. The remaining five credits may be accounting (ACCT) or economics (ECON). The student is limited to 10 credits from any one area and the specialization must include at least 10 credits of 400-level courses.

General Business Specialization

Total Credits: 25

Supply Chain Management Specialization

Advisors

Ozden Bayazit, PhD
Ke Ke, PhD
Yong Joo Lee, PhD
Kun Liao, PhD
Carlo Smith, PhD

Supply chain management (SCM) builds on the business core and prepares students for careers as analysts, decision makers, and managers in any and all segments of the organization’s supply, production, and distribution chain. Students who complete this program will have a fundamental understanding of the systematic, integrated nature of the creation and delivery of goods and services, and the manner in which the supply, production, and distribution chain includes or involves other internal and external entities. Students will be able to solve problems and make decisions in this environment by using concepts from accounting, economics, and other business administration areas, computing and analytical skills, and appropriate quantitative and qualitative models.

Required Courses

SCM 425 - Procurement and Supply Management	5
SCM 435 - Advanced Operations Management	5

SCM 475 - Global Supply Chain Management	5
SCM 480 - Supply Chain Strategy	5
Minimum of 5 credits from the following.. 5	
ACCT 305 - Cost Accounting (5)	
BUS 490 - Cooperative Education (1-12)	
ECON 352 - Managerial Economics (5)	
MGT 384 - Introduction to International Business (5)	
MGT 484 - International Management (5)	
OR one other course approved in advance by SCM advisor (5)	
SCM 324 - Quality and Continuous Improvement (5)	

SCM Total Credits: 25

Business Minor

Advisors

Any business administration faculty member.

The business minor provides students with an introduction to several key areas of business administration. Students are admitted into the program when the completed minor application form is approved by a business administration minor advisor. Forms are available in the department offices. Students must earn a cumulative grade point average of 2.25 in courses allowed in fulfilling the business administration minor requirements.

Required Courses

ACCT 301 - Financial Accounting Analysis .	5
OR	
ACCT 252 - Managerial Accounting (5)	
BUS 241 - Legal Environment of Business. . .	5
ECON 201 - Principles of Economics Micro .	5
OR	
BUS 374 - Personal Investments (5)	
HRM 381 - Management of Human Resources	5
MGT 380 - Organizational Management	5
MKT 360 - Principles of Marketing	5

Total Credits: 30

Supply Chain Management Certificate Program

Advisors

Ozden Bayazit, PhD
Ke Ke, PhD
Yong Joo Lee, PhD
Kun Liao, PhD
Samuel Otim, PhD
Carlo Smith, PhD

The certificate program provides the opportunity for the student to gain knowledge and skills in the full spectrum of supply chain activities – supplier relationships, purchasing management, operations and inventory management, logistics and transportation, quality management, and information technology. Typical job titles include: purchasing/ supply manager, procurement manager, materials manager, contracts manager, purchasing agent, senior buyer and buyer/planner.

Required Courses

MIS 386 - Management Information Systems	5
SCM 425 - Procurement and Supply Management	5
SCM 435 - Advanced Topics in Operations Management	5
SCM 475 - Global Supply Chain Management	5
Select a minimum of 5 credits from	
ACCT 305 - Cost Accounting (5)	
BUS 321 - Intermediate Business Statistics (5)	
BUS 490 - Cooperative Education (1-12)	
MGT 384 - Introduction to International Business (5)	
MGT 484 - International Management (5)	
SCM 324 - Quality and Continuous Improvement (5)	
SCM 480 - Supply Chain Strategy (5)	

Certificate Program Total Credits: 25

Additional Notes

This program is open to current accounting, economics, finance, management, marketing, and operations supply chain students and CWU students in other academic programs who have completed business pre-admission courses, and persons with bachelors degrees in other fields who have completed business pre-admission courses. The courses in the certificate program may be used as part of the BS Business Administration Program. A cumulative GPA of 3.0 must be earned in the program to be eligible for the certificate.

Finance Courses

FIN 364. Personal Finance (5). Broad spectrum course covering financial issues encountered by individuals throughout their lives. Topics include but are not limited to: Preparing a personal budget, money management, investments, retirement planning, and insurance. This course cannot be used as a College of Business upper division course. Those students desiring to use this as a general elective course outside the College of Business requirements please e-mail cbadvising@cwu.edu.

FIN 370. Introductory Financial Management (5). An introduction to financial decision making. Topics include financial statement analysis, time value of money, risk and return, securities valuation, capital budgeting, cost of capital, and capital structure. Prerequisite: admission to a business, accounting, or economics major with a specialization in general economics, managerial economics, or economic and business forecasting, or an actuarial science major who has completed ACCT 251, ECON 201, MATH 172, MATH 173, and BUS 221 or MATH 311 with grades no lower than a C (2.0). MATH 311 may be taken concurrently.

FIN 466. Working Capital Management (5). Course covers the management of current assets and current liabilities, describes

the nature and types of short-term credit instruments, and incorporates a significant use of Excel. Prerequisite: FIN 370.

FIN 470. Intermediate Financial Management (5). A review, consolidation, and extension of the FIN 370 class. Additional focus on the theory, practice, and analysis of the firm's investing and financing activities as these activities relate to the value creation process. Prerequisites: FIN 370 and admission to a business administration or accounting major.

FIN 475. Investments (5). Principles of investment valuation. Topics include a survey of securities and securities markets, analysis of risk, expected return, timing, and selection of stocks and bonds in a portfolio context. Prerequisite: FIN 370 and admission to a business administration, accounting, or actuarial science major.

FIN 476. Advanced Investments (5). Portfolio theory, construction, and administration. Cases may be used to analyze key investment decisions and to relate theories and concepts to real-world situations. Prerequisites: FIN 475 and admission to a business administration or accounting major.

FIN 477. International Finance (5). Financial decision making in an international setting. Explores both traditional areas of finance and recent innovations in financial management from the perspective of the multinational corporation. Prerequisites: FIN 370 and admission to a business administration or accounting major.

FIN 478. Management of Financial Institutions (5). Asset-liability management process; investment and financing activities of banks, savings and loans, and credit unions. Prerequisites: FIN 370 and admission to a business administration or accounting major.

FIN 479. Derivative Securities and Risk Management (5). Survey of characteristics, markets, and pricing of options, futures, and other derivative securities and their use in managing risk for large and small businesses and investors, domestically and internationally. Prerequisites: FIN 370 and admission to a business administration or accounting major.

Management Information Systems Courses

MIS 386. Management Information Systems (5). Use of computer-based information systems in all functional areas of business. Computer and information technology, resources, management, and end-user decision making, and system development. Prerequisites: admission to either the business, accounting, or economics major, with a specialization in either general economics, or economic and business forecasting.

MIS 420. Database Systems in Business

(5). Database systems theories. Logical data modeling, physical database design and implementation for business process improvement, and effective business decision making. Structured query language. Prerequisite: admission to either the business administration or accounting major.

MIS 445. Systems Analysis and Design

in Business (5). Methods for planning, analysis, and design of information systems in business; systems development tools; modeling; business process redesign; business applications development. Prerequisite: admission to either the business administration or accounting major.

Supply Chain Management Courses**SCM 310. Supply Chain Management (5).**

Adoption of a supply chain orientation toward business management which emphasizes the inter-functional and inter-firm relationships that contribute to improving coordination of operations and performance of organizations that participate in various types of supply chains. OSC 323 and SCM 310 are equivalent courses; students may not receive credit for both. Prerequisites: admission to either the business, accounting, or economics major, and a specialization in economic and business forecasting.

SCM 324. Quality and Continuous

Improvement (5). Development and deployment of quality management and continuous improvement practices. Qualitative, analytical, and statistical methods which integrate managerial, technical, behavioral, and economic perspectives. Prerequisites: SCM 310, admission to either the business, accounting, or economics major, and a specialization in economic and business forecasting.

SCM 425. Procurement and Supply

Management (5). Purchasing processes, procurement cycle analysis, research to support purchasing decisions, supplier relationship development and management, negotiations, commodity planning, costing, pricing, and value analysis related to the purchasing of products and services. Prerequisites: SCM 310, admission to either the business, accounting, or economics major, and a specialization in economic and business forecasting.

SCM 435. Advanced Topics in Operations and Supply Chain Management (5).

Advanced methods and models for planning, management, and decision making involving aspects of supply chain management operations including inventory, transportation, location, purchasing, and other related analyses.

Emphasizes integration and coordination of resources for productivity improvement. Prerequisites: SCM 310, admission to either the business, accounting, or economics major, and a specialization in economic and business forecasting.

SCM 475. Global Supply Chain

Management (5). Global supply chain activities emphasizing integration of transportation, inventory, warehousing, facility location, customer service, materials handling, packaging, and information. Analysis of product and service delivery and the associated trade, cultural, and legal factors and influences. Prerequisites: SCM 310 and admission to either the business administration or accounting major.

SCM 480. Supply Chain Strategy (5).

Integration of concepts learned throughout supply chain curriculum into a combined analysis of comprehensive cases incorporating strategic and tactical decision making throughout the supply chain planning and implementation process. Prerequisites: SCM 310, SCM 435, admission to either the business, accounting, or economics major, and a specialization in economic and business forecasting.

FOREIGN LANGUAGES DEPARTMENT

College of Arts and Humanities
Ellensburg
Language and Literature Bldg., room 102

509-963-1218

Fax: 509-963-1959

www.cwu.edu/~forlang

See website for how these programs can be used for educational and career purposes.

Faculty and Staff

Chair

Joshua S. Nelson, PhD

Professors

Rodney Bransdorfer, PhD, Spanish, applied linguistics

Natalie Lefkowitz, PhD, Spanish, applied linguistics

Stella Moreno, PhD, Spanish

Joshua S. Nelson, PhD, Japanese

Associate Professors

Nathalie Kassel-Smith, PhD, Spanish
Dieter Romboy, PhD, German

Assistant Professors

Mei Chun, PhD, Chinese
Dinara Georgeoliani, PhD, Russian
Alejandro Lee, PhD, Spanish
Eric Mayer, PhD, Spanish

Emeritus Faculty

Elbert E. Bilyeu, PhD, Spanish

Eva-Marie Carne, PhD, German
Kelton W. Knight, PhD, French
M. Nancy Lester, PhD, Spanish
Carlos E. Martin, PhD, Spanish
Christian Immo Schneider, PhD, German
Rosco N. Tolman, PhD, Spanish

Lecturers

Steven L. Cook, BA, lecturer
Mariko Okada-Collins, MA, lecturer

Staff

Lindsay Groce, secretary senior

Department Information

The Department of Foreign Languages offers four BA degrees with specializations and minors in Chinese, French, German, Japanese, and Russian. Four BA degrees and two minors are available in Spanish. Teacher certification may also be completed in the target language(s). Course offerings provide: (1) an introduction to the nature of the language as a facet of culture; (2) an acquaintance with the literature and culture of the aforementioned languages; and (3) proficiency in speaking, comprehension, and writing.

For non-majors or minors, the first- and second-year sequences are designed to provide basic proficiency in a foreign language. The department recommends that all majors include some organized study in a foreign country where their major language is spoken.

Admission to Department Programs

- Students planning to major or minor must meet with an advisor in the foreign languages department for details about admission requirements and complete an application form.
- Potential majors must have a grade point average of at least 3.0 in second-year language courses.
- Potential minors must have a grade point average of at least 2.5 in second-year language courses.
- The foreign languages department reserves the right to modify these requirements as the needs of the department change. Any changes would supersede policies previously published in this catalog.

Departmental Standards

Students in non-teaching majors and minors must earn a minimum grade of C+ in each course allowed toward fulfilling the major and/or minor. Students in teaching majors must earn a minimum grade of B in each course allowed toward fulfilling the major.

Departmental Honors

To earn honors in the Department of Foreign Languages, the student must be

a major, at least a first-quarter senior, and have a GPA of 3.4 in the foreign language in question. Aspirants must apply in writing to the department chair.

Core Course Requirements

Only courses numbered 200 and above will count toward a major or minor. For students with sufficient preparation the 200 level sequence may be challenged for credit but not waived. Those pursuing a foreign language broad area major or foreign language teaching broad area major will be required to earn at least 10 credits in a study abroad program where the courses are taught in the target language. Students pursuing a Spanish broad area major or a Spanish teaching broad area major will be required to earn 10 credits in a study abroad program where the courses are taught in Spanish. Students planning to study abroad must see their advisor prior to departure to ensure the applicability of the proposed course of study. All upper-division foreign language classes not listed as requirements are approved electives.

Bachelor of Arts Foreign Language Majors with Specializations

Chinese
German
Russian
French
Japanese

Bachelor of Arts Foreign Language Major

This major requires a minor.

Required Courses

251, 252, 253 - Second Year	15
*301 - Introduction to Literature	3
*310 - Civilization and Culture	3
Language electives	15
Literature/Culture electives	9
*May be taken at an approved exchange institution	

Total Credits: 45

Bachelor of Arts Foreign Language Broad Area Major

This major does not require a minor. At least 10 credits in the target language must be earned abroad, in a country where the target language is spoken.

Required Courses

Completion of the Foreign Language	
Major courses	45
Electives in language and/or literature	15

Total Credits: 60

Bachelor of Arts Foreign Language: Teaching Major

Completion of this major and passing the West E and ACTFL oral and written proficiency exams for Chinese, French, German, Japanese, and Russian satisfies the endorsement for designated world language.

This major requires a minor and is open only to students pursuing a teaching certificate. Students taking this major are required to apply to the Teacher Preparation Program and complete the Professional Education Program requirements offered through the Department of Educational Foundations and Curriculum.

Required Courses

251, 252, 253 - Second Year	15
*301 - Introduction to Literature	3
*310 - Civilization and Culture	3
385 - Phonetics	3
OR Approved Substitute	
Language electives	12
Literature/Culture electives	9
FNLA 481 - Methods and Materials for Language Teaching	4
FNLA 482 - Second and Foreign Language Acquisition	4
OR	
FNLA 483 - Sociolinguistics (4)	
OR	
ANTH 483 - Sociolinguistics (4)	
*May be taken at an approved exchange institution	

Total Credits: 53

Bachelor of Arts Foreign Language: Teaching Broad Area Major

Completion of this major and passing the West E and ACTFL oral and written proficiency exams for Chinese, French, German, Japanese, and Russian satisfies the endorsement for designated world language.

This major does not require a minor and is open to students pursuing a teaching certificate. At least 10 credits in the target language must be earned abroad, in a country where the target language is spoken. Students taking this major are required to apply to the Teacher Preparation Program and complete the Professional Education Program requirements offered through the Department of Educational Foundations and Curriculum.

Required Courses

Completion of the Foreign Language: Teaching major courses	53
Electives in language and/or literature	7

Total Credits: 60

Bachelor of Arts Spanish Major

This major requires a minor.

Required Courses

SPAN 251, 252, 253 - Second-year Spanish	15
SPAN 301 - Introduction to Spanish and Latin American Literature	4
SPAN 310 - Hispanic Civilizations and Cultures	4
SPAN 341 - Spanish Composition and Grammar I	4
OR	
SPAN 345 - Spanish for Spanish Speakers I (4)	
Spanish Language electives	8
Spanish Literature/Culture electives	12

Total Credits: 47

Bachelor of Arts Spanish Broad Area Major

This major does not require a minor. At least 10 credits in Spanish must be earned abroad, in a country where Spanish is spoken.

Required Courses

Completion of Spanish major courses	47
Department-approved electives	16

Total Credits: 63

Bachelor of Arts Spanish Teaching Major

Completion of this major and passing the West E and ACTFL oral and written proficiency exam for Spanish satisfies the endorsement for designated world language.

This major requires a minor and is open only to students pursuing a teaching certificate. Students taking this major are required to apply to the Teacher Preparation Program and complete the Professional Education Program requirements offered through the Department of Educational Foundations and Curriculum. Of the 16 elective credits, students must complete at least four approved elective credits in Spanish language courses and at least eight approved elective credits in Spanish literature or culture courses.

Required Courses

SPAN 251, 252, 253 - Second-year Spanish	15
SPAN 301 - Introduction to Spanish and Latin American Literature	4
SPAN 310 - Hispanic Civilizations and Cultures	4
SPAN 341 - Spanish Composition and Grammar I	4
OR	
SPAN 345 - Spanish for Spanish Speakers I (4)	
SPAN 385 - Spanish Phonetics	4
FNLA 481 - Methods and Materials for Language Teaching	4
FNLA 482 - Second- and Foreign-language Acquisition	4
OR	

FNLA 483 - Sociolinguistics (4)	
OR	
ANTH 483 - Sociolinguistics (4)	
Department-approved electives	16

Total Credits: 55

Bachelor of Arts Spanish Teaching Broad Area Major

Completion of this major and passing the West E and ACTFL oral and written proficiency exam for Spanish satisfies the endorsement for designated world language.

This major does not require a minor and is open only to students pursuing a teaching certificate. At least 10 credits in Spanish must be earned abroad, in a country where Spanish is spoken. Students taking this major are required to apply to the Teacher Preparation Program and complete the Professional Education Program requirements offered through the Department of Educational Foundations and Curriculum.

Required Courses

Completion of the Spanish Teaching Major courses	55
Department-approved electives	12

Total Credits: 67

Foreign Language Minors

Chinese
German
Russian
French
Japanese

Courses must be numbered 200 or above.

Required Courses

251, 252, 253	15
341	3
343 or 345	2
Department-approved electives	7

Total Credits: 27

Spanish Minor

Courses must be numbered 200 or above.

Required Courses

SPAN 251, 252, 253 - Second-year Spanish	15
SPAN 341 - Spanish Composition and Grammar I	4
OR	
SPAN 345 - Spanish for Spanish Speakers I (4)	
Department-approved electives	8

Total Credits: 27

American Sign Language Minor

A program designed for students who wish to develop advanced level proficiency in American sign language.

Required Courses

ASL 251, 252, 253 - Second-year American Sign Language	15
ASL 301 - American Sign Language Literature	5

ASL 310 - Deaf Culture	4
ASL 343 - American Sign Language in Education	3
Total Credits: 27	

American Sign Language Courses

ASL 151, 152, 153. American Sign Language (5,5,5). Conversational approach with intensive visual/manual drill. Firm foundation in basic signs and structural principles of the language. Students may not receive credit for both ASL 151, 152, 153, and EDSE 427, 428, 429. Courses must be taken in sequence.

ASL 251, 252, 253. Second-year American Sign Language (5,5,5). How signers construct meaning and messages in ASL, grammatical variation, and discourse strategies is covered with special focus on increasing non-manual behavior. Prerequisite: courses must be taken in sequence.

ASL 301. American Sign Language Literature (5). Introduces aspects of ASL literature, including poetry, narrative, humor and folklore. Students will develop knowledge of the literary history of ASL and will acquire skills in comprehending and producing ASL literary texts. Prerequisite: ASL 253.

ASL 310. Deaf Culture (4). Overview of the cultural development and linguistic history of the deaf. Provides a comprehensive study of the deaf-world through analysis of historical events, sociolinguistic factors that affect ASL and current issues. Prerequisite: ASL 253.

ASL 343. American Sign Language in Education (3). Overview of current practices concerning the use of ASL in the educational setting. Topics explored will include manually coded English systems, bilingual bicultural education, and language acquisition in deaf children. Prerequisite: ASL 253.

Foreign Language Courses

FNLA 111. Foreign Languages – Special Instruction (3-5). A foreign language not usually taught by the department. Offerings vary according to student demand, availability of staff, or of instructional programs. FNLA 111 or the sequence may be repeated for credit in different languages. Interested students should contact the Department of Foreign Languages for available offerings. May be repeated for credit.

FNLA 112. Foreign Language – Special Instruction (3-5). A foreign language not usually taught by the department. Offerings vary according to student demand, availability of staff, or of instructional programs. FNLA 111 or the sequence may be repeated for credit in different languages. Interested students should contact the Department of Foreign Languages for available offerings. May be repeated for credit. Prerequisite: FNLA 111.

FNLA 113. Foreign Languages – Special Instruction (3-5). A foreign language not usually taught by the department. Offerings vary according to student demand, availability of staff, or of instructional programs. FNLA 111 or the sequence may be repeated for credit in different languages. Interested students should contact the Department of Foreign Languages for available offerings. May be repeated for credit. Prerequisite: FNLA 112.

FNLA 298. Special Topics (1-6).

FNLA 398. Special Topics (1-6).

FNLA 401. Introduction to Romance

Linguistics (3). Analysis of the phonology, morphology, and syntax of the romance languages. Credits to be counted toward either French or Spanish major or minor. Prerequisite: Two years of a romance language.

FNLA 481. Methods and Materials for Language Teaching (4). Emphasizes the practical concerns of second- and foreign-language instruction. Explores as a group the theory underlying approaches incorporated into personalized teaching styles.

FNLA 482. Second- and Foreign-language Acquisition (4). This course explores second and foreign language acquisition/learning from an applied linguistics perspective. The focus of this course will be on the learner. Prerequisite: FNLA 481.

FNLA 483. Sociolinguistics (4). Concepts and methods of sociolinguistic analysis in first and second languages. Will examine differences among cultures in the relationship between language usage and inequality. ANTH 483 and FNLA 483 are equivalent courses; students may not receive credit for both. Prerequisites: either ANTH 180, ENG 180, ANTH 381, or FNLA 481.

FNLA 490. Cooperative Education (1-12). An individualized, contracted field experience with business, industry, government, or social service agencies. This contractual arrangement involves a student learning plan, cooperating employer supervision, and faculty coordination. May be repeated for credit. Grade will either be S or U. By permission.

FNLA 491. Workshop (1-6).

FNLA 496. Individual Study (1-6).

FNLA 498. Special Topics (1-6).

Chinese Courses

CHIN 141, 142, 143. Chinese for Western Language Speakers (5,5,5). This course is designed for students whose native tongues are Western languages and who have not previously been exposed to the Chinese character writing system.

CHIN 151, 152, 153. First-year Chinese (5,5,5). Conversational approach with intensive oral-aural drill. A firm foundation in basic structural principles of the language is necessary. Prerequisite: courses must be taken in sequence.

CHIN 251, 252, 253. Second-year Chinese (5,5,5). Graduated readings in modern Chinese writings with discussion conducted in Chinese. Prerequisite: courses must be taken in sequence.

CHIN 298. Special Topics (1-6).

CHIN 301. Chinese Literature in Translation (4). A survey of Chinese literature in translation. CHIN 301 and AST 301 are equivalent courses; students may not receive credit for both.

CHIN 341. Intermediate Composition and Grammar (3). Should be taken in sequence. Prerequisite: CHIN 253.

CHIN 343. Intermediate Conversation (2). Should be taken in sequence. Prerequisite: CHIN 253.

CHIN 344. Intermediate Conversation II (2). Prerequisite: CHIN 343.

CHIN 398. Special Topics (1-6).

CHIN 461. Chinese Cinema (4). An examination of the history, aesthetic achievements, major directors and themes, and cultural explorations of Chinese cinema. Includes films from mainland China, Taiwan, and Hong Kong. Prerequisite: FVS 250.

CHIN 496. Individual Study (1-6).

CHIN 498. Special Topics (1-6).

French Courses

FR 151, 152, 153. First-year French (5,5,5). Conversational approach with intensive oral-aural drill. Firm foundation in the basic structural principles of the language. Prerequisite: courses must be taken in sequence.

FR 251, 252, 253. Second-year French (5,5,5). Thorough review of French grammar and graduated readings in modern French prose with discussions conducted in French. Prerequisite: courses must be taken in sequence.

FR 298. Special Topics (1-6).

FR 301. Introduction to French Literature (3). This course is designed as a transition course to prepare students for the advanced literature courses. Appreciation of literature and methods of analysis will be taught on a basic level through the careful examination of specific texts. Prerequisite: FR 253.

FR 341. Intermediate Composition and Grammar (3). Should be taken in sequence with FR 441. Prerequisite: FR 253.

FR 343. Intermediate Conversation (2). Prerequisite: FR 253.

FR 398. Special Topics (1-6).

FR 442. Translation and Interpretation (2). Prerequisite: FR 342.

FR 455. French Poetry Through the Ages (3). Selected masterpieces from the Middle Ages to the present.

FR 460. French Cinema (4). Students will view and analyze French films as a backdrop to the discussion of the history of French cinema.

FR 491. Workshop (1-6).

FR 496. Individual Study (1-6).

FR 498. Special Topics (1-6).

German Courses

- GERM 151, 152, 153. First-year German** (5,5,5). Conversational approach with intensive oral-aural drill. Firm foundation in the basic structural principles of the language. Prerequisite: courses must be taken in sequence.
- GERM 251, 252, 253. Second-year German** (5,5,5). Graduated readings in modern German prose with discussion conducted in German. Thorough review of German grammar. Prerequisite: courses must be taken in sequence.
- GERM 298. Special Topics** (1-6).
- GERM 301. Introduction to German Literature** (3). Selected pieces of German literature characteristic of the Middle Ages to the present. Prerequisite: GERM 253.
- GERM 310. German Civilization and Culture** (3). The background, development, and especially the present-day situation of the German-speaking areas of the world. Prerequisite: GERM 253.
- GERM 341. Intermediate Composition and Grammar** (3). Should be taken in sequence with GERM 441. Prerequisite: GERM 253.
- GERM 343. Intermediate Conversation** (2). Prerequisite: GERM 253.
- GERM 344. Intermediate Conversation** (2). Prerequisite: GERM 343.
- GERM 385. German Phonetics** (3). Designed to show how German is pronounced, and how to attain accuracy, which approximates native-like pronunciation as much as possible. Provides an opportunity to improve pronunciation. Prerequisite: GERM 341.
- GERM 398. Special Topics** (1-6).
- GERM 442. Translation and Interpretation** (2). Prerequisite: GERM 342.
- GERM 454. The German Narrative** (3). The German short story, novella, and novel.
- GERM 491. Workshop** (1-6).
- GERM 496. Individual Study** (1-6).
- GERM 498. Special Topics** (1-6).

Japanese Courses

- JAPN 151, 152, 153. First-year Japanese** (5,5,5). Conversational approach with intensive oral-aural drill. Foundation in basic structural principles of the language. Prerequisite: courses must be taken in sequence.
- JAPN 251, 252, 253. Second-year Japanese** (5,5,5). Graduated readings in modern Japanese writings with discussion conducted in Japanese. Prerequisite: courses must be taken in sequence.



- JAPN 298. Special Topics** (1-6).
- JAPN 301. Japanese Literature in Translation** (4). A survey of Japanese literature in translation. JAPN 301 and AST 347 are equivalent courses; students may not receive credit for both. Prerequisite: ENG 101 with a grade of C- or better.
- JAPN 341. Intermediate Composition and Grammar** (3). Prerequisite: JAPN 253.
- JAPN 342. Intermediate Composition and Grammar** (3). Prerequisite: JAPN 341.
- JAPN 343. Intermediate Conversation** (2). Prerequisite: JAPN 253.
- JAPN 344. Intermediate Conversation** (2). Prerequisite: JAPN 343.
- JAPN 398. Special Topics** (1-6).
- JAPN 442. Translation and Interpretation** (4). Translation into English of Japanese textual material drawn from a wide range of sources. Prerequisite: JAPN 342.
- JAPN 462. Japanese Cinema** (4). An examination of the history, aesthetic achievements, major directors and themes, and cultural explorations of Japanese cinema. Includes close look at Japan's leading auteur directors.
- JAPN 496. Individual Study** (1-6).
- JAPN 498. Special Topics** (1-6).

Latin Courses

- LAT 151. Latin** (5). Translations, declension, and conjugation approach using oral-aural drill. Firm foundation in the basic structural principles.
- LAT 152. Latin** (5). Translations, declension, and conjugation approach using oral-aural drill. Firm foundation in the basic principles of the language continuing from Latin 151. Prerequisite: LAT 151.
- LAT 153. Latin** (5). Translations, declension, and conjugation approach using oral-aural drill. Firm foundation in the basic principles of the language continuing from LAT 152. Prerequisite: LAT 152.

Russian Courses

- RUSS 151, 152, 153. First-year Russian** (5,5,5). Conversational approach with intensive oral-aural drill. Firm foundation in basic structural principles of the language. Prerequisite: courses must be taken in sequence.
- RUSS 251, 252, 253. Second-year Russian** (5,5,5). Thorough review of Russian grammar and graduated readings in Russian prose and poetry with discussions conducted in Russian. Prerequisite: courses must be taken in sequence.
- RUSS 298. Special Topics** (1-6).
- RUSS 341. Intermediate Composition and Grammar** (3). Should be taken in sequence with RUSS 441. Prerequisite: RUSS 253.
- RUSS 342. Intermediate Composition and Grammar** (3). Should be taken in sequence with RUSS 441. Prerequisite: RUSS 341.
- RUSS 398. Special Topics** (1-6).
- RUSS 441. Advanced Composition and Grammar** (3). Prerequisite: RUSS 342.
- RUSS 445. Topics in Russian Language** (3). This course is based on a systematic and functional approach to Russian grammar; from morphology to syntax and text. May be repeated up to 9 credits. Prerequisite: RUSS 253.
- RUSS 496. Individual Study** (1-6).
- RUSS 498. Special Topics** (1-6).

Spanish Courses

- SPAN 151, 152, 153. First-year Spanish** (5,5,5). Develop elementary skills in listening, speaking, reading, and writing. For students with the equivalent of fewer than two years high school Spanish. Prerequisite: courses must be taken in sequence.
- SPAN 181. Intensive Review of First-year Spanish** (5). Intensive review of first-year Spanish for students with the equivalent of two years of high school Spanish who wish to continue with second-year Spanish. Prerequisite: either at least two years of high school Spanish, SPAN 151, or SPAN 152.
- SPAN 251, 252, 253. Second-year Spanish** (5,5,5). Develop intermediate skills in listening, speaking, reading, and writing. Prerequisite: courses must be taken in sequence.
- SPAN 298. Special Topics** (1-6).
- SPAN 301. Introduction to Spanish and Latin American Literature** (4). This transitional course will prepare students for advanced literature courses by introducing the tools for analysis and critique of literary works in the various genres. Lectures, readings, and discussions will be conducted in Spanish. Prerequisites: either SPAN 341 or SPAN 345.
- SPAN 310. Hispanic Civilizations and Cultures** (4). This course focuses on the study of major historical and cultural events that have shaped Spanish-speaking societies. Lectures, readings, and discussions conducted in Spanish. Prerequisites: either SPAN 341 or SPAN 345.
- SPAN 341. Spanish Composition and Grammar I** (4). Development of writing skills through the practice of grammar, vocabulary, and rhetorical devices. SPAN 341 and SPAN 345 are equivalent courses; students may not receive credit for both. Prerequisite: SPAN 253.
- SPAN 342. Spanish Composition and Grammar II** (4). Further development of writing skills through the practice of grammar, vocabulary, and rhetorical devices. SPAN 342 and SPAN 346 are equivalent courses; students may not receive credit for both. Prerequisite: SPAN 341.
- SPAN 343. Spanish Conversation** (4). Development of speaking and listening skills through the practice of grammar, vocabulary, and communicative strategies. Prerequisite: SPAN 253.
- SPAN 345. Spanish for Spanish Speakers I** (4). Grammar, composition and conversation for academic purposes for heritage speakers of Spanish. SPAN 341 and SPAN 345 are equivalent courses; students may not receive credit for both. Prerequisite: SPAN 253.

SPAN 346. Spanish for Spanish Speakers II (4). Further development of grammar, composition, and conversation for academic purposes for heritage speakers of Spanish. SPAN 342 and SPAN 346 are equivalent courses; students may not receive credit for both. Prerequisite: SPAN 345.

SPAN 385. Spanish Phonetics (4). Analysis of the Spanish sound system. Students will learn to describe, recognize, and produce the sounds of standard Latin American Spanish. Other dialects will also be examined. Prerequisite: SPAN 253.

SPAN 398. Special Topics (1-6).

SPAN 432. Advanced Spanish Composition and Grammar (4). Advanced grammar, composition, and stylistics through textual analysis and essay writing. Prerequisites: either SPAN 342 or SPAN 346.

SPAN 442. Spanish Translation and Interpretation (4). This course illustrates the specific semantic and syntactic aspects of Spanish in translation by examining a variety of texts and materials. Lectures, readings, and discussions in both English and Spanish. Prerequisites: either SPAN 342 or SPAN 346.

SPAN 445. Spanish Medieval Literature (4). This course analyzes the most representative works, literary genres, and movements of the Spanish Middle Ages. Lectures, readings, and discussions conducted in Spanish. Prerequisite: SPAN 301.

SPAN 446. Hispanic Cinema (4). Focuses on the analysis of films that represent different aesthetics and genres of Spanish, Latin American, and U.S. Latino filmmaking. The course is offered in English to students of any discipline, and is a literature elective for Spanish majors and minors. Film critiques will be written in Spanish for Spanish majors and minors.

SPAN 449. Spanish Golden Age Literature (4). Novel, theatre, and poetry in 16th- and 17th century Spain, including works by Cervantes, Lope de Vega, Calderon, or Quevedo. Prerequisite: SPAN 301.

SPAN 456. The Spanish and Latin Short Story (4). Study of the short-story genre represented in works by major modern and contemporary Spanish and Latin American writers. Lectures, readings, and discussions conducted in Spanish. Prerequisite: SPAN 301.

SPAN 457. Latin American Theater (4). Study of dramatic and performance theories and of theatrical pieces from Latin American playwrights. Lectures, readings, and discussions conducted in Spanish. Prerequisite: SPAN 301.

SPAN 459. Latin American Poetry (4). Study of literary conventions of poetry and the major contemporary Latin American poets. Lectures, readings, and discussions conducted in Spanish. Prerequisite: SPAN 301.

SPAN 465. Spanish Theater (4). Study of dramatic and performance theories and of theatrical pieces from Spanish playwrights.

Lectures, readings, and discussions conducted in Spanish. Prerequisite: SPAN 301.

SPAN 466. Spanish Poetry (4). Study of poetic theories and of main developments in the poetry of Spain. Prerequisite: SPAN 301.

SPAN 467. Spanish and Latin American Literature and Film (4). Literary criticism of major contemporary Spanish and Latin American fiction and its reflection in film. Lectures, readings, and discussions conducted in Spanish. Prerequisite: SPAN 301.

SPAN 491. Workshop (1-6).

SPAN 496. Individual Study (1-6).

SPAN 498. Special Topics (1-6).

Foreign Studies Courses

Courses with FNST prefixes, intermediate, and advanced language (111-113, 211-213, 311-312, 411-414), culture and civilization (310) and literature (413), are not offered on campus and are available only in connection with study abroad programs and must be taught in the foreign language. For further information contact the office of International Studies and Programs or the Foreign Languages Department.

FNST 111, 112, 113. First-year Foreign Language (1-6). Offered only in study abroad programs. Courses must be taken in sequence, although a student may enroll in more than one at a time in the case of intensive courses. Interested students should contact the Department of Foreign Languages or the Office of International Studies and Programs. May be repeated for credit.

FNST 211, 212, 213. Second-year Foreign Language (1-6). Offered only in study abroad programs. May be repeated for credit.

FNST 310. Culture and Civilization (1-6). Major aspects of the culture, philosophy and way of life of the host country will be emphasized. Offered only in study abroad programs. May be repeated for credit.

FNST 311, 312, 313. Third-year Foreign Language (1-6). A study of grammar, conversation, and/or composition at the third-year level. Offered only in study abroad programs. May be repeated for credit.

FNST 320. Literature (1-6). An in-depth study of one or more authors, periods, or genres of the literature of the host country. Offered only in study abroad programs. May be repeated for credit.

FNST 411, 412, 414. Fourth-year Foreign Language (1-6). A study of grammar, conversation, and/or composition at the fourth-year level. Offered only in study abroad programs. May be repeated for credit.

FNST 420. Literature (1-6). An in-depth study of one or more authors, periods, or genres of the literature of the host country. Offered only in study abroad programs. May be repeated for credit.

GEOGRAPHY DEPARTMENT

College of the Sciences
Ellensburg
Dean Hall, room 301

509-963-1188

Fax: 509-963-1047

www.cwu.edu/~geograph

See website for how this program may be used for educational and career purposes.

Faculty and Staff

Chair

James Huckabay, PhD

Professors

Anthony Gabriel, PhD, hydrology, lake and river ecosystems, coastal and wetlands management

Robert Hickey, PhD, environmental impacts, coastal zones, GIS, Australia

James Huckabay, PhD, energy resources, climatology, resource conflict management, Europe

Robert Kuhlken, PhD, land-use planning, cultural ecology, historical geography, Oceania

Karl Lillquist, PhD, physical geography, geomorphology, soils, environmental change in arid and alpine watersheds

Morris Uebelacker, PhD, human geography, Yakima River basin, field methods

Assistant Professors

John Bowen, PhD, economic geography, transportation geography, Asia

Jennifer Lipton, PhD, cultural ecology, remote sensing, climate change, Latin America

Michael Pease, water resources, watershed planning and analysis, North America

Craig Revels, PhD, cultural-historical geography, landscape, Latin America

Megan Walsh, PhD, biogeography, paleoecology, NW fire history, climate change

Senior Lecturer

Elaine Glenn, MS, political geography, world regional geography, Middle East

Lecturer

Clay Arango, PhD, environmental geography, field methods, aquatic landscapes

Emeritus Faculty

Joel M. Andress, PhD

James Brooks, PhD

Dee Eberhart, MA

Kenneth Hammond, PhD

Nancy Hultquist, PhD

Martin Kaatz, PhD

George Macinko, PhD

John Ressler, PhD

Staff

David Cordner, instructional technician

Marilyn Mason, secretary senior

Department Information

An understanding of geography is integral to an educated person's ability to live and act effectively in today's changing world. A broad range of factors (human and physical, natural and technological) is at work shaping the future of our planet, and it is the mission of the Department of Geography to prepare students to be active participants in that rapidly developing future. Geography's traditional concern with the interrelatedness of natural and human environments and reasons for their differences from place to place, provides important insights into many of the complex problems facing society today.

The department stresses flexibility in the selection of course sequences for majors and encourages study in related departments between the social and natural sciences. We are active participants in the following university programs: Environmental Studies, Energy Studies, Asia/Pacific Studies, Latin American Studies, International Studies and Programs, and the Resource Management Graduate Program. The department also maintains a well-appointed Geographic Information Systems (GIS) laboratory, which benefits majors from other programs in addition to geography.

If you choose to major in geography, you will be required to take a core sequence of six courses. Beyond those core classes, you may then select-with guidance from a faculty advisor-a coherent sequence of coursework in geography and related fields that will best enable you to achieve your goals in life. Graduates from our program work in positions as diverse as middle school teacher, avalanche forecaster, highway or urban planner and GIS supervisor, and many of them continue on to graduate school.

The department is committed to a liberal education as well as to professional training pertaining to resource planning and environmental management. In meeting those commitments, we offer the geographer's way of "seeing" the interrelationships of human life and habitat. Our students learn to see a holistic Earth and its many components-environmental and social-along with the processes that shape them. The department encourages imagination and creativity, while providing our graduates with the skills necessary to deal with issues, at scales ranging from local to global.

All students who wish to major in geography must:

- Have a 2.25 minimum GPA in all coursework taken up to the time of admission
- Apply for acceptance into the geography major
- Upon acceptance into the program, meet with their assigned advisor to develop a major contract
- Earn a C or better grade in each of the courses in their major contract

Geography Core Requirements

GEOG 101 - World Regional Geography . . .	5
GEOG 107 - Introduction to Physical Geography	5
GEOG 108 - Introduction to Human Geography	5
GEOG 203 - Introduction to Maps and Cartography	4
GEOG 250 - Natural Resource Conservation	4
GEOG 489 - Geography Capstone	2

Geography Core Total Credits: 25

The geography major includes two options: BA - 45 credits, and BA - 60 credits.

Bachelor of Arts

Geography Major (45 credits)

(NOTE: Students seeking a BA degree must complete one year college/university study or two years high school study of a single foreign language.)

The major of 45 credits is recommended for students who wish to develop a broad knowledge of geography yet retain the overall flexibility to prepare themselves for a variety of employment opportunities or graduate study. Students taking this major are required to have a second major.

Required Courses

Geography Core Requirements	25
Department-approved electives	20
Must include an upper-division geography course in each of the five subfields: regional, physical, human, resource, and techniques.	

Total Credits: 45

Bachelor of Arts

Geography Major (60 credits)

(NOTE: Students seeking a BA degree must complete one year college/university study or two years high school study of a single foreign language.)

This major of 60 credits is intended for students who wish to develop depth and breadth in a particular portion of geography in preparation for a career or graduate study in geography. Students may choose one of several areas of emphasis within the geography major.

Areas of emphasis include: geotechniques, global and area studies, physical geography, urban and regional planning, and environmental / resource geography. Recommended electives for each of these emphases are listed on the department's web page. In consultation with a departmental advisor, students may choose a specialization and design a program of component courses which best fits specific career goals and aspirations.

Required Courses

Geography Core Requirements.	25
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Department-approved electives 35

Must include one upper-division geography course in each of the five subfields: regional, physical, human, resource, and techniques.

Total Credits: 60

Geography Minor

All students who wish to minor in geography must:

- Apply for acceptance into the geography minor
- Have a 2.25 minimum GPA in all coursework taken up to the time of admission
- Earn a C or better grade in each of the courses required for the minor

Required Courses

GEOG 101 - World Regional Geography . . .	5
GEOG 107 - Introduction to Physical Geography	5
GEOG 108 - Introduction to Human Geography	5
GEOG 203 - Introduction to Maps and Cartography	4
GEOG 250 - Natural Resource Conservation	4
Any upper-division geography courses . . .	7

Total Credits: 30

Geographic Information Systems (GIS) Certificate

The GIS certificate provides recognition for students completing the required number of GIS-related classes at a high level of competence (minimum average GPA of 2.7). Certification will provide students with a powerful tool to assist their future job searches.

Required Courses

GEOG 303 - Introductory GIS	5
OR	
GEOG 403 - Introductory GIS (5)	
GEOG 404 - Intermediate GIS	5
GEOG 410 - Airphoto Interpretation	5
GEOG 430 - Remote Sensing	5
Choose from the following electives*.	8
CS 301 - Data Structures (4)	
GEOG 409 - Quantitative Methods in Geography (5)	
GEOG 413 - Computer Cartography (4)	
GEOG 417 - Advanced GIS (4)	
GEOG 485 - Topics in GIS and Remote Sensing (4)	
GEOG 490 - Cooperative Education (1-12)	
GEOG 493 - Geography Field Experience (1-12)	
GEOG 496 - Individual Study (1-6)	
Other electives as approved by the director	

Total Credits: 28

*A minimum of 8 credits taken from the list of electives at least 4 credits of which must be a GIS class. All electives must be approved by the certificate director.

Geography Courses

- GEOG 101. World Regional Geography** (5). Regions and nations of the world together with the changing elements of the physical and human environment that support them.
- GEOG 107. Introduction to Physical Geography** (5). The complex weather, climate, water, landforms, soils, and biota of Earth's physical environments over space and time. Four hours of lecture and two hours of laboratory each week. This is a General Education writing course-Natural Sciences -Patterns and Connections in the Natural World.
- GEOG 108. Introduction to Human Geography** (5). Distribution and spatial variation of population, settlement patterns, cultural elements of language, religion, and lifeways, and the economic and political organization of the planet.
- GEOG 203. Introduction to Maps and Cartography** (4). Basic introduction to the principles of cartographic communication. Emphasis on using and understanding a wide variety of general purpose, topographic, and thematic map types.
- GEOG 215. Concepts of GIS** (3). Basic principles and uses of geographic information systems (GIS). Practice with the use of GIS in solving land management and evaluation problems. Two hours lecture and four hours laboratory per week.
- GEOG 250. Natural Resource Conservation** (4). The meaning of resources and conservation; population growth and its implications for land management, public control, and environment quality; attitudes regarding the use of resources; conservation thought and activities in the United States.
- GEOG 265. Geography of the African Diaspora** (5). Examination of the physical and cultural geography, human-environment interactions, landscapes, and regional diversity of the African Diaspora.
- GEOG 273. Geography of Rivers** (5). Global, regional, and local physical and cultural patterns and processes within river basins.
- GEOG 279. Geography of the West** (1-12). In-depth field examination of the complex, physical, human, and resource issues of one or more of the varied subregions of western North America. May be repeated for up to 12 credits under a different topic.
- GEOG 290. Cooperative Education Field Experience** (1-5). Individualized field experience with business, industry, government, or other agency. Requires a student learning plan, cooperating employer supervisors, and faculty coordinator. May be repeated for up to 10 credits. Grade will either be S or U. By permission. Prerequisite: sophomore standing or above.
- GEOG 303. Introductory GIS** (5). Applications, scope, and benefits of Geographic Information Systems (GIS), classification and components of GIS; data acquisition; data management; data errors; implementation considerations; applied

experience using GIS software. Students will be given a computer literacy test during the first week of class. Continued enrollment is dependent upon passing the test. Prerequisite: computer literacy, and GEOG 203, or GEOG 210, or ANTH 323, or BIOL 360.

- GEOG 304. Economic Geography** (5). Geographic survey of human livelihood and interaction with the environment. Agriculture, industry, and urbanization are examined in the context of an increasingly interdependent world system.
- GEOG 305. Introduction to Land Use Planning** (5). Investigation into the process and practice of urban and regional planning. Emphasis on historical development, legal foundations, and techniques of planning in the United States.
- GEOG 308. Cultural Geography** (5). Consequences of cultural diversity in the human occupation of the Earth and the interactions of human and natural systems.
- GEOG 310. Introduction to Landscape Analysis** (5). Application of concepts and techniques of landscape analysis. Specific landscapes are analyzed utilizing various techniques including remotely sensed imagery, historical records, and field observation and measurement.
- GEOG 346. Political Geography** (4). The spatial structure of political units. The effect of political, economic, social, and Earth resource factors on the areas, shapes, and boundaries of these units, and on the distribution of populations and institutions.
- GEOG 352. Geography of North America** (5). Examination of the physical and cultural geography, human-environment interactions, landscapes, and regional diversity of the United States, Canada, and Mexico.
- GEOG 355. Geography of the Pacific Northwest** (4). Examination of the physical and cultural geography, human-environment interactions, landscapes, and regional diversity of the Pacific Northwest.
- GEOG 361. Soils** (5). Properties, factors, processes, and classification of Earth's soils, past and present. Four hours lecture and three hours of laboratory or field trips each week. GEOG 361 and GEOG 461 are equivalent courses; students may not receive credit for both. Prerequisite: GEOG 107.
- GEOG 365. Geography of Africa** (5). Examination of the physical and cultural geography, human-environment interactions, landscapes, and regional diversity of Africa, with an emphasis on Sub-Saharan Africa.
- GEOG 366. Geography of the Middle East** (5). Examination of the physical and cultural geography, human-environment interactions, landscapes, and regional diversity of the Middle East.
- GEOG 371. Geography of Europe** (5). Examination of the physical and cultural geography, human-environment interactions, landscapes, and regional diversity of Europe.

GEOG 373. Water Resources (4). Foundation course for understanding the physical and social dimensions of water resource use on a global scale. Special attention paid to issues in the American West. GEOG 107 is recommended.

- GEOG 379. Geography of the West** (1-12). In-depth field examination of the complex physical, human, and resource issues of one or more of the varied sub-regions of western North America. May be repeated up to 12 credits under a different topic.
- GEOG 382. Hydrology** (5). Provides a comprehensive introduction to both the global and local hydrologic cycle. Covers constituent processes, their measurements and quantitative relationships, plus basic water quality parameters. GEOG 382 and GEOG 482 are equivalent courses; students may not receive credit for both. Prerequisite: GEOG 107.
- GEOG 386. Geomorphology** (5). Descriptive and interpretive examination of the Earth's landforms and the processes and factors that shape these features over space and time. Four lectures and three hours laboratory or field trips each week. GEOG 386, GEOG 486, and GEOG 386 are equivalent courses; students may not receive credit for more than one. Prerequisites: either GEOL 101 or 102 and 101LAB or 107.
- GEOG 388. Climatology** (5). Elements, factors, and processes affecting Earth's climates, present, past, and future. Four hours lecture and two hours laboratory / field per week. Course fee required. Prerequisite: GEOG 107.
- GEOG 389. Biogeography** (5). Investigates the functional relationships between biophysical processes and their spatial and temporal patterns at various scales. Introduces approaches to land systems analysis focusing upon ecosystems. Prerequisite: GEOG 107.
- GEOG 398. Special Topics** (1-6).
- GEOG 399. Seminar** (1-5).
- GEOG 404. Intermediate GIS** (5). Applied concepts, principles, and operation of fundamental GIS applications, including raster-vector data models, topology, digitizing, and various analytical techniques such as overlay, buffers, and Boolean queries. Lecture and practical applications. ANTH 404, GEOL 404, and GEOG 404 are equivalent courses; students may not receive credit for more than one. Prerequisites: either GEOG, GEOL, or ANTH 303 or 403.
- GEOG 405. Advanced Topics in Land Use Planning** (3). Selected issues and problems in land use planning and environmental control. Topics may include growth management, small town and rural planning, or coastal zone management. May be repeated for credit under a different title. May be repeated for credit. Prerequisite: GEOG 305.
- GEOG 408. Advanced Topics in Human Geography** (3). Focuses on the content of GEOG 308 in greater detail with particular

emphasis on land use in non industrial societies. Topics will vary; consult with instructor.

GEOG 409. Quantitative Methods in Geography (5). Quantitative analysis assessment in geography and resource management. Emphasis on spatial statistics. Prerequisites: MATH 130 or post-baccalaureate/graduate student standing.

GEOG 410. Airphoto Interpretation (5). Introduction to airborne photography and the tools and techniques to apply this photography to geographical issues. Three hours lecture and two hours laboratory per week. Course fee required. Prerequisite: GEOG 203, or GEOL 210.

GEOG 413. Computer Cartography (4). Computerized mapmaking basics of contour, choropleth, 3-D, and other thematic maps from digitizing to final color product. Applied experience using cartographic software. Prerequisite: GEOG 203, or GEOL 210, or ANTH 323, or BIOL 360.

GEOG 415. Geography of Oceania (3). Examination of the physical and cultural geography, human-environment interactions, landscapes, and regional diversity of Australia, New Zealand, and the Pacific Islands.

GEOG 417. Advanced GIS (4). Advanced GIS principles, techniques, analysis, and application. Lecture and practical hands-on experience. Applied experience using GIS software. GEOG 417, ANTH 417 and GEOL 417 are equivalent courses; students may not receive credit for more than one. Prerequisites: either GEOG, GEOL, or ANTH 404.

GEOG 422. Geography of Food and Agriculture (4). Overview of food and agriculture as it relates to specific geographic regions, production regimes, trade, and cuisine. Domestic and international issues explored through lecture and field study. Prerequisite: junior standing or above.

GEOG 425. Field Methods in Geography (5). Theory of, and practice in, geography field methods via in-depth field research projects. Topics include field observation, data collection, and data interpretation. Two hours lecture and five hours field per week.

GEOG 427. Environmental Archaeology (4). Analyses of sediments and plant and animal remains from archaeological sites are used to explore relationships between humans and their environments. Case studies combine natural and physical sciences to study long-term change in landscapes and ecosystems. ANTH 427/527 AND GEOG 427/527 are equivalent courses. Graduate credit requires an additional research paper to be specified in syllabus. Prerequisites: either ANTH 120 or GEOG 107.

GEOG 430. Remote Sensing (5). Principles of acquisition, analysis, and use of remotely sensed data (LANDSAT, SPOT, Ikonos, etc.). Applied experience using image processing software. Three hours lecture and three

hours laboratory per week. GEOG 430, GEOL 430, and GEOL 530 are equivalent courses; students may not receive credit for more than one. Prerequisites: GEOG 410 or GEOL 210.

GEOG 440. Ecology and Culture (4). Investigation into interdependent environmental and human cultural systems. Traditional agroecologies and subsistence strategies; contemporary problems of resource management, social equity, political ecology, and sustainable development. GEOG 440 and ANTH 440 are equivalent courses; students may not receive credit for both.

GEOG 442. Alternative Energy Resources and Technology (5). Overview of energy systems, with focus on wind, biomass, solar, biodiesel, geothermal, and sustainable energy systems. Includes energy production and conversion. Field trips. GEOG 442 and IET 442 are equivalent courses; students may not receive credit for both. Prerequisite: junior standing.

GEOG 443. Energy Policy (5). Legal, institutional, and economic frameworks for regional, national, and international energy decisions. By permission.

GEOG 445. Natural Resources Policy (4). Development and significance of policies affecting resource management in the United States.

GEOG 448. Geographic Approaches to Environmental Resource Analysis (5). Examination of the techniques and methodologies used for the evaluation and sustainable management of environmental resources from a variety of perspectives. Prerequisite: GEOG 107 and GEOG 250.

GEOG 450. Arid Environments (5). Physical, human, and resource geography of Earth's arid settings. Prerequisite: GEOG 107.

GEOG 451. Mountain Environments (5). Physical, human, and resource geography of mountain settings. Prerequisite: GEOG 107.

GEOG 452. Coastal Environments (5). Physical, human, and resource geography of coastal environments. Emphasis on physical processes, resource issues, and environmental management of coastal environments. Prerequisite: GEOG 107.

GEOG 453. Riparian and Wetlands Analysis (5). Physical, human, and resource geography of wetland environments. Emphasis on physical processes, resource issues, and environmental evaluation and management of wetland environments. Prerequisite: GEOG 107.

GEOG 454. Forest Environments (5). Examinations of topics related to global forest including forest ecology, disturbance regimes, biogeography, and management issues. Case studies will focus on western U.S. forest and highlight the use of geospatial techniques to study forest change. Prerequisites: GEOG 107.

GEOG 460. Geography of International Trade (5). Geographic basis of international trade with special emphasis on the

Pacific Northwest. Field trips required. Prerequisite: GEOG 304.

GEOG 461. Soils (5). Properties, factors, processes, and classification of Earth's soils, past and present. Four hours lecture and three hours of laboratory or field trips each week. GEOG 361 and GEOG 461 are equivalent courses; students may not receive credit for both. Prerequisite: GEOG 107.

GEOG 465. Wine: A Geographical Appreciation (3). World overview of grape and wine industry emphasizing geographic themes. Includes all-day field trip to Yakima Valley viticultural area. May be repeated for credit. Grade will either be S or U.

GEOG 470. Geography of Latin America (4). Examination of the physical and cultural geography, human-environment interactions, landscapes, and regional diversity of Latin America.

GEOG 472. Geography of Russia and the Newly Independent States (4). Examination of the physical and cultural geography, human environment interaction, landscapes, and regional diversity of Russia and the newly independent states that once comprised the USSR.

GEOG 473. Watershed Analysis and Planning (4). Examination of water resource analysis, development, management, and planning in the United States. Focus on contemporary problems, trends, and case studies. Prerequisite: GEOG 373.

GEOG 474. Geography of China (4). Examination of the physical and cultural geography, human-environment interactions, landscapes, and regional diversity of China.

GEOG 475. Geography of Asia (5). Examination of the physical and cultural geography, human-environment interactions, landscapes, and regional diversity of Asia.

GEOG 479. Geography of the West (1-12). In-depth field examination of the complex physical, human, and resource issues of one or more of the varied subregions of western North America. May be repeated for credit under a different title. By permission.

GEOG 481. Urban Geography (5). The spatial and size distribution of cities as explained by their historical development and major functions. Analysis of the internal structure of cities and the results of urban growth. Prerequisite: GEOG 304.

GEOG 482. Hydrology (5). Provides a comprehensive introduction to both the global and local hydrologic cycle. Covers constituent processes, their measurements and quantitative relationships, plus basic water quality parameters. GEOG 361 and GEOG 461 are equivalent courses; students may not receive credit for both. Prerequisite: GEOG 107.

GEOG 485. Topics in GIS and Remote Sensing (4). Special topic classes in GIS and remote sensing. Applied experience using GIS or image processing software. Prerequisites: GEOG 303 and 430.

GEOG 486. Geomorphology (5). Descriptive and interpretive examination of Earth's landforms, and the processes and factors that shape these features over space and time. Four lectures and three hours laboratory or field trips each week.

GEOG 386, GEOG 486, and GEOL 386 are equivalent courses; students may not receive credit for more than one.

GEOG 489. Geography Capstone (2). Assessment of past coursework and exploration of future opportunities. Prerequisites: senior standing and admission to a geography major.

GEOG 490. Cooperative Education (1-12). An individualized, contracted field experience with business, industry, government, or social service agencies. This contractual arrangement involves a student learning plan, cooperating employer supervision, and faculty coordination. May be repeated for credit. Grade will either be S or U. By permission.

GEOG 491. Workshop (1-6).

GEOG 492. Geography Teaching Experience (1-3). Experience in classroom, laboratory, and/or field teaching. May be repeated for credit. By permission.

GEOG 493. Geography Field Experience (1-12). Individual or group off-campus experience in the field study of geographical phenomena. May be repeated for credit under a different title. By permission.

GEOG 494. Applied GIS Project (2-6). GIS projects in anthropology, biology, geography, geology, and resource management. ANTH 494, GEOL 494 and GEOG 494 are equivalent courses; students may not receive credit for more than one.

GEOG 496. Individual Study (1-6).

GEOG 498. Special Topics (1-6).

GEOG 499. Seminar (1-5).

GEOLOGICAL SCIENCES DEPARTMENT

College of the Sciences
Ellensburg
Lind Hall, room 108B

509-963-2702

Fax: 509-963-2821

www.geology.cwu.edu

See website for how this program may be used for educational and career purposes.

Faculty and Staff

Chair

Wendy A. Bohrsen, PhD

Professors

Wendy A. Bohrsen, PhD, volcanology, isotope geochemistry, igneous petrology
Lisa L. Ely, PhD, geomorphology, paleohydrology, and quaternary geology
Carey Gazis, PhD, environmental geochemistry, stable isotope geochemistry, and hydrogeology

Jeffrey Lee, PhD, active and regional tectonics, structural geology

M. Meghan Miller, PhD, crustal deformation, GPS geodesy, active tectonics, and remote sensing

Charles M. Rubin, PhD, paleoseismology, earthquake hazards, and active tectonics

Associate Professors

Timothy I. Melbourne, PhD, seismology, continental dynamics

Assistant Professors

Audrey Huerta, PhD, geodynamics, climate, and mountain building

Susan Kaspari, PhD, climate and environmental variability and glaciochemistry

Chris Mattinson, PhD, mineralogy and petrology

Faculty Research Associates

Paul Winberry, PhD, glacier dynamics, seismology

Lecturers

Marie Ferland, PhD, marine stratigraphy, climate change

Winston Norrish, PhD, petroleum geology

Emeritus Professors

Robert D. Bentley, PhD, structural geology, igneous and metamorphic petrology, regional geology of the Pacific Northwest
James Hinthorne, PhD, mineralogy, geochemistry, spatial information systems

Staff

Rex Flake, tiltmeter engineer, PANGA network engineer and geologist

Andrew Minder, PANGA network engineer and geologist

Ivan Rabak, real-time GPS data analyst

Jocelyn Robinette, secretary

V. Marcello Santillan, scientific programmer and GPS data analyst

Craig Scrivner, systems analyst

Linda Shepard, fiscal specialist

Brad Woods, scientific programmer and GPS data analyst

Nick Zentner, instructional technician supervisor

Department Information

Geosciences encompass the scientific study of the origin and evolution of the earth. Energy, mineral and water resources, geologic hazards, pollution of natural waters, and earthquake prediction are just a few of the pressing societal concerns that are addressed by geoscientists. The geological sciences program has two major parts: (1) solid-earth geosciences, such as rocks, minerals, deformation, and tectonic evolution of the Earth's crust; and (2) Earth processes over the last 10,000 years, such as active faulting, environmental geochemistry, hydrogeology and water resources, geologic hazards, seismology, surface processes,

and volcanology. Field, laboratory, and computer skills are essential to the study of the geological sciences. Research in the geosciences is active and varied, with faculty and students interacting closely. BS and BA degrees are offered in geology and a BS degree in environmental geological sciences. A BA in Earth sciences is also offered, and is intended for future secondary school teachers. Minors in geology and Earth sciences are also available to supplement careers in other fields.

Students who declare a major in geology must register with the department and work out a specific program of study with the chairperson or an assigned advisor. Course programs can be tailored to the student's needs and interests with the aid of an academic advisor. Other course requirements may be modified in cases where past performance indicates superior ability. Students must be evaluated for math placement upon declaration of the major with the goal of establishing proficiency at the MATH 154 level early in the major program.

Bachelor of Science Major

The BS curriculum in geosciences prepares students for careers in solid-earth geosciences and environmental geology. This program assures adequate preparation in the basic physical sciences and breadth in the geosciences, so that students are well prepared for graduate school and have flexibility in career decisions. The BS requires courses in the geological sciences and additional courses in mathematics, chemistry, and physics. The BS degree is also appropriate for students who wish to continue in other quantitative scientific fields or directions (e.g., medical school).

Bachelor of Arts and Bachelor of Science

(NOTE: Students seeking a BA degree must complete one year college/university study or two years high school study of a single foreign language.)

The BA degree is designed for students planning professional careers in the geosciences and for those preparing to incorporate geosciences into broader careers such as teaching, resource management, environmental planning, business, or law. The BA degree may be an appropriate prerequisite for some graduate programs, but a BS is generally recommended for those in the geological sciences. Election of this major will allow students to choose supporting courses from disciplines such as computer science, mathematics, and physics or other physical or biological sciences, or from disciplines as diverse as anthropology, environmental studies, or geography.

Bachelor of Science**Geology Major****Required Courses**

GEOL 101 - Physical Geology	4
OR	
GEOL 103 - Geology of Washington (4)	
GEOL 101LAB - Physical Geology Laboratory	1
GEOL 200 - Earth Evolution and Global Change	5
GEOL 210 - Introduction to Geologic Field Methods	4
GEOL 305 - Quantitative Methods of Geology	4
GEOL 320 - Rocks and Minerals	5
GEOL 346 - Mineralogy	5
GEOL 360 - Structural Geology	5
GEOL 370 - Stratigraphy	5
GEOL 487 - End of Major Review Seminar	1
GEOL 489 - Geologic Field Methods	6-12
Electives selected from the following	19-20
(Take at least one with asterisk)	
GEOL 377 - Regional Natural History (2)	
AND	
GEOL 377LAB - Regional Natural History (3)	
GEOL 380* - Environmental Geology and Natural Hazards (4)	
GEOL 381* - Environmental Mineralogy (4)	
GEOL 386* - Geomorphology (5)	
GEOL 415* - Earthquake Geology and Neotectonics (5)	
GEOL 423 - The Cryosphere (5)	
GEOL 425* - Environmental Geochemistry (5)	
GEOL 432 - Field Geodetics (3)	
GEOL 434 - Petroleum Geology (5)	
GEOL 441 - Climate Variability and Climate Change (5)	
GEOL 445* - Hydrogeology (5)	
GEOL 452 - Geophysics (4)	
GEOL 453 - Seismology (5)	
GEOL 454 - Geostatistics (5)	
GEOL 456 - Geodynamics (5)	
GEOL 463 - Tectonic Investigations (2)	
AND	
GEOL 463LAB - Tectonic Field Investigation (3)	
GEOL 474 - Quaternary Geology (4)	
GEOL 475 - Petrography and Petrogenesis (5)	
GEOL 478 - Volcanology (5)	
GEOL 480 - Geochemistry (4)	
GEOL 481 - Mineralogy and Planetary Materials (4)	
GEOL 483 - Isotope Geochemistry (5)	
GEOL 484 - Geochronology (5)	
GEOL 488 - Senior Colloquium in Geology (4)	

Total Credits: 64-71**Allied Science Requirements for Bachelor of Science Degree****Required Courses**

Chemistry	10
CHEM 181, 181LAB, 182, 182LAB.	
Physics	10
PHYS 181, 181LAB, 182, 182LAB	

Mathematics	10
MATH 172 - Calculus I (5)	
MATH 173 - Calculus II (5)	
Select one of the following:	4-5
CHEM 183 - General Chemistry III (4)	
MATH 265 - Linear Algebra I (4)	
MATH 272 - Multivariable Calculus I (5)	
MATH 311 - Statistical Concepts and Methods (5)	

BS Allied Science Total Credits: 34-35**Bachelor of Science Total Credits: 98-106****Bachelor of Arts****Geology Major****Required Courses**

GEOL 101 - Physical Geology	4
OR	
GEOL 103 - Geology of Washington (4)	
GEOL 101LAB - Physical Geology Laboratory	1
GEOL 200 - Earth Evolution and Global Change	5
GEOL 210 - Introduction to Geologic Field Methods	4
GEOL 305 - Quantitative Methods in Geology	4
GEOL 320 - Rocks and Minerals	5
GEOL 346 - Mineralogy	5
GEOL 360 - Structural Geology	5
GEOL 370 - Stratigraphy	5
GEOL 452 - Geophysics (4)	
OR	
GEOL 480 - Geochemistry (4)	4
GEOL 487 - End of Major Review Seminar	1
GEOL 489 - Geologic Field Methods	6-12

Electives selected from the following **17-20**
(Take at least one with asterisk)

GEOL 377 - Regional Natural History (2)	
AND	
GEOL 377LAB - Regional Natural History (3)	
GEOL 380* - Environmental Geology and Natural Hazards (4)	
GEOL 381* - Environmental Mineralogy (4)	
GEOL 386* - Geomorphology (5)	
GEOL 415* - Earthquake Geology and Neotectonics (5)	
GEOL 423 - The Cryosphere (5)	
GEOL 425* - Environmental Geochemistry (5)	
GEOL 432 - Field Geodetics (3)	
GEOL 434 - Petroleum Geology (5)	
GEOL 441 - Climate Variability and Climate Change (5)	
GEOL 445* - Hydrogeology (5)	
GEOL 452 - Geophysics (4)	
GEOL 453 - Seismology (5)	
GEOL 454 - Geostatistics (5)	
GEOL 455* - Applied Geophysics (4)	
GEOL 456 - Geodynamics (5)	
GEOL 463 - Tectonic Investigations (2)	
AND	
GEOL 463LAB - Tectonic Field Investigation (3)	
GEOL 474 - Quaternary Geology (4)	
GEOL 475 - Petrography and Petrogenesis (5)	

GEOL 478 - Volcanology (5)	
GEOL 480 - Geochemistry (4)	
GEOL 481 - Mineralogy and Planetary Materials (4)	
GEOL 483 - Isotope Geochemistry (5)	
GEOL 484 - Geochronology (5)	
GEOL 488 - Senior Colloquium in Geology (4)	

Total Credits: 62-71**Allied Science Requirements for Bachelor of Arts Degree**MATH 154 - Pre-Calculus Mathematics II . . . 5
Select 10 credits from the following 10

CHEM 111 & 111LAB, 112 & 112LAB, 113 & 113LAB, 181 & 181LAB, 182 & 182LAB, 183 & 183LAB	
PHYS 111 & 111LAB, 112 & 112LAB, 113 & 113LAB, 181 & 181LAB, 182 & 182LAB, 183 & 183LAB	
MATH 172, 173, 311	

BA Allied Science Total Credits: 15**Bachelor of Arts Total Credits: 77-86****Bachelor of Science Environmental Geological Sciences Major****Required Core Courses**

GEOL 101 - Physical Geology (4)	4-5
OR	
GEOL 103 - Geology of Washington (4)	
OR	
GEOL 108 - Introduction to Environmental Geology (5)	
GEOL 101LAB - Physical Geology Laboratory	1
GEOL 200 - Earth Evolution and Global Change	5
GEOL 210 - Introduction to Geologic Field Methods	4
GEOL 305 - Quantitative Methods in Geology	5
GEOL 320 - Rocks and Minerals	5
GEOL 370 - Stratigraphy	5
GEOL 380 - Environmental Geology and Natural Hazards	4
GEOL 386 - Geomorphology	5
GEOL 425 - Environmental Geochemistry	5
OR	
GEOL 483 - Isotope Geochemistry (5)	
GEOL 445 - Hydrogeology	5
GEOL 487 - End of Major Review Seminar	1
Electives selected from the following	24-25
(Must take at least one with asterisk)	
BIOL 362 - Biomes of the Pacific Northwest (4)	
CHEM 345 - Environmental Chemistry (5)	
ECON 462* - Economics of Energy, Resources, and Environment (5)	
ENST 303* - Environmental Management (5)	
ENST 310* - Energy and Society (5)	
GEOG 305* - Introduction to Land Use Planning (5)	
GEOG 361 - Soils (5)	

GEOG 373* - Water Resources (4)
 GEOG 382 - Hydrology (5)
 GEOG 445* - Natural Resources Policy (4)
 GEOL 302 - Oceans and Atmosphere (4)
 GEOL 377 - Regional Natural History (2)
 AND
 GEOL 377LAB - Regional Natural History (3)
 GEOL 381 - Environmental Mineralogy (4)
 GEOL 410 - Snow Sciences: The Physics of Avalanches (4)
 GEOL 415 - Earthquake Geology and Neotectonics (5)
 GEOL 423 - Cryosphere (5)
 GEOL 425 - Environmental Geochemistry (5)
 GEOL 430 - Remote Sensing (5)
 GEOL 441 - Climate Variability and Climate Change (5)
 GEOL 455 - Applied Geophysics (4)
 GEOL 474 - Quaternary Geology (4)
 GEOL 478 - Volcanology (5)
 GEOL 483 - Isotope Geochemistry (5)
 HIST 454 - American Environmental History (5)
 PHIL 306 - Environmental Ethics (5)

Total Credits: 73-75

Allied Science Requirements for Bachelor of Science Environmental Geological Sciences Degree

A one-year series is required in chemistry and mathematics: two quarters are required in physics.

CHEM 181 & 181LAB, 182 & 182LAB, 183 & 183LAB. 15
 PHYS 181 & 181LAB, 182 & 182LAB, 10
 MATH 172 and 173 10

Allied Science Total Credits: 35

BS Environmental Geological Sciences Total Credits: 108-110

Geology Minor

Required Courses

GEOL 101 - Physical Geology 4
 OR
 GEOL 102 - Geology of National Parks (4)
 GEOL 101LAB - Physical Geology Laboratory 1
 GEOL 200 - Earth Evolution and Global Change 5
 GEOL 320 - Rocks and Minerals 5
 Department-approved electives 18-20

Total Credits: 33-35

Bachelor of Arts

(NOTE: Students seeking a BA degree must complete one year college/university study or two years high school study of a single foreign language.)

Bachelor of Arts

Earth Science Teaching Major

This major satisfies the criteria for an endorsement in earth and space science and qualifies students to teach Earth and space science at the high school, middle, or junior high school levels. Students should seriously consider working toward endorsement in a second area, such as biology, chemistry, general science, middle-level science, middle-level mathematics, physics, or mathematics. Students taking this major are required to apply to the Teacher Preparation Program and complete the Professional Education Program requirements offered through the Department of Educational Foundations and Curriculum with the exception of EFC 416 and EFC 350 (44 total credits required). Students completing this program are required to demonstrate knowledge, skill, and disposition proficiency through a program portfolio prior to student teaching. Students must pass the WEST-E exam for Earth and space science to receive an Earth and space science endorsement.

Required Courses

CHEM 111 - Introduction to Chemistry 4
 AND
 CHEM 111LAB - Introductory Chemistry Laboratory 1
 OR
 CHEM 181 - General Chemistry I (4)
 AND
 CHEM 181LAB - General Chemistry Laboratory I (1)
 GEOL 101 - Physical Geology 4
 OR
 GEOL 103 - Geology of Washington (4)
 GEOL 101LAB - Physical Geology Laboratory 1
 GEOL 200 - Earth Evolution and Global Change 5
 GEOL 210 - Introduction to Geologic Field Methods 4
 GEOL 302 - Oceans and Atmosphere 4
 GEOL 320 - Rocks and Minerals 5
 GEOL 350 - Teaching Northwest Geology .. 4
 GEOL 370 - Stratigraphy 5
 GEOL 380 - Environmental Geology and Natural Hazards 4
 GEOL 386 - Geomorphology 5
 GEOL 492B - Laboratory Experience Teaching Earth Science 2
 MATH 153 - Pre-Calculus Mathematics I ... 5
 PHYS 101 - Introductory Astronomy I. 5
 SCED 324 - Science Education in Secondary Schools I 3
 SCED 325 - Science Education in Secondary Schools II 3
 SCED 401 - Interdisciplinary Secondary Science Inquiry 5
 SCED 487 - Teaching Secondary Science Seminar 2

Total Credits: 71

Geology Courses

GEOL 101. Physical Geology (4). An introduction emphasizing the origin and nature of the common rocks and the continually changing features of the Earth's crust. Four lectures per week. This is a General Education writing course - Natural Sciences - Fund Disc Physical and Biological Sciences. Co- or prerequisite: GEOL 101LAB.

GEOL 101LAB. Physical Geology Laboratory (1). Application of map study to geological processes and land forms, identification of rocks and minerals, and local field trips. Two hours laboratory per week. This is a General Education writing course - Natural Sciences - Fund Disc Physical and Biological Sciences. Corequisite: GEOL 101 or GEOL 102 or GEOL 103.

GEOL 102. Geology of National Parks

(4). Fundamentals of geology applied to selected national parks in North America. Four lectures per week. Co- or prerequisite: GEOL 101LAB.

GEOL 103. Geology of Washington (4).

Fundamentals of geology applied to the state of Washington. Topics include Washington's volcanic, earthquake, tectonic, and glacial activity. Four lectures per week. This is a General Education writing course - Natural Sciences-Patterns and Connections of the Natural World. Corequisite: GEOL 101LAB.

GEOL 107. Volcanoes, Earthquakes, and Civilization (5).

The role of natural geologic processes such as volcanoes, earthquakes, and climate change in shaping the earth, the environment and human civilization. Four hour lecture per week plus required field trips.

GEOL 108. Introduction to Environmental Geology (5). Interaction between human activity and geological processes. Scientific discussion of global environmental issues such as ozone depletion, climate change, geologic hazards, natural resources, and water use.

GEOL 200. Earth's Evolution and Global Change (5). Evolution of Earth, plate tectonics, life, and climate over the last 4.5 billion years. Three lectures, four hours laboratory per week. Prerequisites: either GEOL 101 or 102, and GEOL 101LAB.

GEOL 210. Introduction to Geologic Field Methods (4). Introduction to the basic methods of geologic field investigation. Emphasis on constructing geologic maps. The class will consist of two weeks in the field, primarily along the eastern front of the Sierra Nevada, California, or other regions in the western United States. The class will be offered during the summer break or as arranged by the instructor. Students will register for the class during the immediately subsequent academic year quarter. Extra fees required. Prerequisites: either GEOL 101 or 102, and GEOL 101LAB.

GEOL 302. Oceans and Atmosphere (4).

Introduction to Earth's climate and the

hydrologic cycle through study of the ocean-atmosphere system. Chemical and physical changes will be studied over time scales ranging from millions of years to days. Will include a field trip. Prerequisite: sophomore standing or above.

GEOL 305. Quantitative Reasoning for Geoscientists (4). An introduction to quantitative methods commonly used for observation, analysis, and interpretation of geologic features and processes. Prerequisite: either GEOL 101 or GEOL 102; and GEOL 101LAB; and MATH 100C or above.

GEOL 320. Rocks and Minerals (5). Identification, classification, and evolution of common igneous and metamorphic rocks. Includes recognition and interpretation of rocks in typical field exposures. Three hours lecture and three hours laboratory per week plus required field trips. Prerequisites: either GEOL 101 or 102, and GEOL 101LAB, and any chemistry course.

GEOL 346. Mineralogy (5). Physical, chemical, and crystallographic properties, and occurrence of minerals. Examination and description of hand specimens and crystal models. Theory and practice in optical mineralogy and X-ray diffraction. Four lectures and three hours laboratory per week. Prerequisite: GEOL 320.

GEOL 350. Teaching Northwest Geology (4). Designed for students planning to teach in Washington public schools. Fundamentals of geology applied to the Pacific Northwest. May include student presentations and teaching practica. Four hours per week. Prerequisites: either GEOL 101 or 102, and GEOL 101LAB.

GEOL 360. Structural Geology (5). Introduction to the basic principles of rock deformation with an emphasis on the geometry, styles, and mechanics of faulting and folding and the stereographic projection and analysis of geologic structures. Three lectures and four hours laboratory per week. Field trips required. Prerequisite: GEOL 200.

GEOL 370. Stratigraphy (5). Origin of sedimentary rocks, physical processes and stratigraphic principles. Identification of sedimentary rocks in hand sample. Four hours lecture and four hours laboratory per week. Three day field trip required. Prerequisite: GEOL 200.

GEOL 377. Regional Natural History (2). Classroom study of the natural history of a selected region as preparation for a one- or two-week field trip. Emphasis will be on developing background skills to undertake a field exploration over the quarter (winter, spring, summer) break. Subtitles will identify the selected geographical region (e.g. Baja California Natural History). GEOL 377 and BIOL 377 are equivalent courses. May be repeated for credit under a different subtitle (region). By permission.

GEOL 377LAB. Regional Natural History (3). One- or two-week field trip to explore

biological and physical patterns and processes in selected regions of North America. Emphasis will be on recording field observations, keeping a field journal, field study techniques, and performing investigations chosen and developed by student participants. Subtitles will identify the region studied. BIOL 377LAB and GEOL 377LAB are equivalent courses. Special fees required. May be repeated for credit under a different subtitle.

GEOL 380. Environmental Geology and Natural Hazards (4). Examine interactions between humans and their environment from a geologic perspective, evaluating problems such as geologic hazards and the use of Earth's resources. Four lectures per week and required field trips. Prerequisites: either GEOL 101 or 102, and GEOL 101LAB.

GEOL 386. Geomorphology (5). Descriptive and interpretive examination of Earth's landforms. Four lectures and three hours laboratory or field trips. GEOL 386 and GEOG 386 are equivalent courses; students may not receive credit for both. Prerequisites: either GEOL 101 or 102, and either GEOL 101LAB or GEOG 107.

GEOL 386. Geomorphology (5). Descriptive and interpretive examination of the Earth's landforms, and the processes and factors that shape these features over space and time. Four lectures and three hours laboratory or field trips each week. GEOG 386, GEOG 486, and GEOL 386 are equivalent courses; students may not receive credit for both. Prerequisites: either GEOL 101 and GEOL 101LAB or GEOL 102 and GEOL 101LAB or GEOG 107.

GEOL 388. Field Trips (1-3). Intensive study of geological phenomena on field trips up to two weeks in length. Three days field work for each credit. Extra fees required. May be repeated for areas of significantly different geologic content. Grade will either be S or U. By permission.

GEOL 392. Lab Experience Teaching Physical Geology (1). May be taken twice for credit. Grade will either be S or U. Prerequisites: either GEOL 101 or 102, and GEOL 101LAB.

GEOL 395. Junior Research (1-6). May be repeated up to 12 credits. By permission.

GEOL 396. Individual Study (1-6).

GEOL 398. Special Topics (1-6).

GEOL 404. Intermediate GIS (5). Applied concepts, principles, and operation of fundamental GIS applications, including raster-vector data models, topology, digitizing, and various analytical techniques such as overlay, buffers, and Boolean queries. Lecture and practical applications. ANTH 404, GEOL 404 and GEOG 404 are equivalent courses; students may not receive credit for more than one. Prerequisites: either GEOG, GEOL, or ANTH 303 or 403.

GEOL 410. Snow Sciences: The Physics of Avalanches (4). Physical processes in avalanches and snow dynamics; snow pack accumulation, redistribution, metamorphism, energy balance, ablation, and

runoff. Field investigations are required under rigorous outdoor conditions. Three hours lecture and six hours field laboratory per week. By permission.

GEOL 415. Earthquake Geology and Neotectonics (5). Geomorphology, stratigraphy, and structural geology applied to the study of active faults and folds in a variety of tectonic settings. Relation of seismicity and geodetic measurements to geologic structure and active tectonic processes, including case studies of selected earthquakes. Three hours lecture and four hours laboratory per week. GEOL 415 and GEOL 515 are equivalent courses; students may not receive credit for both. Prerequisites: either GEOL 101 or 102, and GEOL 101LAB.

GEOL 417. Advanced GIS (4). Advanced GIS principles, techniques, analysis, and application. Lecture and practical hands-on experience. Applied experience using GIS software. GEOL 417, ANTH 417 and GEOG 417 are equivalent courses; students may not receive credit for more than one. Prerequisites: either GEOG, GEOL, or ANTH 404.

GEOL 423. The Cryosphere (5). Components of the cryosphere (ice sheets, mountain glaciers, ice shelves, global snow cover, sea ice extent, and permafrost/frozen ground) will be examined, including anticipated changes in the cryosphere due to changing climate. GEOL 423 and GEOL 523 are equivalent courses; students may not receive credit for both. Prerequisites: GEOL 101 or GEOL 102 and GEOL 101LAB, GEOL 200, GEOL 210, CHEM 181 and CHEM 182.

GEOL 425. Environmental Geochemistry (5). Global geochemical cycles, influences of rocks and soils on water chemistry, behavior of isotopes and trace elements. Includes class project studying local environmental geochemistry topic. Three lectures plus one three-hour lab per week. GEOL 425 and GEOL 525 are equivalent courses; students may not receive credit for both. Prerequisites: CHEM 181, 181LAB, 182, and 182LAB.

GEOL 430. Remote Sensing (5). Principles of acquisition, analysis, and use of remotely sensed data (LANDSAT, SPOT, Ikonos, etc.). Applied experience using image processing software. Three hours lecture and three hours laboratory per week. GEOL 430, GEOG 430, and GEOL 530 are equivalent courses; students may not receive credit for more than one. Prerequisites: GEOG 410 or GEOL 210.

GEOL 432. Field Geodetic Techniques (3). Training in field geodetic techniques, including scientific application of two or more precision surveying instruments: geodetic GPS, differential GPS, and electronic distance meter. Three hours a week and field project, or one-week field course. GEOL 432 and GEOL 532 are equivalent courses; students may not receive credit for both. Prerequisites: GEOL 101 or 102, and 101LAB, and GEOL 200 and 210.

GEOL 434. Petroleum Geology (5). Petroleum geology delivers a comprehensive introduction to the application of geology in the oil and gas industry, including the origin and occurrence of petroleum, application of geology in exploration and production, and the evolution of the industry in the context of global demand. GEOL 434 and GEOL 534 are equivalent courses; students may not receive credit for both. Prerequisites: GEOL 101, 101LAB, 370, and either 200 or 210.

GEOL 441. Climate Variability and Climate Change (5). Examine past, present, and future changes in climate, and the factors that contribute to climate change over various timescales. GEOL 441 and GEOL 541 are equivalent courses; students may not receive credit for both. Prerequisite: GEOL 200.

GEOL 445. Hydrogeology (5). Study of the occurrence and movement of ground water using geology, hydrology, and geochemistry, with an emphasis on practical problems in water management. Three hours lecture and three hours laboratory per week. GEOL 445 and GEOL 545 are equivalent courses; students may not receive credit for both. Prerequisites: MATH 154, either GEOL 101 or 102, and GEOL 101LAB.

GEOL 452. Geophysics (4). Basic elasticity theory, gravity, and geoid analysis. Terrestrial heat flow and seismology. Three hours lecture per week plus four hours of scientific computing lab. No prior Unix experience required. Prerequisite: MATH 154.

GEOL 453. Seismology (5). Elasticity theory, the wave equation, ray theory, diffraction, waveform modeling, travel time inversion. Data analysis. Three hours lecture per week plus four hours of scientific computing lab. Offered alternate years. GEOL 453 and GEOL 553 are equivalent courses; students may not receive credit for both. Prerequisite: MATH 173.

GEOL 454. Geostatistics (5). Introduction to statistical analysis and numerical simulation of problems relevant to Earth science. Three hours of lecture and three hours of lab. No prior Unix experience necessary. GEOL 454 and GEOL 554 are equivalent courses; students may not receive credit for both.

GEOL 456. Geodynamics (5). Study of plate tectonics and mountain building processes that shape Earth. Lab includes introduction to Matlab software for analysis and visualization. Required field trip. GEOL 456 and GEOL 556 are equivalent courses; students may not receive credit for both. Corequisite: MATH 172. Prerequisite: GEOL 101.

GEOL 463. Tectonic Investigations (2). Classroom study and analysis of tectonics of a selected region. Emphasis will be on developing background skills and knowledge to undertake a tectonic field investigation in GEOL 463LAB. GEOL 463 and GEOL 563 are equivalent courses; students may not receive credit for both.

GEOL 463LAB. Tectonic Field Investigation (3). Tectonic investigation and analysis of select field sites employing a variety of field and laboratory measurements such as mapping, tectonic geomorphology, GPS, and Total Station surveying. Course consists of either weekly local field trips during the quarter or single one-week trip over spring break to another region. GEOL 463LAB and GEOL 563LAB are equivalent courses; students may not receive credit for both. Corequisite: GEOL 463.

GEOL 474. Quaternary Geology (4). Study of geological processes affecting Earth's most recent history. Course emphasizes global quaternary environmental change, glacial epochs, paleoclimatic methods, and dating techniques. GEOL 474 and GEOL 574 are equivalent courses; students may not receive credit for both. Prerequisites: either GEOG or GEOL 386.

GEOL 475. Petrography and Petrogenesis (5). Petrogenetic, hand specimen, and thin section study of igneous, metamorphic, or sedimentary rocks. Three hours lecture and four hours laboratory or field work per week plus required field trips. GEOL 475 and GEOL 575 are equivalent courses; students may not receive credit for both. Offered in alternate years.

GEOL 478. Volcanology (5). Study of volcanoes and associated deposits, styles of eruption, physical and chemical controls on eruption mechanisms, and volcanic hazards and hazard mitigation. Three hours lecture and four hours laboratory per week plus required field trips. GEOL 478 and GEOL 578 are equivalent courses; students may not receive credit for both. Offered in alternate years.

GEOL 480. Geochemistry (4). An introduction to the branches of geochemistry, including the origin of elements, age dating, isotope geochemistry, and petrochemistry. Four hours lecture per week plus required field trips. Prerequisites: GEOL 320, CHEM 182, CHEM 182LAB, and MATH 154.

GEOL 483. Isotope Geochemistry (5). Covers principles of isotope geochemistry and applications to studies of geological processes such as hydrologic cycling, volcanic petrogenesis, and climate change. Three hours lecture per week plus required laboratory work and field trips. GEOL 483 and GEOL 583 are equivalent course; students may not receive credit for both. Offered in alternate years. Prerequisites: CHEM 182, 182LAB, and MATH 154.

GEOL 484. Geochronology (5). Principles, analytical methods, and interpretation of several of the most widely applied geochronological methods. Computer-based data analysis of problems in igneous and metamorphic petrology, structural geology, sedimentary geology, geomorphology, paleoseismology, and planetary science. GEOL 484 and GEOL 584 are equivalent

courses; students may not receive credit for both. Prerequisites: MATH 172 and GEOL 346.

GEOL 487. End-of-major Review Seminar (1). Students must be familiar with the language of geology and possess certain basic geologic skills. Coordinates student participation in program assessment activities and provides a structured avenue for student input into program goals. Grade will either be S or U. Prerequisite: senior status and intention to graduate during the current year.

GEOL 488. Senior Colloquium in Geology (4). Lecture, reading, and presentation of various topics in geology. Three hours lecture plus three hours of discussion per week. Prerequisite: senior standing.

GEOL 489. Geologic Field Methods (6-12). Emphasis is placed on observation and recording of lithologic and structural features, measurement of stratigraphic and structural sections, applications of various survey methods, and plotting geologic data on topographic and aerial photographs in the field. The class will be offered during summer or winter break, or as arranged by the instructor. Credits will be carried in concurrent or immediately subsequent academic year quarter. Extra fees required. Prerequisites: GEOL 200, 360, either GEOL 101 or 102, and GEOL 101LAB.

GEOL 490. Cooperative Education (1-12). An individualized, contracted field experience with business, industry, government, or social service agencies. This contractual arrangement involves a student learning plan, cooperating employer supervision, and faculty coordination. May be repeated for credit. Grade will either be S or U. By permission.

GEOL 491. Workshop (1-6).

GEOL 492A. Experience Teaching Upper-level Geology (2). Assisting with instruction in upper-level geology major lab or field courses. May be repeated for credit under a different title. Grade will either be S or U. By permission.

GEOL 492B. Laboratory Experience Teaching Earth Science (2). Course designed for future Earth science teachers in secondary schools. Assist teaching one laboratory section of GEOL 101LAB and discuss laboratory-teaching methods. Grade will either be S or U.

GEOL 494. Applied GIS Project (2-6). GIS projects in anthropology, biology, geography, geology, and resource management. ANTH 494, GEOL 494 and GEOG 494 are equivalent courses; students may not receive credit for more than one.

GEOL 495. Senior Research (1-6). May be repeated up to 12 credits. By permission.

GEOL 496. Individual Study (1-6).

GEOL 498. Special Topics (1-6).

GEOL 499. Seminar (1-5).

HISTORY DEPARTMENT

College of Arts and Humanities
Ellensburg
Language and Literature Bldg., room 100

509-963-1655

Fax: 509-963-1654

www.cwu.edu/~history

See website for how this program may be
used for educational and career purposes.

Faculty and Staff Chair

Karen J. Blair, PhD

Professors

Karen J. Blair, PhD, 20th century U.S.,
women's history
Roxanne Easley, PhD, Russia, Eastern Europe
Marji Morgan, PhD, 19th century British social
and cultural history

Associate Professors

James Cook, PhD, East Asia
Daniel Herman, PhD, U.S. pre-1877
Jason Knirck, PhD, Britain/British Empire,
Western Europe
Stephen Moore, PhD, Pacific Northwest,
foreign relations, social studies education

Visiting Professors

Stephanie Ballenger, PhD
Brian Carroll, PhD

Lecturers

Michael Duerre, MA
Albert C. Miller, MA
Kenneth Munsell, MA
Jalynn Padilla, PhD
Ian Stacy, MA

Emeritus Professors

Beverly Heckart, PhD, Germany, Europe
Zoltan Kramar, PhD, Ancient World
Larry Lowther, PhD, Colonial and
Revolutionary America
Kent Richards, PhD, American West, Pacific
Northwest

Staff

K. Angie Hill, secretary

Department Information

The history faculty offers courses leading
to bachelor of arts and master of arts.

Students who declare a major in history
must register with the department.

History Honors Program

Qualified students are urged to enter the
Department of History's Honors Program.
To qualify for the program, students must
complete 25 credits in their major and have
an overall GPA of 3.0 and 3.25 in history.
Honors students will complete the following
requirements:

- An elective course in addition to those
required for their major in an area of
concentration (United States, Europe, or
non-western)
- A year of coursework in one
departmentally approved foreign language
at an accredited college or university. If it
is the same language as that taken in high
school, the student must complete the
coursework at the 200 level
- An honors research paper (25 page
minimum) completed during HIST 481. A
faculty committee will judge whether the
paper meets departmental standards for
honors.

Students who complete the above
requirements will graduate with departmental
honors. Please contact the department chair
for more information.

Bachelor of Arts

(NOTE: Students seeking a BA degree
must complete one year college/university
study or two years high school study of a
single foreign language.)

Bachelor of Arts History Major (Large Plan)

Required Courses

Select from the following 20

HIST 101* - World Civilization to 1500 (5)	
HIST 102* - World Civilization: 1500- 1815 (5)	
HIST 103* - World Civilization Since 1815 (5)	
HIST 143 - United States History to 1865 (5)	
HIST 144 - United States History Since 1865 (5)	
HIST 302 - Introduction to History. 5	
HIST 481 - Understanding History. 4	
Upper-division United States history 5	
Upper-division European history 5	
Upper-division African, Asian, Middle Eastern, or Latin American history 10	
HIST 401, 402, or 403 - History Readings Seminar. 5	
Upper-division history electives. 20	

Total Credits: 74

* Western Civilization may be substituted.

Bachelor of Arts History Major (Small Plan)

(Note: It is recommended that students
who plan to enter graduate school should
complete two years of a foreign language at
the college level.)

Required Courses

***Select from the following 20**

HIST 101 - World Civilization to 1500 (5)	
HIST 102* - World Civilization: 1500- 1815 (5)	

HIST 103* - World Civilization Since
1815 (5)

HIST 143 - United States History to
1865 (5)

HIST 144 - United States History Since
1865 (5)

HIST 302 - Introduction to History. 5

HIST 481 - Understanding History. 4

Upper-division United States history 5

Upper-division European history 5

Upper-division African, Asian, Middle

Eastern, or Latin American history 10

HIST 401, 402, or 403 - History Readings

Seminar. 5

Upper-division history electives. 5

Total Credits: 59**

* Western Civilization may be substituted.

**Students with fewer than 60 credits
must have a minor or another major in
order to graduate.

Bachelor of Arts History/Social Studies Teaching Major

This major satisfies the endorsements
for history and social studies. This major
is designed for students in the secondary
Teacher Training Program. Students taking
this major are required to apply to the Teacher
Preparation Program and complete the
Professional Education Program requirements
offered through the Department of
Educational Foundations and Curriculum.

Required Courses

***Select from the following 20**

HIST 101 - World Civilization to 1500 (5)	
HIST 102* - World Civilization: 1500- 1815 (5)	
HIST 103* - World Civilization Since 1815 (5)	
HIST 143 - United States History to 1865 (5)	
HIST 144 - United States History Since 1865 (5)	
HIST 301 - Pacific Northwest History 5	
HIST 302 - Introduction to History 5	
**HIST 421 - Methods and Materials in the Social Studies, Secondary 5	
HIST 481 - Understanding History. 4	
POSC 210 - American Politics 5	

Select from the following 15

Upper-division U.S. History (5)	
Upper-division European History (5)	
Upper-division African, Asian, Middle Eastern, or Latin American History (5)	

Select from the following 5

ECON 101 - Economic Issues (5)	
ECON 102 - World Economic Issues (5)	
ECON 201 - Principles of Economics Micro (5)	
ECON 202 - Principles of Economics Macro (5)	

Select from the following 5

ANTH 107 - General Anthropology (5)	
SOC 101 - Social Problems (5)	
SOC 107 - Principles of Sociology (5)	

Select from the following 5

- GEOG 101 - World Regional Geography (5)
 GEOG 107 - Introduction to Physical Geography (5)
 GEOG 304 - Economic Geography (5)
 GEOG 308 - Cultural Geography (5)

Select from the following 3-5

- GEOG 352 - Geography of North America (5)
 GEOG 355 - Geography of the Pacific Northwest (4)
 GEOG 371 - Geography of Europe (5)
 GEOG 415 - Geography of Oceania (3)
 GEOG 470 - Geography of Latin America (4)
 GEOG 474 - Geography of China (4)
 GEOG 475 - Geography of Asia (5)

Total Credits: 77- 79

*Western Civilization may be substituted.

**Prior completion of EDCS 311 recommended. Students must be admitted to the Teacher Preparation Program prior to enrolling in this course.

History Minor**Required Courses****Select from the following 10**

- HIST 101,102,103* – World Civilization
 HIST 143,144 - United States History

Upper-division History electives 20**Total Credits: 30**

*Western Civilization may be substituted.

History Courses**HIST 101. World Civilization to 1500 (5).**

Origins and development of the major world civilizations to the 15th century. A comparative study of their political, social, and economic institutions, and their religious and intellectual backgrounds. Meets the General Education writing requirement.

HIST 102. World Civilization: 1500-1815 (5).

A comparative survey of political, social, economic, and cultural developments. For general education (breadth) credit, it is preferred that a student be enrolled in or have completed ENG 101. Meets the General Education writing requirement.

HIST 103. World Civilization Since 1815 (5).

A comparative survey of political, social, economic, and cultural developments. For general education (breadth) credit, it is preferred that a student be enrolled in or have completed ENG 101. Meets the General Education writing requirement.

HIST 143. United States History to 1865 (5).

The Colonial, Revolutionary, and National periods. Meets the General Education writing requirement.

HIST 144. United States History Since 1865

(5). Reconstruction, Industrial America, and 20th century urban America. For general education (breadth) credit, it is preferred that a student be enrolled in or have

completed ENG 101. Meets the General Education writing requirement.

HIST 298. Special Topics (1-6).**HIST 301. Pacific Northwest History (5).**

Exploration and settlement; subsequent political, economic, and social history with particular emphasis on Washington.

HIST 302. Introduction to History (5).

Exercises in historical research, critical analysis, and interpretation. Students must earn a minimum grade of C as a major requirement. Prerequisites: sophomore or junior standing and admission to either the history, history teaching broad area, social science, or social science teaching major.

HIST 313. History of Rome 500 B.C. to 500

A. D. (5). Beginning, city-state, republican period; world empire; decline.

HIST 314. Military History of the United

States (5). A comprehensive and systematic survey and analysis of the American military experience from Colonial times through the Vietnam War. HIST 314 and MSL 314 are equivalent courses; students may not receive credit for both.

HIST 315. Muslim Middle East (3-5). The origins and spread of Islamic civilization and its interaction with Graeco-Roman, Persian, and Indian civilizations. Crusades and the rise and fall of the Ottoman Empire.**HIST 316. Modern Middle East: 1914 to**

the Present (3-5). The Arab revolt, the British-French mandates, nationalism, modernization, independence movements, Arab-Israeli struggle, Palestinians, and oil politics.

HIST 322. World Prehistory (4). Old- and

New-world prehistory from late Pliocene to the early historic period, including the ecology and development of hunting-gathering, agriculture, and state-level societies. HIST 322 and ANTH 322 are equivalent courses; students may not receive credit for both.

HIST 325. Renaissance and Reformation

(5). Survey of European political, social, cultural, and economic revolutions from the 14th to 16th centuries; including medieval dissolution, humanism, overseas exploration, Protestantism, and popular culture.

HIST 328. Modern Latin America (5).

Analyzes the history of Latin America in the past two centuries, from the Wars of Independence to the present day.

HIST 329. The Tropics and the Modern

World (5). Analyzes the history of the modern world through the history of tropical commodities.

HIST 331. Colonial Africa (3-5). Africa on

the eve of colonial conquest; causes of imperialism; colonial rule and African reactions and initiatives; independence and colonial legacy.

HIST 332. History of the Black Diaspora (5).

This course focuses on the black diaspora. It looks at the movement and impact of black people from Africa to other parts of the world. It examines their contribution to world civilizations and identities.

HIST 339. Colonial British America (5).

Social, cultural, political, and economic life in the British colonies of North America to 1763.

HIST 343. African American History since

1865 (5). This course explores United States history from the late 19th century to the present day, focusing on the experiences of African Americans.

HIST 346. Women in American History

(5). A survey of the role of women, their treatment, and response in American society from colonial times to the present.

HIST 348. Economic History of the United

States (5). Economic factors in the development of the American nation from the European background to the present. HIST 348 and ECON 348 are equivalent courses; students may not receive credit for both.

HIST 352. The History of the American

Family (3). American family patterns from early settlement to the present; demography, gender roles, courtship, marriage, child raising, aging, ethnicity, and alternative lifestyles.

HIST 370. Medieval European History (5).

Survey of Western European history from late antiquity to the 16th century; political, economic, social, and religious thought and institutions.

HIST 377. Early Modern Europe, 1600-1789

(5). A survey of the major trends and events in European history during the two centuries leading up to the French Revolution. Topics covered include the Glorious Revolution, the Enlightenment, and the rise of absolutism.

HIST 380. Modern East Asia (5). A survey

of the modern histories of China, Japan, and Korea from 1600 to the present. Imperialism, nationalism, and the rise of communism are covered.

HIST 381. History of Modern Southeast

Asia: Colonial Era to the Present (5). This is a survey course in the political and cultural history of modern Southeast Asia. It will examine European colonialism, nationalism, decolonization, and post WWII configuration.

HIST 383. East Asian Civilization (5). A

general survey of the development of civilization in China, Japan, and Korea to about 1600.

HIST 386. The Latin American Colonies (5).

Analyzes the history of Latin America and the Caribbean from pre-Columbian times to the Wars of Independence.

HIST 395. Research in Local History (1- 6).

Comparative local history with emphasis on research techniques and the utilization of sources. May be repeated for credit.

HIST 398. Special Topics (1-6).**HIST 401. Readings in U.S. History (5).**

Readings seminar of United States history. May be repeated up to 15 credits.

HIST 402. Reading in European History (5).

Readings seminar on European history. May be repeated for up to 15 credits.

HIST 403. Readings in African, Asian, Middle Eastern, Latin American History (5). Readings seminar on African, Asian, Middle Eastern, or Latin American history. May be repeated up to 15 credits.

HIST 421. Methods and Materials in the Social Studies, Secondary (5). Prerequisite: EDCS 311 and admission to the Teacher Preparation Program.

HIST 422. British Isles to 1763 (5). The British Isles from Roman times to the conclusion of the Seven Years War. Course will cover the rise of the English monarchy, the Renaissance and Reformation in England, and the beginnings of the British Empire. HIST 422 and HIST 522 are equivalent course; students may not receive credit for both.

HIST 423. The Irish Revolution (5). History and historiography of the Irish revolution. Topics include the constitutional and revolutionary antecedents, the course of the revolution, and the foundation of the Irish Free State. HIST 423 and HIST 523 are equivalent courses; students may not receive credit for both.

HIST 424. Modern Ireland: 1798-present (5). The history of Ireland from the revolt of 1798 through the present. Focus will be on the varieties of Irish nationalism, the process of state-building, and the ongoing troubles in the north. HIST 424 and HIST 524 are equivalent courses; students may not receive credit for both.

HIST 426. France 1789-1945 (5). French history through the lens of revolution. Discussions of the variety of French revolutions (1789, 1792, 1830, 1848, 1870) and concluding with the National Revolution of Vichy France. HIST 426 and HIST 526 are equivalent courses; students may not receive credit for both.

HIST 427. Modern Britain and the Empire since 1688 (5). History of Britain and the empire since the Glorious Revolution. Topics include growth of empire, industrialization, political reform, world wars, decolonization, and post-war social changes. HIST 427 and HIST 527 are equivalent courses; students may not receive credit for both.

HIST 435. History of South Africa (5). This course examines the history of South Africa from the earliest time to the present. It looks at pre-colonial African states; colonialism; apartheid; and the triumph of African nationalism under the ANC and Nelson Mandela. HIST 435 and HIST 535 are equivalent courses; students may not receive credit for both.

HIST 436. The History of Arab and Israeli Relations (5). This course examines the history of the Arab-Israeli conflict beginning with the decline of the Ottoman Empire and the British mandate in Palestine. It focuses on the post-1948 Arab relations with Israel in Palestine. HIST 436 and HIST 536 are equivalent courses; students may not receive credit for both.

HIST 437. History of Islamic Traditions (5). This course will cover the history of Islam and Muslim societies around the world since 1700 using a global perspective. It will also examine Islamic developments in Asia, Europe, and North America. HIST 437 and HIST 537 are equivalent courses; students may not receive credit for both.

HIST 438. Conquests and Compromises: American Indian History since 1492 (5). Discussion and lecture course on interactions between Native Americans and Europeans in North America since the arrival of Columbus. HIST 438 and HIST 538 are equivalent courses; students may not receive credit for both.

HIST 440. The American Revolution (5). Causes and consequences of the American Revolution, 1688-1789. HIST 440 and HIST 540 are equivalent courses; students may receive credit for both.

HIST 441. Oral History (3). Training and practice in conducting oral histories and analyzing their content.

HIST 443. The West in American History (3-5). Exploration, territorial acquisition, patterns of settlement, economic development, and the influence of the frontier on American institutions. HIST 443 and HIST 543 are equivalent courses; students may not receive credit for both.

HIST 444. Sectionalism, Civil War, and Reconstruction (3-5). Slavery, the Old South, sectionalism, the breakdown of the Union, and secession. A military, political, and social history of North and South during the Civil War, and the aftermath of the war. HIST 444 and HIST 544 are equivalent courses; students may not receive credit for both.

HIST 445. Introduction to Public History (5). This course examines the venues through which the general public learns American history, with visits and analysis of exhibits and their interpretation.

HIST 449. History of Women and the West (5). Women in the western United States, with emphasis on the 19th and 20th centuries: myths and stereotypes; women's work; community roles; class and racial/ethnic differences. HIST 449 and HIST 549 are equivalent courses; students may not receive credit for both.

HIST 450. Exploring U.S. Cultural History (5). Thematic approach to 19th century cultural transformations in U.S. Selected topics: mesmerism, utopias, true womanhood, women's rights, slave spirituals, confidence men, and gold rushes. HIST 450 and HIST 550 are equivalent courses; students may not receive credit for both.

HIST 451. 20th Century U.S.: 1896-1919 (3-5). Imperialism, progressivism, and World War I. HIST 451 and HIST 551 are equivalent courses; students may not receive credit for both.

HIST 452. 20th Century U.S.: 1919-1945 (3-5). Prosperity and depression; the New Deal and its implications; World War II, origins and conclusion. HIST 452 and HIST 552 are equivalent courses; students may not receive credit for both.

HIST 453. 20th Century U.S.: 1945 to the Present (3-5). Cold War, sedentary 50s, rebellious 60s, the Watergate era. HIST 453 and HIST 553 are equivalent courses; students may not receive credit for both.

HIST 454. American Environmental History (5). Environmental values and practices of the diverse populations of America. HIST 454 and HIST 554 are equivalent courses; students may not receive credit for both.

HIST 462. History of American Foreign Relations: 1900-1941 (3-5). From the Spanish-American War to Pearl Harbor. HIST 462 and HIST 562 are equivalent courses; students may not receive credit for both.

HIST 463. History of American Foreign Relations Since 1941 (3-5). From Pearl Harbor to the present. HIST 463 and HIST 563 are equivalent course; students may not receive credit for both.

HIST 464. Latin American Revolutions (5). This course compares and contrasts the causes, courses, and consequences of the Mexican Revolution (1910-40), the Cuban Revolution (1959-present), the Chilean Revolution (1970-73), and the Nicaraguan Revolution (1979-89). HIST 464 and HIST 564 are equivalent courses; students may not receive credit for both.

HIST 465. History of the People's Republic of China. (5). Evaluates the historical record of the Chinese Communists in power since the establishment of the People's Republic of China in 1949. HIST 465 and HIST 565 are equivalent courses; students may not receive credit for both.

HIST 469. History of Russian and Soviet Women (5). Examination of the social status and cultural representations of women in Russia and the Soviet Union from the 17th century to the present. HIST 469 and HIST 569 are equivalent courses; students may not receive credit for both.

HIST 472. German History since 1815 (3-5). A political, socio-economic, and intellectual study of Germany with special attention to the causes, progress, and aftermath of the National Socialist State. HIST 472 and HIST 572 are equivalent courses; students may not receive credit for both.

HIST 473. Russia to 1881 (3-5). The political, social, economic, and cultural development of Russia from ancient times to the assassination of Alexander II. HIST 473 and HIST 573 are equivalent courses; students may not receive credit for both.

HIST 474. Russia Since 1881 (3-5). The political, economic, social and cultural history of Russia and the Soviet Union since 1881. HIST 474 and HIST 574 are equivalent courses; students may not receive credit for both.

HIST 476. History of Modern East Europe

(5). Poland, Czech, Slovak Republics, Austria, Hungary, Romania, Yugoslavia, Bulgaria, Greece, Albania, with special attention to multi-ethnicity, economic underdevelopment and modernization, political dependence, and nationalism. HIST 476 and HIST 576 are equivalent courses; students may not receive credit for both.

HIST 478. Russian Far East (5). Russian Far East history from 16th century Cossak exploration to 21st century democracy. Topics include the imperial "urge to the sea," the Trans-Siberian Railway, the Soviet gulag system, and Pacific Rim relations. HIST 478 and HIST 578 are equivalent courses; student may not receive credit for both.

HIST 481. Understanding History (4). Analysis of the nature of history, of the way historians reason, and of the search for meaning in history. Students must earn a minimum grade of C as a major requirement. Prerequisites: HIST 302 and senior standing.

HIST 483. Modern China (5). The history of China in the 19th and 20th centuries, including the nature of China's response to the West and the Chinese Revolution of the 20th century. Emphasis on internal social and economic change. HIST 483 and HIST 583 are equivalent courses; students may not receive credit for both.

HIST 484. Modern Japan (3-5). The recent historical development of Japan beginning with the collapse of the Tokugawa Shogunate and the resumption of foreign contacts in the mid-19th century. Emphasis is given to the modernization process with its concomitant political, social, economic, and intellectual changes. HIST 484 and HIST 584 are equivalent courses; students may not receive credit for both.

HIST 487. The Russian Revolutionary Movement (3-5). Origins and development of Russian radicalism through the Bolshevik Revolution of 1917. HIST 487 and HIST 587 are equivalent courses; students may not receive credit for both.

HIST 488. Mexico in the Modern Era (5). Analyzes the modern history of Mexico, from independence to the present day. HIST 488 and HIST 588 are equivalent courses; students may not receive credit for both.

HIST 490. Cooperative Education (1-8). An individualized, contracted field experience with business, industry, government, or social service agencies. This contractual arrangement involves a student-learning plan, cooperating employer supervision, and faculty coordination. HIST 490 and HIST 590 are equivalent courses; students may not receive credit for both. May be repeated for credit. Grade will either be S or U. By permission.

HIST 496. Individual Study (1-6)

HIST 498. Special Topics (1-6).

HUMANITIES PROGRAM

College of Arts and Humanities
Ellensburg
Language and Literature Bldg., room 1001

509-963-1655

Contact Person

Roxanne I. Easley, PhD

Humanities Courses

HUM 101. Exploring Cultures in the Ancient World (5). An interdisciplinary exploration from literature, history, philosophy, and the arts of selected major ancient civilizations in Asia, Africa, Europe, and the Americas from their beginnings through the 15th century. Prerequisites: ENG 101 with a grade of C- or better.

HUM 102. Exploring Cultures From 16th through 19th Centuries (5). An interdisciplinary exploration of selected literature, history, philosophy, and the arts in Asia, Africa, Europe, and the Americas from the 16th through the 19th centuries. Prerequisites: ENG 101 with a grade of C- or better.

HUM 103. Exploring Cultures in Modern and Contemporary Societies (5). An interdisciplinary exploration of literature, history, philosophy, and the arts of selected world civilizations of the 20th century. Prerequisites: ENG 101 with a grade of C- or better.

HUM 398. Special Topics (1-6).

HUM 498. Special Topics (1-6).

INDIVIDUAL STUDIES PROGRAM

Undergraduate Studies
Ellensburg
Barge Hall, room 303

509-963-1456

www.cwu.edu/~avpugrad/individualstudy.html

See website for how this program may be used for educational and career purposes.

Program Director

Tracy L. Pellett, EdD, Associate Vice-President for Undergraduate Studies

Program Information

Students interested in pursuing an area of scholarly inquiry which falls outside the purview of an established academic department or program of the university may apply for admission to the Individual Studies program. This academic program offers students an opportunity to develop, under the guidance of faculty advisors, a major which meets their specific needs. Major areas of study are typically interdisciplinary.

Admission

Applicants must have completed 60 credit hours of study with a minimum 2.5 cumulative GPA and be in academic good standing for admission. All proposal materials must be submitted to the associate vice president for Undergraduate Studies at least three quarters prior to anticipated graduation, unless approved by the associate vice president for Undergraduate Studies. Proposals are subject to review and approval of an advisory committee which meets quarterly.

List of Degrees

The active programs available include:

Bachelor of Arts

Bachelor of Science

Bachelor of Music

(NOTE: Students seeking a BA degree must complete one year college/university study or two years high school study of a single foreign language.)

Proposal and Application

Detailed written procedures directing proposal preparation are available at www.cwu.edu/~avpugrad/individualstudy.html. The proposal must include a title, statement of purpose, a listing of courses comprising the major, and support from a faculty advisor. The course of study should include a minimum of 60 credits including at least two separate subject areas; 30 of the credits must be upper division. IS 487, End-of-Program Assessment, must be included in the course of study. No more than 15 credits may overlap with a declared minor or second major.

Students must earn a minimum grade of C- in each course counted toward fulfilling major requirements and the overall GPA in the major must be a 2.5.

Individual Studies Courses

IS 298. Special Topics (1-6).

IS 487. End-of-Program Assessment (1).

An individual study for students enrolled in the individual studies major program.

Grade will either be S or U. By permission.

IS 496. Individual Study (1-6).

IS 498. Special Topics (1-6).



INDUSTRIAL AND ENGINEERING TECHNOLOGY DEPARTMENT

College of Education and Professional Studies
Ellensburg (E)
Hogue Hall, room 107
CWU-Des Moines (DM)
CWU-Lynnwood (L)

509-963-1756 (E)
Fax: 509-963-1795
206-439-3800 (DM)
425-640-1574 (L)
www.cwu.edu/~iet

See website for how this program may be
used for educational and career purposes.

Faculty and Staff

Chair

Michael L. Whelan, PhD

Professors

William Bender, PhD, construction
management
David Carns, MS, construction management
Craig Johnson, PhD, mechanical engineering
technology
Taiqian Q. Yang, PhD, electronics

Associate Professors

Scott Calahan, MEd, industrial/technology
education
John (Jack) A. Gumaer, MS, electronics
Lad Holden, MT, electronics
Michael L. Whelan, PhD, construction
management

Assistant Professors

Roger Beardsley, MS, mechanical engineering
technology
Geoff Dean, PhD, industrial and engineering
technology
John O'Neill, MPA, safety and health
management
P. Warren Plugge, PhD, construction
management

Emeritus Professors

D. Ken Calhoun, EdD
Robert Wiekling, PhD
Tim Yoxtheimer, MS

Lecturers

William Cattin, MS, industrial technology
Juan Robertson, PhD, MSET (DM)

Staff

Susan Van de Venter, assistant to the chair
Javier Santillana, instructional and classroom
support technician

Department Overview

The Department of Industrial and
Engineering Technology offers BS and BAS
degree programs in various technologies.

Accrediting Information

The Construction Management program
is fully accredited by the American Council
for Construction Education (ACCE).

The Electronics Engineering Technology
program and Mechanical Engineering
Technology program are accredited by the
Technology Accreditation Commission of
the Accreditation Board for Engineering and
Technology (TAC/ABET), 111 Market Place,
Suite 1050, Baltimore, MD 21202-4012,
Telephone 410-347-7700.

Department Information

Some programs have specific admission
requirements and admission deadlines.
Specific information for each program can be
found on the program website.

Students should seek advising from their
program advisor prior to registration each
quarter.

Courses with an additional fee are
identified in the special course fee section of
the student handbook published by the
registrar.

Majors:

Construction Management (BS)
Electronics Engineering Technology (BS)
Computer Engineering Technology
Electronic Systems
Industrial Technology (BS, BAS)
Mechanical Engineering Technology (BS)
Mechanical Technology
Manufacturing Technology
Industrial Education (Broad Area) (BS)
Industrial Education (BS)
Safety and Health Management (BS, BAS)

Minors:

Construction Safety
Electronics-Computer Hardware
Industrial Technology
Safety and Health Management
Traffic Safety Education

Bachelor of Science

Construction Management Major

Advisors

David Carns, MS (Coordinator)
William Bender, PhD
P. Warren Plugge, PhD
Michael Whelan, PhD

This major prepares the graduate for
management positions in the construction
industry. Students must be accepted into the
major prior to taking upper-division CMGT
courses. See www.cwu.edu/~iet/programs/
cmgt/cmgt.html for details. Students
pursuing this degree should work closely
with their program advisor to ensure that
prerequisites for entry into the major have
been satisfied.

Construction management students
have the choice to concentrate on one of two
different construction types; general building
or heavy civil construction.

Exit Requirements

Students are required to complete the
Associate Constructor exam administered
by American Institute of Constructors and
achieve a minimum score of 60 percent
to graduate with a BS in construction
management.

Required Courses

ACCT 301 - Financial Accounting Analysis . 5
BUS 241 - Legal Environment of Business .. 5
CMGT 265 - Blueprint Reading and
Construction Graphics 4
CMGT 245 - Light Commercial
Construction (5) 4-5
OR
CMGT 452 - LEED in Sustainable
Construction (4)
OR
IET 490 - Cooperative Education (4)
CMGT 320 - Electrical Systems Design 3
CMGT 343 - Construction Estimating I 3
CMGT 343LAB - Construction
Estimating I Laboratory 1
CMGT 346 - Construction Methods and
Materials 4
OR
CMGT 347 - Heavy Civil Methods and
Materials (4)
CMGT 440 - Temporary Structures 4
OR
CMGT 441 - Wood and Steel
Construction (4)
CMGT 442 - Building Service Systems 3
OR
CMGT 443 - Heavy Civil Utilities (3)
CMGT 444 - Codes, Contracts, and
Specifications 4
OR
CMGT 445 - Heavy Civil Contract Law (4)
CMGT 447 - Construction Planning,
Scheduling and Control 4
CMGT 450 - Soils and Foundations 4
CMGT 455 - Principles of Construction
Management 4
OR
CMGT 456 - Principles of Heavy Civil
Construction Management (4)
CMGT 460 - Concrete Construction 4
OR
CMGT 461 - Pavement Design and
Construction (4)
CMGT 485 - Construction Accounting,
Finance, and Contemporary Topics 4
CMGT 488 - Professional Certification 1
COM 345 - Business and Professional
Speaking 4
ECON 201 - Principles of Economics Micro . 5
IET 161 - Architectural Computer Aided
Design 3
IET 301 - Engineering Project Cost Analysis . 4
IET 311 - Statics 4
IET 312 - Strength of Materials 4
MATH 172 - Calculus I 5
MATH 173 - Calculus II 5
PHYS 181 - General Physics 4
PHYS 181LAB - General Physics
Laboratory 1
SHM 323 - Construction Safety and
Supervision 3

CHEM 111 - Introduction to Chemistry 4	
OR	
CHEM 181 - General Chemistry I (4)	
CHEM 111LAB - Introductory Chemistry Laboratory 1	
OR	
CHEM 181LAB - General Chemistry Laboratory I (1)	
Select two of the following 10-11	
HRM 381 - Management of Human Resources (5)	
OR	
MGT 380 - Organizational Management (5)	
OR	
MKT 360 - Principles of Marketing (5)	
OR	
ADMG 201 - Introduction to Business (3)	
AND	
ADMG 372 - Leadership and Supervision (3)	
Select from the following 5	
GEOL 101 - Physical Geology (4)	
AND	
GEOL 101LAB - Physical Geology Laboratory (1)	
OR	
GEOL 108 - Introduction to Environmental Geology (5)	
Select from the following 4	
CMGT 267 - Plane Surveying (3)	
AND	
CMGT 267LAB - Plane Surveying Field Session (1)	
OR	
CMGT 267 - Plane Surveying (3)	
AND	
CMGT 267LABHC - Heavy Civil Highway Field Session (1)	
Select from the following 4	
CMGT 344 - Construction Estimating II (3)	
AND	
CMGT 344LAB - Construction Estimating II Laboratory (1)	
OR	
CMGT 345 - Heavy Civil Estimating II (3)	
AND	
CMGT 345LAB - Heavy Civil Estimating II Laboratory (1)	

Total Credits: 131-133

Bachelor of Science Electronics Engineering Technology Major with Specialization

Advisors

Lad Holden, MS (Coordinator)
John Gumaer, MS
Taiqian Yang, PhD

The technologists graduating from this program are applications oriented, building upon a background of mathematics, science, and technology. They interface with engineers at the product level and produce practical, workable results quickly, install and operate

technical systems, devise hardware and software from proven concepts, develop and produce products, service machines, programs, and systems, manage production facilities and work groups, and provide support for technical systems' hardware and software.

The core of the major's coursework is electronics, digital principles, programming, math, and science. There are two specializations: computer engineering technology for students specializing in software and electronic systems for those specializing in hardware.

Students interested in engineering courses after graduation should complete PHYS 181-183 and MATH through differential equations (MATH 376 and 377).

Students pursuing this degree should work with the departmental advisors to ensure that they have met the prerequisites for the upper-division electives. Due to the number of hours required, some students may find that this program requires additional time to complete.

Electronics Engineering Technology

Required Core Courses

CS 110 - Programming Fundamentals I 4	
EET 221 - Basic Electricity 5	
EET 312 - Basic Electronics 5	
EET 323 - Active Linear Circuits 4	
EET 324 - Advanced Electrical Networks . . 4	
EET 342 - Instrumentation 4	
EET 370 - Program Applications in Technology 4	
EET 371 - Digital Circuits 4	
EET 372 - Advanced Digital Circuits 4	
EET 375 - Microprocessor Applications . . . 4	
EET 376 - Microprocessors and Instrumentation 4	
EET 452 - Computer Networks 4	
EET 478 - Senior Project I 2	
EET 479 - Senior Project II 2	
EET 489 - Senior Technical Presentations . . 2	
IET 301 - Engineering Project Cost Analysis . 4	
IET 380 - Quality Control 4	
IET 455 - Engineering Project Management . 4	
MATH 172 - Calculus I 5	
MATH 173 - Calculus II 5	
Math Elective 3-5	

Select one:

MATH 260 - Sets and Logic (5)	
MATH 265 - Linear Algebra (4)	
MATH 272 - Multivariable Calculus I (5)	
MATH 311 - Statistical Concepts and Methods (5)	
MATH 330 - Discrete Mathematics (5)	
MATH 376 - Elementary Differential Equations I (3)	

Physics Elective 15

PHYS 111, 111LAB, 112, 112LAB, 113, 113LAB	
OR	
PHYS 181, 181 LAB, 182, 182LAB, 183, 183LAB	

Written Communications Elective

Select one 3-5

ADMG 385 - Business Communications and Report Writing (5)	
CS 325 - Technical Writing in Computer Science (3)	
ENG 310 - Technical Writing (4)	

Speech Elective, select one 3-4

IET 389 - Technical Presentations (3)	
COM 207 - Introduction to Communication Studies (4)	
COM 345 - Business and Professional Speaking (4)	

EET Core Total Credits: 102-107

Computer Engineering Technology Specialization

Advisors

Lad Holden, MT
John Gumaer, MS
James Schwing, PhD

Required Courses

EET Core Requirements 102-107	
CS 111 - Programming Fundamentals II 4	
CS 301 - Data Structures 4	
CS 302 - Advanced Data Structures and File Processing 4	
CS 470 - Operating Systems 4	
CS 473 - Parallel Computing 4	
Department-approved electives 7-12	

Total Credits: 134

Electronic Systems Specialization

Advisors

Lad Holden, MT
John Gumaer, MS
Taiqian Q. Yang, PhD

Required Courses

EET Core Requirements 102-107	
EET 332 - Electrical Power and Machinery . 4	
EET 343 - Process Control 4	
EET 432 - Generation and Transmission of Electrical Power 4	
IET 160 - Computer-aided Design and Drafting 4	
IET 373 - Programmable Logic Controllers . . 4	
Department-approved electives 7-12	

Total Credits: 134

Bachelor of Science Industrial Technology Major

Advisors

William Cattin, MS (Coordinator)
Scott Calahan, MEd
Lad Holden, MS
Craig Johnson, PhD

This major prepares the graduate for leadership positions in industry and technical distribution. The program applies algebra, trigonometry, and the physical sciences to industrial systems. Students select 40-41 credits by advisement in an area of technical interest. Areas of interest may include technology (general), industrial

distribution, industrial electronics, industrial manufacturing, industrial supervision, power systems, cast metals, metal fabrication, non-destructive testing, wood production, or other technical areas by departmental advisement. With departmental approval, transfer students from technical programs may elect to use their technical degree as the elective area of interest.

Students pursuing this degree should work closely with their department advisor to assure that they have met the prerequisites for the upper-division electives.

Required Courses

CHEM 111/111LAB - Introduction to Chemistry and Laboratory.....	5
OR	
CHEM 181/181LAB - General Chemistry and Laboratory (5)	
EET 221 - Basic Electricity	5
EET 312 - Basic Electronics	5
EET 342 - Instrumentation	4
IET 160 - Computer-aided Design and Drafting	4
IET 301 - Engineering Project Cost Analysis	4
IET 380 - Quality Control	4
IET 385 - Product Design and Development	4
IET 442 - Alternative Energy and Technology	5
IET 455 - Project Management	4
IET 490 - Cooperative Education (summer quarter only)	4
IT 101 - Computer Applications	3
MATH 154 - Pre-calculus Mathematics II ...	5
MET 310 - Hydraulics/Pneumatics	4
MET 345 - Production Technology	4
MET 351 - Metallurgy/Materials and Processes	4
PHYS 111/111LAB - Introductory Physics and Laboratory	5
SHM 325 - Manufacturing Safety	3
ADMG 385 - Business Communications and Report Writing (5)	4-5
OR	
ENG 310 - Technical Writing (4)	
CS or IT Elective	
Department-approved electives	3-4
Technical Specialization Credits: 24-25 (By advisement)	

Total Credits: 107-110

Transfer students MUST complete a minimum of 25 credits from the IET Department.

Industrial Technology Minor

Advisors

William Cattin, MS
Scott Calahan, MEd
Lad Holden, MS
Craig Johnson, PhD

Required Courses

Courses to be selected from Department of Industrial Technology courses under department advisement.

Total Credits: 25

Bachelor of Applied Science Industrial Technology Major

Advisors

William Cattin, MS (coordinator)
Scott Calahan, MEd
Lad Holden, MS
Craig Johnson, PhD

The bachelor of applied science in industrial technology allows persons who have worked in industry for a period of time to enhance their career potential by utilizing their community college education and on-the-job experience to earn a baccalaureate degree after taking upper-division coursework. The goal of the program is to provide students with technical skills and knowledge to function as professionals within the industrial environment.

Admission Requirements

Prior to being admitted the student entering the BAS industrial technology major will have:

- An appropriate and approved associate degree as issued by a Washington State community college
- Taken at least 20 credits of general education basic skills courses
- Completed prerequisites for the major
- Taken course equivalencies to IET 160, BUS 221, and EET 221
- Completed 2,000 hours of recent, documented work experience in an industrial technology-related job and approved by the department chair

Prerequisites

CHEM 111, 111LAB - Introductory Chemistry	5
IT 101 - Computer Applications	3
MATH 153 - Pre-Calculus Mathematics I ...	5
PHYS 111, 111LAB - Introductory Physics ..	5

Required Courses

ADMG 385 - Business Communications and Report Writing	5
BUS 221 - Introductory Business Statistics ..	5
EET 221 - Basic Electricity	5
IET 160 - Computer Aided Design and Drafting	4
IET 301 - Engineering Project Cost Analysis	4
IET 380 - Quality Control	4
IET 385 - Product Design and Development	4
IET 442 - Alternative Energy and Technology	5
IET 455 - Project Management	4
IET 490 - Cooperative Education (summer quarter only)	3
MET 345 - Production Technology	4
SHM 325 - Manufacturing Safety	3
Department-approved electives	12

Total Credits: 80

Bachelor of Science Mechanical Engineering Technology Major with Specialization

Coordinator and Advisors

Craig Johnson, PhD (Coordinator)
Roger Beardsley, MS
William Cattin, MS

The bachelor of science degree in mechanical engineering technology (MET) has specializations in mechanical or manufacturing technology. The major provides a broad foundation in the practical application of mechanical engineering principles. Graduates concentrating in mechanical technology may pursue one of the following career paths: machine and product design, product and system evaluation, plant operation and management, technical sales, field service, environmental quality control, and energy production. Graduates specializing in manufacturing technology are prepared to enter career paths as tool designers, tool and production planners, numerical control programmers, machine planners, computer-assisted machine planners, manufacturing process analysts, quality assurance, and technical field representatives.

In the absence of an appropriate background, the student may find it necessary to take IET 165, Engineering Drawing I. Those students who are interested in engineering courses after graduation should complete the engineering physics sequence, (PHYS 181, 182, 183) and mathematics through differential equations.

Students pursuing this degree should work with the departmental advisor to ensure that the prerequisites for the upper-division electives have been met. Due to the number of hours in this program, some students may find that this program requires additional time to complete.

Mechanical Engineering Technology Core Requirements

Computer Science Elective	3
CHEM 181 - General Chemistry I	4
CHEM 181LAB - General Chemistry Laboratory I	1
COM 345 - Business and Professional Speaking	4
EET 221 - Basic Electricity	5
ENG 310 - Technical Writing	4
IET 160 - Computer-aided Design and Drafting	4
IET 265 - Three-dimensional Modeling	4
IET 301 - Engineering Project Cost Analysis	4
IET 311 - Statics	4
IET 312 - Strength of Materials	4
MATH 172 - Calculus I	5
MATH 173 - Calculus II	5
MET 255 - Machining	4
MET 314 - Applied Thermodynamics	4
MET 314LAB - Applied Thermodynamics Laboratory	1

MET 315 - Fluid Dynamics	5
MET 327 - Technical Dynamics	4
MET 327LAB - Technical Dynamics Laboratory	1
MET 351 - Metallurgy/Materials and Processes	4
MET 418 - Mechanical Design I	4
MET 418LAB - Mechanical Design I Laboratory	1
MET 419 - Mechanical Design II	5
MET 426 - Applications in Strength of Materials	4
MET 488 - Professional Certification Exam Preparation	2
MET 495A - Senior Project I	3
MET 495B - Senior Project II	3
MET 495C - Senior Project III	3
PHYS 111 - Introductory Physics	4
AND	
PHYS 111LAB - Introductory Physics Laboratory	1
OR	
PHYS 181 - General Physics (4) AND	
PHYS 181LAB - General Physics Laboratory (1)	4
PHYS 112 - Introductory Physics II	4
AND	
PHYS 112LAB - Introductory Physics Laboratory II	1
OR	
PHYS 182 - General Physics II (4) AND	
PHYS 182LAB - General Physics Laboratory II (1)	4
PHYS 113 - Introductory Physics III	4
AND	
PHYS 113LAB - Introductory Physics Laboratory III	1
OR	
PHYS 183 - General Physics III (4) AND	
PHYS 183LAB - General Physics Laboratory III (1)	4

MET Core Total Credits: 114

Mechanical Technology Specialization

Advisors

Craig Johnson, PhD
Roger Beardsley, MS
William Cattin, MS

Required Courses

MET Core Requirements	114
EET 332 - Electrical Power and Machinery ..	4
MET 316 - Applied Heat Transfer	5
MET 411 - Energy Systems I	5

Department-approved electives8-9

EET 342 - Instrumentation (4)	
MET 320 - Fundamentals of Laser Technology (4)	
MET 382 - Plastics and Composites (4)	
MET 412 - Alternative Energy Systems (5)	
MET 420 - Finite Element Analysis (4)	
MET 423 - Computer-aided Design and Manufacturing (4)	
MET 483 - Ceramics and Composites (4)	

Total Credits: 136-137

Manufacturing Technology Specialization

Advisors

Craig Johnson, PhD
Roger Beardsley, MS

Required Courses

MET Core Requirements	114
MET 345 - Production Technology	4
MET 355 - Advanced Machining and CNC Programming	4
MET 423 - Computer-aided Design and Manufacturing	4

Department-approved electives8-9

BUS 221 - Introductory Business Statistics (5)	
IET 380 - Quality Control (4)	
MET 257 - Casting Processes (4)	
MET 310 - Hydraulics/Pneumatics (4)	
MET 357 - Welding/Fabrication (4)	
MET 382 - Plastics and Composites (4)	
MET 483 - Ceramics and Composites (4)	

Total Credits: 138

Bachelor of Science Technology Education Broad Area Major

Advisor

Scott Calahan, MEd (coordinator)

This bachelor of science teaching major satisfies the endorsement for technology education.

Students selecting this major must have a basic background in woods, metals, drafting, and mathematics through trigonometry. IET 430 is a prerequisite for student teaching. Students taking this major are required to apply to the Teacher Preparation Program and complete the Professional Education Program requirements offered through the Department of Educational Foundations and Curriculum.

Pre-admission Courses

CHEM 111/111LAB - Introduction to Chemistry	5
MATH 153 - Pre-Calculus I	5
PHYS 111/111LAB - Introductory Physics ..	5

Required Courses

EET 221 - Basic Electricity	5
EET 312 - Basic Electronics	5
IET 145 - Machine Woodworking	4
IET 160 - Computer-aided Design and Drafting	4
IET 210 - Energy Sources and Power	3
IET 265 - Three-dimensional Modeling	4
IET 385 - Product Design and Development	4
IET 430 - Methods of Teaching Industrial Education	3
IET 433 - Industrial Education Laboratory Planning	3
IET 435 - Technology Education Exit Assessment	1
MET 310 - Hydraulics and Pneumatics	4
MET 255 - Machining	4
MET 345 - Production Technology	4
MET 357 - Welding/Fabrication	4
MET 382 - Plastics and Composites	4

OCED 410 - Career and Technical Education School to Work Programs	4
SHM 325 - Manufacturing Safety	3
Department-approved electives	7-10

Total Credits: 85-88

Bachelor of Science Technology Education Major

Advisor

Scott Calahan, MEd (coordinator)

This bachelor of science teaching major satisfies the endorsement for technology education.

Students selecting this major must also select a minor or other education endorsement. IET 430 is a prerequisite for student teaching. Students taking this major are required to apply to the Teacher Preparation Program and complete the Professional Education Program requirements offered through the Department of Educational Foundations and Curriculum.

Pre-admission Courses

CHEM 111/111LAB - Introduction to Chemistry	5
MATH 153 - Pre-Calculus I	5
PHYS 111/111LAB - Introductory Physics ..	5

Required courses

IET 145 - Machine Woodworking	4
IET 160 - Computer-aided Design and Drafting	4
IET 210 - Energy Sources and Power	3
MET 255 - Metal Machining	4
IET 265 - Three-dimensional Modeling	4
EET 221 - Basic Electricity	5
EET 312 - Basic Electronics	5
MET 310 - Hydraulics and Pneumatics	4
MET 345 - Production Technology	4
MET 357 - Welding/Fabrication	4
IET 385 - Product Design and Development	4
IET 430 - Methods in Industrial Education ..	3
IET 433 - Industrial Education Laboratory Planning	3
IET 435 - Technology Education Exit Assessment	1

Total Credits: 67

The IET department strongly suggests for a student to be more competitive in the job market, the following additional courses should be taken.

IET 210 - Energy Sources and Power (3)	
MET 382 - Plastics and Composites (4)	
OCED 410 - Career and Technical Education School to Work Programs (4)	
SHM 325 - Manufacturing Safety (3)	

Electronics - Computer Hardware Minor

Advisor

John (Jack) A. Gumaer, MS
Lad Holden, MT

Required Courses

EET 221* - Basic Electricity	5
EET 312 - Basic Electronics	5

EET 371 - Digital Circuits	4
EET 372 - Advanced Digital Circuits	4
EET 375 - Microprocessor Applications	4
EET 376 - Microprocessors and Instrumentation	4
EET 476 - Mini-computer Technology	4

Total Credits: 30

*MATH 153 is required for EET 221.

Construction Management Courses

CMGT 245. Light Commercial Construction (5). Construction of building foundations, commercial carpentry, and enclosing of wood frame structures. Students participate in construction of a building. Prerequisite: CMGT 265.

CMGT 265. Blueprint Reading and Construction Graphics (4). Introduction to plan reading, construction terminology, and the construction process. Extensive work with plans of significant scope. Not open to students with credit in CMGT 266.

CMGT 267. Plane Surveying (3). General surveying theory and practice pertaining to distance, elevation, and angle measurement. Includes traverse calculations and an emphasis on construction applications. Corequisites: either CMGT 267LAB or 267LABHC. Prerequisites: MATH 154 and CMGT 265.

CMGT 267LAB. Plane Surveying Field Session (1). One surveying field session weekly. Co- or prerequisite: CMGT 267.

CMGT 267LABHC. Heavy Civil Highway Field Session (1). One surveying field session weekly. Co- or prerequisite: CMGT 267.

CMGT 320. Electrical Systems Design (3). Design and specification of building electrical systems including circuit principles, power distribution, and low voltage controls. Prerequisites: MATH 172 and CMGT 265.

CMGT 343. Construction Estimating I (3). Quantity surveying and bid preparation for general construction. Use of cost handbooks, specifications, and bid documents. Corequisite: CMGT 343LAB. Prerequisite: CMGT 265.

CMGT 343LAB. Construction Estimating I Laboratory (1). One estimating computer laboratory session weekly. Corequisite: CMGT 343.

CMGT 344. Construction Estimating II (3). Advanced quantity surveying and bid preparation for general construction. Corequisite: CMGT 344LAB. Prerequisite: CMGT 343.

CMGT 344LAB. Construction Estimating II Laboratory (1). One estimating computer laboratory session weekly. Corequisite: CMGT 344.

CMGT 345. Heavy Civil Estimating II (3). Advanced estimating techniques and bid preparation for heavy civil and highway construction. Corequisite: CMGT 345LAB. Prerequisite: CMGT 343.

CMGT 345LAB. Heavy Civil Estimating II Laboratory (1). One weekly estimating laboratory session. Co- or prerequisite: CMGT 345.

CMGT 346. Construction Methods and Materials (4). Materials commonly used and the various methods employed in construction. Introduction to materials testing. Prerequisite: CMGT 265.

CMGT 347. Heavy Civil Methods and Materials (4). Materials commonly used and the various methods employed with an emphasis on heavy, civil, marine, and highway construction. Prerequisite: CMGT 265.

CMGT 440. Temporary Structures (4). An introduction to the materials, methods, and techniques associated with temporary construction facilities such as false work, scaffolding, formwork, and cofferdams. Prerequisites: IET 312 and either CMGT 346, or CMGT 347.

CMGT 441. Wood and Steel Construction (4). A comprehensive study of the materials, design, and erection of wood and steel structures. Prerequisites: IET 312 and CMGT 346.

CMGT 442. Building Service Systems (3). An introduction to building service systems. Study the interfaces and specifications of mechanical and plumbing systems in building construction. Topics include plumbing, fire suppression, storm drainage, heat gain/loss, heating and cooling systems, and elevators. Prerequisite: CMGT 265.

CMGT 443. Heavy Civil Utilities (3). An introduction to the materials, equipment, methods, and safety requirements for the construction of underground and above ground utilities including water, sewer, natural gas, and electrical systems. Prerequisites: CMGT 346 or 347.

CMGT 444. Codes, Contracts, and Specifications (4). Construction contracts and liability, bonding, arbitration, specifications, and building codes administration. Prerequisites: BUS 241, ENG 102, and either CMGT, 346 or 347.

CMGT 445. Heavy Civil Contract Law (4). Construction contracts, liability, bonding, arbitration, and heavy civil highway specifications. Prerequisites: BUS 241, ENG 102, and either CMGT 346 or 347.

CMGT 447. Construction Planning, Scheduling, and Control (4). Project scheduling and evaluation using network scheduling techniques, including critical path scheduling. Includes short interval scheduling and cash flow forecasting. Prerequisite: CMGT 343.

CMGT 450. Soils and Foundations (4). An introduction to soil mechanics and analysis and design of both shallow and deep foundations. Prerequisites: IET 312, either GEOL 101 and 101LAB or GEOL 108, and either CMGT 346 or 347.

CMGT 452. LEED in Sustainable Construction (4). The process using LEED as a measurement for sustainable

construction. The course covers benefits and mechanisms of green building, cost analyses, and professional problem solving. CMGT 452 and IET 552 are equivalent courses; students may not receive credit for both. By permission. Prerequisite: CMGT 265.

CMGT 455. Principles of Construction Management (4). Fundamental tools of construction management. Topics include contract management, scheduling, cost estimating, cost control, conflict management, negotiating, team building, quality control, safety, and a capstone project. Prerequisites: CMGT 447 and either CMGT 444, or 445.

CMGT 456. Principles of Heavy Civil Construction Management (4). Fundamental tools of heavy civil highway construction management. Topics include contract management, scheduling, cost estimating, cost control, conflict management, negotiating, team building, quality control, safety, and a capstone project. Prerequisites: CMGT 447 and either CMGT 344, or 345.

CMGT 460. Concrete Construction (4). Manufacturing and testing of concrete, field practices, and formwork. Two hours lecture and two hours laboratory per week. Prerequisites: IET 312, either CMGT 346 or 347, and either CMGT 440 or 441.

CMGT 461. Pavement Design and Construction (4). An introduction to flexible and rigid pavement design and construction including pavement types, materials, construction methods, and maintenance concerns. Prerequisites: IET 312, and either CMGT 346 or 347.

CMGT 480. Heavy, Civil, and Highway Construction (4). Study of the heavy, civil, and highway construction techniques and equipment used to build infrastructure projects such as highways, bridges, and site development. Prerequisites: either CMGT 344 or 345.

CMGT 485. Construction Accounting, Finance, and Contemporary Topics (4). Project cost accounting principles, applications, and impact on profitability. Includes principles of activity based costing; WBS, earned value, cash management, value engineering, and contemporary topics. Prerequisites: either CMGT 444 or 445.

CMGT 488. Professional Certification (1). A comprehensive review of professional construction management principles and technical skills in preparation for a national certification examination. Grade will either be S or U. Prerequisites: either CMGT 444 or 445.

CMGT 495. Construction Management Competition Preparation (1). Students work in teams to prepare for construction management competition. Teams develop cost, schedule, site layout, and safety plans for a major construction project. Students will compete in the Associated Schools of Construction competition in Reno, Nevada.

May be repeated for credit. Grade will either be S or U. Prerequisite: CMGT 344.
CMGT 499. Seminar (1-5).

Electronic Engineering Technology Courses

EET 221. Basic Electricity (5). The fundamental principles of DC, AC, series, and parallel circuits, resistance, capacitance, inductance, and power are explored. Theory is reinforced by practical laboratory experimentation. Prerequisite: MATH 153.

EET 312. Basic Electronics (5). Analysis of semiconductor devices and their application in power supplies, amplifiers, and control circuits. Theoretical concepts will be reinforced by circuit simulation and laboratory experimentation. Prerequisite: EET 221.

EET 323. Active Linear Circuits (4). Analysis and design of operational amplifier circuits including amplifiers, comparators, active filters, controls, and instrumentation devices. Prerequisites: EET 312 and MATH 172.

EET 324. Advanced Electrical Network (4). Analysis techniques applied to system solutions in the time and frequency domain using linear differential equations and laplace and fourier transform methods. Prerequisites: EET 312 and MATH 173.

EET 332. Electrical Power and Machinery (4). A study of power transformers, single, and polyphase circuits. The study of DC machines and AC single and polyphase synchronous and induction machines.

EET 342. Instrumentation (4). Analysis of instrumentation systems including data collection, transmission and conversion, sensors operation, signal conditioning, and application techniques. Lecture/laboratory. Prerequisite: EET 312.

EET 343. Process Control (4). Application of analog and digital controller principles to process control systems. Three hours lecture and two hours laboratory per week. Prerequisite: EET 342.

EET 363. Lab View Applications (1). An introduction to Lab VIEW instrumentation software. Techniques used to simulate instrumentation systems will be introduced.

EET 370. Programming Applications in Technology (4). Programming applications with an emphasis on networking, computer interfacing, and embedded systems applications.

EET 371. Digital Circuits (4). Introduction to digital circuit logic, analysis, and design, including number systems, Boolean algebra, and combinational and sequential logic. Digital systems are evaluated in the laboratory. Three hours lecture and two hours laboratory per week.

EET 372. Advanced Digital Circuits (4). Study of state machines, interfacing, programmable logic devices (PLDs), memory, and computer architecture. Digital systems are designed, assembled, and verified in the laboratory. Two hours

lecture and four hours laboratory per week. Prerequisite: EET 371.

EET 375. Microprocessors (4). Study of microprocessor system components, functions, and programming methods in assembly language. Laboratories examine microprocessor system operation, configuration, and programming. Three hours lecture and two hours laboratory per week. Prerequisite: EET 372.

EET 376. Microprocessors and Instrumentation (4). Study of microprocessor system configuration, design, and sensor integration programming applications. Laboratories examine application design using various sensor input and system output methods. Prerequisite: EET 375.

EET 432. Generation and Transmission of Electrical Power (4). A study of the generation and transmission of electrical energy. Includes techniques used by electric utilities for the protection of generating equipment and transmission lines, an introduction to the economic considerations of power plant operation and three-winding transformers, and methods of solving unbalanced three-phase systems. Prerequisite: EET 332.

EET 445. Electro-Mechanical Controls (4). A study of the components in open- and closed-looped systems. Included components are sensing devices, error detectors, potentiometers, synchors, resolvers, modulators, demodulators, amplifiers, motors, generators, and network. An analysis course that stresses operation time and frequency-response characteristics and proper adjustment of the components. Prerequisites: EET 324 and 343.

EET 452. Computer Networks (4). A study of computer network protocols, topologies, and device configurations. Three hours lecture and two hours laboratory per week. Prerequisite: EET 375.

EET 455. Electronic Communications (4). An introduction to electronic communications circuits. Two hours lecture and four hours laboratory per week. Prerequisite: EET 312.

EET 475. Microcontrollers (4). Use and programming of microcontrollers in the design and implementation of embedded controller systems.

EET 477. Robotics (4). Microprocessor applications in robotics, automated systems, and digital control. Three hours lecture and two hours laboratory per week. Prerequisites: EET 342 and 375.

EET 478. Senior Project I (2). Research, planning, and conceptual section of a capstone analysis and design project. Collaborative group endeavors in cooperation with industry, community, or government entities are encouraged. Evidence of extensive and thorough laboratory performance is required.

EET 479. Senior Project II (2). Development section of a capstone analysis and design project where the creation of a prototype or method for the advancement of a

concept takes place. Evidence of extensive performance is required. Prerequisite: EET 478.

EET 489. Senior Technical Presentations (2). Written and oral presentation section of a capstone analysis and design project where communication of technical concepts takes place. Prerequisite: EET 478.

Industrial and Engineering Technology Courses

IET 101. Modern Technology and Energy (5). A study of how basic scientific principles are applied daily in industrial societies through a survey of transportation, energy and power, construction, and consumer product technologies.

IET 145. Machine Woodworking (4). Machine and tool operations, wood technology, designing and construction principles, finishing methods and materials. Two hours lecture and four hours laboratory per week.

IET 160. Computer-aided Design and Drafting (4). Hands-on training in the operation of AutoCAD's design and drafting software system with emphasis on features, limitations, and dimensioning strategy.

IET 161. Architectural Computer Aided Design (3).

IET 201. Bio-related Technologies (5). Agriculture, medicine, fuel production, waste management, and other technologies in which living organisms are used to solve problems and modify products and systems. Includes problem-solving, design, and research activities for understanding bio-related technologies.

IET 210. Energy Sources and Power (3). A study of the various forms of power, its generation, application, and implications for technology and a technological society.

IET 215. Small Engines (4). Maintenance and repair of one- and two-cylinder internal combustion engines. Two hours lecture and four hours laboratory per week. Prerequisite: IET 210.

IET 260. NURBS Modeling (4). Hands-on training in the production of 3-D models using Rhinoceros' NURBS (non-uniform rationale B-splines) geometry. Prerequisite: IET160.

IET 265. Three-dimensional Modeling (4). Design of parts, assemblies, and working drawings using 3-D solid modeling software, basic theory of threaded fasteners and gears, welding representation, geometric dimensioning, and tolerancing. Two hours lecture and four hours laboratory per week. Prerequisites: IET 160 and IET 165.

IET 290. Cooperative Education (1-15). An individualized, contracted field experience with business, industry, government, or social service agencies. This contractual arrangement involves a student learning plan, cooperating employer supervision, and faculty coordination. May be repeated for credit. Grade will either be S or U. By permission.

IET 296. Individual Study (1-6).

IET 298. Special Topics (1-6).

IET 299. Seminar (1-5).

IET 301. Engineering Project Cost Analysis

(4). Techniques of economic cost analysis applied to engineering projects: interest, present value, annual equivalence, rate of return, payout criteria, and break even modeling. Prerequisite: MATH 153.

IET 311. Statics (4). Introductory statics including forces and equilibrium. Principles of structures including stress analysis, beams, frames, machines and friction. Prerequisites: MATH 173 and either PHYS 111 or 181.

IET 312. Strength of Materials (4). Strength of materials, including stress analysis of axially loaded members, torsional members, beams, and indeterminate structures. Prerequisite: IET 311.

IET 353. Pattern Making (4). Two hours lecture and four hours laboratory per week. Prerequisite: MET 257.

IET 360. Brewing Process Technology (3). Study of brewing technology including equipment and processes from the brewhouse through packaging and distribution. Topics include factors that affect product quality. Prerequisites: a grade of C or better in CHEM 101, MATH 153, and either CHEM 111 or CHEM 181, and admission to the Craft Beer Trade Certificate Program.

IET 373. Programmable Logic Controller Applications (4). A study of programmable logic controller concepts, components, systems, programming and applications. Three hours lecture and two hours laboratory per week.

IET 380. Quality Control (4). Provides the foundation necessary to understand and apply statistical quality control techniques, product reliability procedures, and the management aspects of quality assurance. Prerequisites: either BUS 221, MATH 311, or PSY 362.

IET 385. Product Design and Development (4). Methodology for the design and development of industrial and commercial products from conceptual stage to product introduction into the marketplace. Project based instructional structure. Three hours lecture per week.

IET 389. Technical Presentations (3). Written and oral presentations based on technical reference material utilizing the library, technical society publications, and the Internet.

IET 398. Special Topics (1-6).

IET 430. Methods of Teaching Industrial Education (3). Prerequisite: conditional or full admission to the Teacher Preparation Program.

IET 433. Industrial Education Laboratory Planning (3). Planning of school shop and labs, new construction, and remodeling of facilities. Management of industrial education facilities, inventories: records of tools, equipment, materials; safety and student personnel.

IET 435. Technology Education Exit

Assessment (1). This is a senior level course designed to measure student competencies in meeting state and national standards for program exit. Students are evaluated on their portfolio as presented in Livetext. Grade will either be S or U. Prerequisite: IET 430, IET 433, and senior standing taken last quarter at CWU prior to graduation.

IET 442. Alternative Energy Resources and Technology (5). Overview of energy systems, with focus on wind, biomass, solar, biodiesel, geothermal, and sustainable energy systems. Includes energy production and conversion. Field trips. GEOG 442 and IET 442 are equivalent courses; students may not receive credit for both. Prerequisite: junior standing or above.

IET 455. Engineering Project Management (4). Project-based synthesis used in engineering project management. Topics; bidding, contract management, scheduling, cost estimating and control, logistics, conflict management, team building, negotiating, and risk assessment. IET 455 and IET 555 are equivalent course; students may not receive credit for both. By permission.

IET 457. Advanced Foundry (4). Two hours lecture and four hours laboratory per week. Prerequisites: MET 257 and IET 353.

IET 490. Cooperative Education (1-12). An individualized, contracted field experience with business, industry, government, or social service agencies. This contractual arrangement involves a student learning plan, cooperating employer supervision, and faculty coordination. May be repeated for credit. Grade will either be S or U. By permission.

IET 491. Workshop (1-6).

IET 496. Individual Study (1-6).

IET 498. Special Topics (1-6).

IET 499. Seminar (1-5).

Mechanical Engineering Technology Courses

MET 255. Machining (4). Basic operations and technical information concerning common metal working machines and metal machining processes. Two hours lecture and four hours laboratory per week.

MET 257. Casting Processes (4). Theory and practice in green sand, shell core, permanent mold, no bake, and evaporation casting processes. Two hours lecture and four hours laboratory per week.

MET 310. Hydraulics/Pneumatics (4). A study of the application, controls, and uses of air and liquid for the transmission of power. Two hours lecture and four hours laboratory per week. Prerequisite: IET 210.

MET 314. Applied Thermodynamics (4). Properties of pure substances, first and second laws of thermodynamics, enthalpy and entropy, perfect gases, Carnot cycle, steam cycles, refrigeration cycles, mixtures of perfect gases, chemical reactions, and

combustion. Four hours lecture per week.

Corequisite: MET 314LAB. Prerequisites: MATH 173 and either PHYS 182 or 112.

MET 314LAB. Applied Thermodynamics Laboratory (1). Practical application of thermodynamics systems teaching First and Second Law of Thermodynamics principles. Lab work includes usage of state-of-the-art instrumentation and data systems. Corequisite: MET 314. Prerequisites: MATH 173 and either PHYS 182 or 112.

MET 315. Fluid Dynamics (5). Fluid statics, continuity, Bernoulli, and the general energy equation, laminar and turbulent flow, friction losses in pipes and ducts, pump performance and selection, compressible flow, and fluid measurements. Four hours lecture and two hours laboratory per week. Prerequisites: IET 311 and MET 314.

MET 316. Applied Heat Transfer (5). Steady and unsteady state heat conduction, free convection, forced convection in tubes, forced convection over exterior surfaces, radiation heat transfer, change in phase heat transfer, heat exchangers, and heat pipes. Four hours lecture and two hours laboratory per week. Prerequisite: MET 315.

MET 320. Fundamentals of Laser Technology (4). Overview of laser technology with emphasis on laser characteristics, safety, and applications. Four hours lecture per week. Prerequisite: PHYS 113.

MET 327. Technical Dynamics (4). Topics: rectilinear and curvilinear motion, rotational kinematics, work, energy and power, linear impulse and momentum, angular impulse and momentum, rigid body motion, relative motion, and vibrations. Corequisite: MET 327LAB. Prerequisite: IET 311.

MET 327LAB. Technical Dynamics Laboratory (1). Practical application of dynamical systems including usage of state-of-the-art instrumentation and data recording systems. Corequisite: MET 327. Prerequisite: IET 311.

MET 345. Production Technology (4). Mass production principles, organization for production, product engineering, production system design, jig, and fixture development, special problems in production.

MET 351. Metallurgy/Materials and Processes (4). Ferrous and nonferrous metals and alloys; polymeric, ceramic, and cellular materials; use of phase diagrams, cooling curves, stress-strain diagrams, and metallography. Prerequisites: either CHEM 111 or CHEM 181.

MET 355. Advanced Machining and CNC Programming (4). Machining of metallic and non-metallic materials on automated equipment; mass production technology; programming and operation of CNC equipment. Prerequisite: MET 255.

MET 357. Welding/Fabrication (4). Theory and practice in arc welding, oxyacetylene

welding and cutting, MIG, TIG, and plastic welding. Two hours lecture and four hours laboratory per week.

MET 382. Plastics and Composites (4).

Composition, characteristics, and classifications of plastics and composite materials incorporating industrial applications, processing, and fabrication. Prerequisites: either CHEM 111 and 111LAB, or CHEM 181 and 181LAB.

MET 411. Energy Systems I (5).

Power generation, energy reserves, fuels, reciprocating machines, internal combustion engines, rotating compressors, axial flow turbines, and gas turbine power. Four hours lecture and two hours laboratory per week. Prerequisite: MET 316.

MET 412. Alternative Energy Systems (5).

Comprehensive overview of alternative energy technology including societal issues, energy reserves, fossil, nuclear, solar, wind, geothermal, hydrogen and biomass energy sources, and advanced energy conversion systems.

MET 418. Mechanical Design I (4).

Mechanical design principles including material and device responses to complex loading and optimization of energy system and mechanical drives. Prerequisite: IET 265 and MET 327 and MET 426. Corequisite: MET 418LAB.

MET 418LAB. Mechanical Design I

Laboratory (1). Practical application of mechanical design principles. Lab work includes design and or evaluation of modern mechanical devices, concepts and systems. Prerequisite: IET 265, MET 327, MET 418, and MET 426.

MET 419. Mechanical Design II (5).

Fasteners, welds, machine frames, pressure vessels, hydraulic cylinders, electrical motors, and actuators. Four hours lecture and two hours laboratory per week. Prerequisite: MET 418.

MET 420. Finite Element Analysis (4).

Computerized modeling of structural, vibrational, and thermal design problems. Two hours lecture and four hours laboratory. Prerequisites: IET 160 and MET 426.

MET 423. Computer-aided Design and

Manufacturing (4). Integrates Computer-aided Design (CAD) and Computer-aided Manufacturing (CAM). Three hours lecture and two hours laboratory per week. Prerequisites: IET 160, MET 255, and MET 418.

MET 426. Applications in Strength of

Materials (4). Topics support stress analysis and design. Laboratory activities include material strength, hardness, impact testing, strain gage technology, photoelasticity, ultrasonics, and eddy current. Prerequisites: IET 312 and MET 351.

MET 483. Ceramics and Composites (4).

Composition, characterization, and classification of ceramics and related composite materials incorporating

industrial applications, processing, and fabrication. Prerequisites: either CHEM 111 and 111LAB, or CHEM 181 and 181LAB.

MET 488. Professional Certification Exam

Preparation (2). A comprehensive review of professional mechanical engineering principles and technical skills in preparation for the national certification examination. Grade will either be S or U. Prerequisite: MET 418.

MET 495A. Senior Project I (3).

The senior project is a capstone course that integrates all the major elements of the MET curriculum in a project related activity. The topic is chosen by the student in concurrence with the instructor and must include elements of planning, design, and analysis (Phase I), construction (Phase II), and test and evaluation (Phase III). Collaboration with representatives of industry, government agencies, or community institutions is encouraged. As an alternative, it will be possible to select a design study for the senior project for all three quarters, providing it is sufficiently comprehensive and approved by the MET advisor. Course must be taken in sequence. May be repeated for credit. Prerequisite: MET 315.

MET 495B. Senior Project II (3).

The senior project is a capstone course that integrates all the major elements of the MET curriculum in a project related activity. The topic is chosen by the student in concurrence with the instructor and must include elements of planning, design, and analysis (Phase I), construction (Phase II), and test and evaluation (Phase III). Collaboration with representatives of industry, government agencies, or community institutions is encouraged. As an alternative, it will be possible to select a design study for the senior project for all three quarters, providing it is sufficiently comprehensive and approved by the MET advisor. Course must be taken in sequence. May be repeated for credit. Prerequisite: MET 495A.

MET 495C. Senior Project III (3).

The senior project is a capstone course that integrates all the major elements of the MET curriculum in a project related activity. The topic is chosen by the student in concurrence with the instructor and must include elements of planning, design, and analysis (Phase I), construction (Phase II), and test and evaluation (Phase III). Collaboration with representatives of industry, government agencies, or community institutions is encouraged. As an alternative, it will be possible to select a design study for the senior project for all three quarters, providing it is sufficiently comprehensive and approved by the MET advisor. Course must be taken in sequence. May be repeated for credit. Prerequisite: MET 495B.

SAFETY AND HEALTH MANAGEMENT PROGRAM

College of Education and Professional Studies
Ellensburg
Hogue Hall, room 107

509-963-1756

Fax: 509-963-1795

www.cwu.edu/~iet

Advisors

John O'Neill, MPA

Michael L. Whelan, PhD

Program Information

The vision for the BS major in safety and health management is one that is recognized for preparing students to be well-rounded safety practitioners who have the confidence and capabilities to navigate the complex organizational and knowledge networks necessary to succeed in contemporary safety and health management.

The safety and health field includes many industries, functions, and occupations. Graduates from the curriculum have a history of high employment rates and competitive starting salaries.

The BS in safety and health management is the primary program for the student seeking a baccalaureate degree leading to a career in safety and health management. The program requires completion of an approved minor or second major.

Admission Requirements

Applications are accepted throughout the academic year. Admission to the program is based upon a review of completed prerequisite courses and application materials. Please see the program application at www.cwu.edu/~iet/programs/shm/documents/bsshm_app.doc.

Admission to any course requires a grade of C or better in each prerequisite listed. Students who do not meet the prerequisite grade requirement will be dropped from the course.



A student is expected to complete each course used to fulfill a degree program requirement with a grade of C or better. Students must complete all CWU basic and breadth requirements prior to beginning 400-level SHM coursework.

Bachelor of Science Safety and Health Management Major

Required Basic and Breadth Courses

ENG 101 - English Composition I	4
ENG 102 - English Composition II	4
PSY 101 - General Psychology	5
Choose one of the following courses	5
MATH 101 - Mathematics in the Modern World (5)	
MATH 153 - Pre-calculus Mathematics I (5)	
MATH 154 - Pre-calculus Mathematics II (5)	
MATH 172 - Calculus I (5)	
MATH 102 - Mathematical Decision Making	5
OR	
MATH 130 - Finite Mathematics (5)	
CHEM 101 - Contemporary Chemistry	5
OR	
CHEM 111 / 111LAB - Introduction to Chemistry (5)	
OR	
CHEM 181 / 181LAB - General Chemistry I (5)	
BIOL 201 - Human Physiology	5
IT 101 - Computer Applications (3)	3-4
OR	
CS 101 - Computer Basics (4)	

Required Courses

HRM 381 - Management of Human Resources	5
MGT 380 - Organizational Management	5
Choose one of the following courses	4-5
ADMG 385 - Business Communications and Report Writing (5)	
COM 345 - Business and Professional Speaking (4)	
ENG 310 - Technical Writing (4)	
Choose one of the following courses	4-5
MGT 386 - Principles of Organizational Behavior (5)	
PSY 456 - Industrial and Organizational Psychology (4)	
Choose one SHM Industry Practice Course	3
SHM 321 - Agriculture Safety (3)	
SHM 323 - Construction Safety (3)	
SHM 325 - Manufacturing Safety (3)	
SHM 327 - Research and Laboratory Safety (3)	
SHM Core Functions courses	12
SHM 351 - Incident Analysis (4)	
SHM 352 - Systems and Design (4)	
SHM 353 - Risk and Insurance (4)	
Choose three SHM Program Management courses	12
SHM 371 - Emergency Planning and Preparedness (4)	
SHM 373 - Industrial Machinery and Process Safety (4)	

SHM 375 - Transportation and Fleet Safety (4)	
SHM 377 - Hazardous Materials Management (4)	
SHM 379 - Facility and Building Safety (4)	
Select from the following SHM Analysis and Design courses	12
SHM 471 - Industrial Hygiene I (4)	
SHM 472 - Industrial Hygiene II (4)	
SHM 474 - Safety and Health Management Systems (4)	
SHM 475 - Management System Auditing (4)	
SHM 477 - Environmental Management (4)	
SHM Synthesis Courses	8
SHM 481 - Professional Safety Today (1)	
SHM 485 - Safety and Health Management Capstone (4)	
SHM 490 - Cooperative Education (1-12)	

Total Credits: 65-67

Plus an approved minor or second major

BS Degree Program Total Credits: 101-104

Bachelor of Applied Science Occupational Safety and Health Major

Advisors

John O'Neill, MPA
Michael L. Whelan, PhD

Program Information

The bachelor of applied science (BAS) major in occupational safety and health allows persons who have worked in industry for a period of time to enhance their career potential by utilizing their community college educational and on-the-job experience to earn a baccalaureate degree following completion of upper-division coursework. The goal of the program is to prepare and enable students to fill professional level positions as managers within the broad area of industrial safety and health.

The program provides course options for the student to tailor the program to their specific career interests. Admission to any course requires a grade of C or better in each prerequisite listed. Students who do not meet the prerequisite grade requirement will be dropped from the course. Students are expected to complete each course used to fulfill a degree program requirement with a grade of C or better. Students must complete all CWU basic and breadth requirements prior to beginning 400-level SHM coursework.

Admission Requirements

A student wishing to enter the BAS occupational safety and health major must have:

- An appropriate and approved associate degree
- Completed at least 20 credits of general education basic skills courses
- Completed the program prerequisites

Applications are accepted throughout the academic year. Please see the program application for prerequisites available on the web at http://www.cwu.edu/~iet/programs/shm/documents/basosh_app.doc.

Required Basic and Breadth Courses

ENG 101 - English Composition I	4
ENG 102 - English Composition II	4
PSY 101 - General Psychology	5
Choose one of the following courses	5
MATH 101 - Mathematics in the Modern World (5)	
MATH 153 - Pre-calculus Mathematics I (5)	
MATH 154 - Pre-calculus Mathematics II (5)	
MATH 172 - Calculus I (5)	
MATH 102 - Mathematical Decision Making	5
OR	
MATH 130 - Finite Mathematics (5)	
CHEM 101 - Contemporary Chemistry	5
OR	
CHEM 111 / 111LAB - Introduction to Chemistry (5)	
OR	
CHEM 181 / 181LAB - General Chemistry I (5)	
BIOL 201 - Human Physiology	5
IT 101 - Computer Applications (3)	3-4
OR	
CS 101 - Computer Basics (4)	

Required Courses

MGT 380 - Organizational Management	5
OR	
HRM 381 - Human Resources Management (5)	
SHM 351 - Incident Analysis	4
SHM 352 - Systems and Design	4
SHM 353 - Risk and Insurance	4
Select from the following SHM Program Management Courses	8
SHM 371 - Emergency Planning and Preparedness (4)	
SHM 373 - Industrial Machinery and Process Safety (4)	
SHM 375 - Transportation and Fleet Safety (4)	
SHM 377 - Hazardous Materials Management (4)	
SHM 379 - Facility and Building Safety (4)	
Select from the following SHM Analysis and Design courses	8
SHM 474 - Safety and Health Management Systems (4)	
SHM 475 - Management System Auditing (4)	
SHM 477 - Environmental Management (4)	
SHM 485 - Safety and health Management Capstone	4
Department-approved electives	23

Total Credits: 96-97

Construction Safety Minor

Advisors

John O'Neill, MPA
Michael L. Whelan, PhD

Program Information

The construction safety minor provides a broad coverage of construction management issues that affect safety and health performance during construction work. Enrollment in upper-division CMGT courses is based upon space availability.

Admission to any course requires a grade of C or better in each prerequisite listed. Students who do not meet the prerequisite will be dropped from the course. Students are expected to complete each course used to fulfill a program requirement with a grade of C or better.

Admission Requirements

The construction safety minor is only available to BS safety and health management majors. Applications are accepted throughout the academic year. Please see the program application available on the web at www.cwu.edu/~iet/programs/shm/documents/csminor_app.doc for additional information.

Required Courses

BUS 241 - Legal Environment of Business... 5
CMGT 265 - Blueprint Reading and Construction Graphics... 4
CMGT 346 - Construction Methods and Materials... 4
OR
CMGT 347 - Heavy Civil Methods and Materials (4)
CMGT 442 - Building Service Systems... 3
OR
CMGT 443 - Heavy Civil Utilities (3)
CMGT 444 - Codes, Contracts, and Specifications... 4
OR
CMGT 445 - Heavy Civil Contract Law (4)
IET 490 - Cooperative Education... 3
SHM 323 - Construction Safety... 3

Total Credits: 26

Occupational Safety Technology Minor

Advisors

John O'Neill, MPA
Michael L. Whelan, PhD

Program Information

The occupational safety technology minor provides a balance of technical and process skills used in safety and health practice.

Admission to any course requires a grade of C or better in each prerequisite listed. Students who do not meet the prerequisite grade requirement will be dropped from the course. Students are expected to complete each course used to fulfill a program requirement with a grade of C or better.

Admission Requirements

Students enrolled in the BAS OSH program are not permitted to enroll in this minor. Applications are accepted throughout the academic year. Please see the program application available on the web at www.cwu.edu/~iet/programs/shm/documents/ostminor_app.doc for additional information.

Required Courses

SHM 351 - Incident Analysis... 4
SHM 352 - Systems and Design... 4
SHM 353 - Risk and Insurance... 4
Department-approved electives... 12

Total Credits: 24

Safety and Health Management Minor

Advisors

John O'Neill, MPA
Michael L. Whelan, PhD

Program Information

The safety and health management minor is designed for students who are interested in safety and health in the workplace. The program provides course options for the student to tailor the program to their specific career interests. Course selections should best fit the student's major program. Admission to any course required a grade of C or better in each prerequisite listed. Students who do not meet the prerequisite grade requirement will be dropped from the course. Students are expected to complete each course used to fulfill a degree program requirement with a grade of C or better.

Admission Requirements

The safety and health management minor is not available to students majoring in either the BS safety and health management or BAS occupational safety and health programs. Applications are accepted throughout the academic year. Please see the program application for preferences and evaluation available at www.cwu.edu/~iet/programs/shm/documents/shminor_app.doc.

Required Courses

Select one SHM Industry Practice

Course... 3
SHM 321 - Agriculture Safety (3)
SHM 323 - Construction Safety (3)
SHM 325 - Manufacturing Safety (3)
SHM 327 - Research and Laboratory Safety (3)

SHM Core Functions courses... 12

SHM 351 - Incident Analysis (4)
SHM 352 - Systems and Design (4)
SHM 353 - Risk and Insurance (4)

Select two SHM Program Management

courses... 8
SHM 371 - Emergency Planning and Preparedness (4)
SHM 373 - Industrial Machinery and Process Safety (4)
SHM 375 - Transportation and Fleet Safety (4)

SHM 377 - Hazardous Materials

Management (4)

SHM 379 - Facility and Building Safety (4)

Total Credits: 23

Traffic Safety Education Minor

Advisor

Scott Calahan, MEd (Summer only)

Program Information

Students desiring an endorsement to teach traffic safety education in the public schools are required to take SED 382, SED 481, SED 482, and SED 484 during the summer.

Required Courses

*SED 382 - Driver Task Analysis... 3
*SED 481 - Teaching Traffic Safety Education: Classroom and Simulation Instruction... 3
*SED 482 - Teaching Traffic Safety Education in Car... 5
*SED 484 - Safety Program Supervision... 3
SHM 375 - Transportation and Fleet Safety... 4

Total Credits: 18

* Required for state endorsement.

Safety and Health Management Courses

SHM 201. Introduction to Safety and Health Management

(1). Overview of safety and health management profession, credentials, societies, organizations, application of math and science. Prerequisite: freshmen or sophomore standing.

SHM 321. Agriculture Safety

(3). A comprehensive course that covers the safety and health regulations and practices pertaining to agriculture and the food processing industry.

SHM 323. Construction Safety

(3). A comprehensive course that covers the safety and health regulations and practices pertaining to the construction industry.

SHM 325. Manufacturing Safety

(3). A comprehensive course that covers the safety and health regulations and practices pertaining to the manufacturing industry.

SHM 327. Research and Laboratory Safety

(3). A comprehensive course that covers the safety and health regulations and practices pertaining to the laboratory and research industry.

SHM 349. Fire Administration and Leadership

(4). Analysis and research on selected topics involving contemporary issues in fire administration. By permission.

SHM 351. Incident Analysis

(4). Occupational safety and health legislation (OSHA, Workers' Compensation), anatomy of accidents, incident analysis. By permission. Prerequisites: either SHM 321, 323, 325, 327, and admission to the safety and health major or minor.

SHM 352. Systems and Design (4). Hazard control management, systems and process engineering concepts applied to safety and health management; design for safety principles. Prerequisites: SHM 351 and either MATH 102, or 130.

SHM 353. Risk and Insurance (4). Risk management, insurance, loss control, liability, and legal foundations in safety and health management. Prerequisite: SHM 352.

SHM 371. Emergency Planning and Preparedness (4). Program management relating to emergency planning including facility security, workplace violence, emergency response planning, continuity of operations. Prerequisite: SHM 351.

SHM 373. Industrial Machinery and Process Safety (4). Program management relating to process design, materials handling, ergonomics, machinery/equipment, boilers/pressure vessels, and energy in industrial settings. Prerequisite: SHM 351.

SHM 375. Transportation and Fleet Safety (4). Program management relating to fleet safety including transportation systems loss control management, fleet management, and driver safety training. Prerequisite: SHM 351.

SHM 377. Hazardous Materials Management (4). Program management relating to the use of hazardous materials including chemical and physical properties and hazard communication. Prerequisites: SHM 351, and either CHEM 101, CHEM 111/111LAB, or CHEM 181/181LAB.

SHM 379. Facility and Building Safety (4). Program management relating to facility and building safety including fire prevention, accessibility, confined spaces, indoor air quality and ventilation, and walking-working surfaces. Prerequisite: SHM 351.

SHM 471. Industrial Hygiene I (4). The reasons for, benefits of, and activities related to industrial hygiene with a focus upon radiological hazards and physical hazards (including ergonomics). Prerequisites: SHM 353 and BIOL 201.

SHM 472. Industrial Hygiene II (4). Continuation of industrial hygiene practice, biological and chemical hazards, toxicology, indoor air quality, ventilation. Prerequisites: SHM 377 and SHM 471.

SHM 474. Safety and Health Management Systems (4). Procedures to internally monitor safety and health management: risk management, loss control, benchmarking,

measurement, program evaluation.

Prerequisites: SHM 353, MGT 380, and two of SHM 371, 373, 375, SHM 377, or 379.

SHM 475. Management System Auditing (4). Procedures to externally monitor: auditing, data collection, safety and health management systems, assessment strategies, consulting and contracts. Prerequisites: SHM 474, either SHM 477 or IET 481, and either PSY 456 or MGT 386.

SHM 477. Environmental Management (4). Overview of present and future environmental safety and health issues, environmental management systems. Prerequisites: SHM 353 and 377.

SHM 481. Professional Safety Today (1). Presentations and case studies by practicing safety professionals on contemporary safety and health management topics, and professional networking techniques. Prerequisite: SHM 353.

SHM 485. Safety and Health Management Capstone (4). Senior capstone course addressing ethical considerations and knowledge synthesis. By permission. Prerequisites: SHM 353 and 8 units of SHM 471, 472, 474, 475, or 477.

SHM 490. Cooperative Education (1-12). An individualized contracted field experience with business, industry, government, or social service agencies. May be repeated for credit. Grade will either be S or U. By permission. Prerequisites: either SHM 352 or 353, and either SHM 371, 373, 375, 377, or 379.

SHM 491. Workshop (1-6).

SHM 496. Individual Study (1-6).

SHM 498. Special Topics (1-6).

SHM 499. Seminar (1-5).

Safety Education Courses

SED 298. Special Topics (1-6).

SED 382. Driver Task Analysis (3).

Introduction to traffic safety education, the highway transportation system, driver task analysis, classroom instruction techniques. Prerequisite: SED 180.

SED 398. Special Topics (1-6).

SED 481. Teaching Traffic Safety Education: Classroom and Simulation Instruction (3). Methods, materials, and techniques for teaching classroom and simulation. Experience in teaching beginning drivers. Prerequisite: SED 382.

SED 482. Teaching Traffic Safety Education: In Car (5). Methods, materials, and techniques for teaching in dual-control vehicles. Experience teaching beginning drivers. By permission. Prerequisite: SED 382.

SED 484. Safety Program Supervision (3). Development and management of a total school safety program. Prerequisite: SED 382.

SED 491. Workshop (1-6).

SED 496. Individual Study (1-6).

SED 498. Special Topics (1-6).

SED 499. Seminar (1-5).

INFORMATION TECHNOLOGY AND ADMINISTRATIVE MANAGEMENT DEPARTMENT

College of Education and Professional Studies
Shaw-Smyser Hall, Second Floor - IT
Management Division, room 223
509-963-2611

www.cwu.edu/itam

See website for how this program may be used for educational and career purposes.

Faculty and Staff

Chair

Robert A. Lupton, PhD

Professors

Lori A. Braunstein, PhD, information technology

Robert A. Lupton, PhD, retail management technology

Associate Professor

David Rawlinson, JD, information technology

Assistant Professors

Natalie Lupton, PhD, retail management technology and administrative management
Christine Bernadas, PhD, information technology

Chester Claar, PhD, information technology

Hideki Takei, DBA, administrative management and retail management technology

Robert Trumpy, EdD, LMHC, LCSW, administrative management

Fen Wang, PhD, information technology

Lecturers

Yvonne Alder, information technology

Brandi Carter, MBA, administrative management

John Durham, MA administrative management

Terry Linkletter, MS, administrative management and information technology

Mary Minor, information technology

Amy Perry, MEd, information technology

Angela Unruh, MBA, information technology

Charles Wahle, MA, information technology

Shani Watkins, MEd, administrative management and information technology

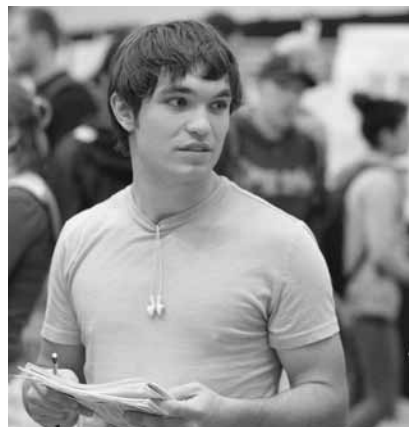
Staff

Laurie Stehle, office manager and internship coordinator

Bachelor of Science Information Technology and Administrative Management

BS-ITAM Program Overview

The department offers coursework for the bachelor of science in information technology



and administrative management. The BS-ITAM is comprised of three components:

- Pre-admission courses that provide foundation knowledge and skills needed for further study in ITAM
- ITAM core courses that focus on the core knowledge areas of ITAM: networking, web, information management, and human-centered skills
- Specialization courses that allow for advanced study in one of the core knowledge areas or retail management and technology

The program is designed to prepare students for information technology, administrative management, or retail management careers. Students completing this major will take the core courses (51-65 credits) and select one of the four areas of specialization: network administration and management, web and database administration and management, administrative management, and retail management and technology.

Several of the elective courses have prerequisites noted in the course description. IT 101, Computer Applications, or equivalent, or demonstration of computer competence is a prerequisite to this major. Students must complete at least 60 credits of upper-division courses.

BS-ITAM Program Admission Requirements

Students must apply and be accepted into the major prior to beginning 300- or 400-level ITAM coursework. At the time of application, the 14 credits of pre-admission coursework should be completed. Application forms are available in the department office or on the department website. Admission shall be based on grades earned in the following courses:

Pre-admission* Requirements

ADMG 201 - Introduction to Business	3
ADMG 271 - Business Math Applications	4
IT 248 - Web Fundamentals	2
IT 260 - Integrated Information Technology Application Projects	5

Pre-admission Total Credits: 14

*A cumulative GPA of 2.3 in the pre-admission courses must be achieved with a minimum grade of C- in each course.

BS-ITAM Graduation Requirements

The following requirements apply to students seeking the BS-ITAM degree:

Students must earn a minimum cumulative GPA of 2.3 in the ITAM coursework to be eligible for the degree.

Students must earn a minimum grade of C- in each course.

Course Fees

Most ITAM courses that use computer resources are assessed a course fee of \$10.

List of Specializations, Minors, and Certifications for the BS-ITAM

Students seeking the BS-ITAM take a common set of core courses. Additionally, students must complete a specialization within the BS-ITAM degree: administrative management, network administration and management, web and database administration and management, information technology management, or retail management and technology.

ITAM Core Requirements

ADMG 302 - Financial Analysis of Administrative and IT Support	5
ADMG 310 - Business Professional Development	3
ADMG 371 - Administrative Management	4
ADMG 372 - Leadership and Supervision	3
ADMG 374 - Project Management	5
ADMG 376 - Project Management and Information Technology	3
ADMG 385 - Business Communications and Report Writing	5
IT 301 - Information Technology Security, Privacy, and Ethics	3
IT 351 - Computer Networks	4
IT 422 - Website Construction	4
IT 468 - Projects in Database	4
RMT 340 - Principles of Selling	4
RMT 366 - Customer Relationship Management	4

Total Core Credits: 51

Total Pre-admission and Core Credits: 65

Network Administration and Management Specialization

Network administration and management specialization students become qualified business professionals prepared to pursue careers that apply a wide variety of network administration skills. These qualifications are complemented by business communications and human-centered skills. Graduates of the network administration and management specialization secure positions as network administrators, network analysts, network managers, data communication analysts, network operations analysts, network specialists, network technicians, PC support specialists, PC network engineers, and user support specialists.

Required Courses

Pre-admission Requirements	14
ITAM Core Requirements	51
IT 362 - Wireless Communications	3
IT 461 - System Analysis	4
IT 463 - Computer Network Management	4
IT 464 - Directory Services	4
IT 465 - Messaging Services	4
T 467 - Network Security	4
IT 490* - Cooperative Education	9-12

Total Credits: 97-100

*Note: Summer quarter only.

Web and Database Administration and Management Specialization

Web and database administration and management specialization students become qualified business professionals prepared to pursue careers that apply a wide variety of web and database skills. These qualifications are complemented by business communications and human-centered skills. Graduates of the web and database administration and management specialization secure positions as web administrators, database administrators, web designers, database developers, web page developers, database managers, and web masters.

Web and Database Administration Required Courses

Pre-admission Requirements	14
ITAM Core Requirements	51
IT 426 - Application of Web Languages	4
IT 428 - Web Applications	4
IT 461 - Systems Analysis	4
IT 462 - Systems Design	4
IT 469 - Enterprise Database Systems: SQL	4
IT 470 - Database and the Web	4
IT 490* - Cooperative Education	9-12

Total Credits: 97-100

*Note: Summer quarter only.

Administrative Management Specialization

Administrative management specialization students become qualified business professionals prepared to pursue careers that apply a blend of management, administrative, and information technology skills in contemporary administrative and information technology environments. The administrative manager supervises office employees, designs office work systems, maintains internal and external communication systems, and compiles meaningful reports from information processing. Their knowledge of IT tools complemented by the soft skills (emotional intelligence and leadership) qualifies them to seek employment in positions requiring the management of data, projects, people, and organizational change. The need for graduates with these skills crosses all types of business including agriculture, construction, finance, retail, government, manufacturing and not-for-profits.

Required Courses

Pre-admission Requirements	14
ITAM Core Requirements	51
ADMG 424 - Administrative Management Policy	4
ADMG 471 - Critical Issues in Administrative Management	4
IT 359 - Advanced Spreadsheet Applications	3
IT 461 - Systems Analysis	4
IT 462 - Systems Design	4
ADMG 490* - Cooperative Education	9-12

Total Credits: 93-96

*Note: Summer quarter only.

Retail Management and Technology Specialization

Retail management and technology specialization students become qualified business professionals prepared to pursue careers in retail environments that infuse information technology in areas such as e-commerce, management, selling, purchasing, operations, and merchandising. These qualifications are complemented by business communications and human-centered skills. Graduates of the retail management and technology specialization secure careers in store operations, store management, IT and e-commerce, sales, distribution and logistics, merchandise buying, and planning and entrepreneurship.

Required Courses

Pre-admission Requirements	14
Retail Core Requirements	51
RMT 330 - Principles of Retailing	4
RMT 335 - Retail Information Technology . .	4
RMT 350 - Retailing and E-commerce	4
RMT 467 - Retail Management	4
RMT 485 - International Retailing	4
RMT 490* - Cooperative Education	9-12

Total Credits: 94-97

*Note: Summer quarter only

Information Technology and Administration Minors or Certificates

The information technology and administrative management minors and certificates provide recognition for students who complete the specified minor or certificate courses. Such recognition will benefit students in gaining professional employment or advancing in their current professional positions.

Students fulfilling the requirements for an ITAM program degree specialization cannot earn a minor with the ITAM department. However, students may earn departmental certificates in an area other than their area of specialization.

Students fulfilling the requirements for a degree program outside the ITAM department can earn a minor in the ITAM department.

Application forms for minors and certificates can be obtained in the department office or on the ITAM web site at www.cwu.edu/itam.

A minimum GPA of 2.3 in the minor and certificate courses must be achieved with a minimum grade of C- in each course.

Administrative Management Minor or Certificate

Required Courses

ADMG 201 - Introduction to Business	3
ADMG 371 - Administrative Management . .	4
ADMG 372 - Leadership and Supervision . .	3
ADMG 374 - Project Management	5

ADMG 385 - Business Communications and Report Writing	5
ADMG 424 - Administrative Management Policy	4

Total Credits: 24

Information Technology Minor or Certificate

Required Courses

ADMG 385 Business Communications and Report Writing	5
IT 248 Web Fundamentals	2
IT 260 Integrated IT Applications	5
IT 301 IT Security, Privacy, and Ethics	3
IT 351 Computer Networks	4
IT 374 Project Management	5
IT 468 Projects in Database	4

Total Credits: 28

Computer Applications Minor or Certificate

Required Courses

IT 204 - Word Processing Applications	3
IT 248 - Web Fundamentals	2
IT 258 - Spreadsheet Applications	3
IT 268 - Database Applications	3
IT 288 - Business Presentation Applications	2
IT 359 - Advanced Spreadsheet Applications	3
IT 422 - Website Construction	4

Total Credits: 20

Retail Management and Technology Minor or Certificate

Required Courses

ADMG 201 - Introduction to Business	3
RMT 330 - Principles of Retailing	4
RMT 335 - Retail Information Technology . .	4
RMT 340 - Principles of Selling	4
RMT 350 - Retailing and E-Commerce	4
RMT 467 - Retail Management	4

Total Credits: 23

Web Design and Management Minor or Certificate

Required Courses

IT 248 - Web Fundamentals	2
IT 268 - Database Applications	3
IT 301 - IT Security, Privacy, and Ethics	3
IT 422 - Website Construction	4
IT 426 - Application of Web Languages	4
IT 428 - Web Application	4
IT 468 - Projects in Database	4
IT 470 - Database and the Web	4

Total Credits: 28

Bachelor of Applied Science Information Technology and Administrative Management

The bachelor of applied science in information technology and administrative management (BAS-ITAM) is designed for students with any technical school degree

to gain a baccalaureate degree in a timely fashion. This degree requires significant study in general education at the upper-division level.

Students seeking the BAS-ITAM program must take a common set of core courses. Additionally, students entering the BAS-ITAM program must choose a specialization in information technology (requires completion of a two-year IT technical degree program with a minimum of 40 approved courses within the IT technical degree) or administrative management.

BAS-ITAM Program Admission Requirements

Applicants for the BAS-ITAM must meet the following admission requirements before admittance to the program:

- Completion of an applied or technical degree from a community college or technical college in Washington with a minimum GPA of 2.3.
- Completion of 20 credits of the CWU "Basic Skills Requirements" (English, math, logic, and computing) or university equivalents or community/technical college equivalents. A foreign language is not required.
- Identification of a clearly articulated academic and/or career goal in pursuing the program and approved by the department chair or designee.

BAS-ITAM Graduation Requirements

- Minimum overall GPA of 2.3.
- Completion of CWU Breadth Requirements
- Completion of the BAS-ITAM core requirement courses and one of the BAS-ITAM specialization list of courses with a minimum grade of C- in each course

List of Specializations for BAS-ITAM program

Students seeking the BAS-ITAM program must take a common set of core courses. Additionally, students entering the BAS-ITAM program must choose a specialization in information technology (requires completion of a two-year IT technical degree program with a minimum of 40 approved courses with the IT technical degree) or administrative management.

BAS-ITAM Core Requirements

ADMG 201 - Introduction to Business	3
OR	
ADMG 301 - Introduction to Business (3)	
ADMG 271 - Business Math Applications . .	4
OR	
ADMG 317 - Business Math Applications (4)	
ADMG 302 - Financial Analysis for Administrative and IT Support	5
ADMG 310 - Business Professional Development	3

ADMG 371 - Administrative Management . . .	4
ADMG 372 - Leadership and Supervision . . .	3
ADMG 374 - Project Management	5
ADMG 385 - Business Communications and Report Writing	5
RMT 366 - Customer Relationship Management	4

Total Core Requirements: 36

BAS-ITAM Information Technology Specialization

The information technology specialization is designed to provide an opportunity for citizens who are information technology professionals with specific technical education to gain a baccalaureate degree in a timely fashion. This baccalaureate degree requires significant study in general education at the upper-division level. This specialization combines human-centered, management skills with IT technical skills—a requirement for those seeking management positions in the IT field.

Required Courses

BAS-ITAM Core Requirements	36
ADMG 376 - Project Management for IT . . .	3
IT 301 - Information Technology Security, Privacy and Ethics	3
IT 461 - Systems Analysis	4
IT 462 - Systems Design	4
IT 486 - Critical Issues in Information Technology	4
IT 490** - Internship	7-10

**NOTE: Elective courses may be substituted for those who have more than 2,000 documented work experience in the information technology field.

Total Credits: 61-64

BAS-ITAM Administrative Management Specialization

The administrative management specialization is designed to provide a baccalaureate degree for those with an applied degree from a Washington community college in a timely fashion. It provides administrative skills for those seeking management positions in any field.

Required Courses

BAS-ITAM Core Requirements	36
ADMG 424 - ADMG Policy	4
ADMG 471 - Contemporary Issues in Administrative Management	4
ADMG 485 - Managerial Communications . .	3
IT 260 - Integrated IT Application Projects . .	5
OR	
IT 360 - Integrated IT Application Projects (5)	
IT 359 - Advanced Spreadsheet Applications 3	
ADMG 490** - Internship	7-10

**NOTE: Elective courses may be substituted for those who have more than 2,000 documented work experience in the administrative management field.

Total Credits: 62-65

Administrative Management Courses

ADMG 201. Introduction to Business (3).

Functions, practices, and organization of the business enterprise. ADMG 201 and ADMG 301 are equivalent course; students may not receive credit for both.

ADMG 271. Business Math Applications (4).

Business and merchandising mathematics applications. ADMG 271 and ADMG 317 are equivalent courses; students may not receive credit for both.

ADMG 301. Introduction to Business (3).

Functions, practices, and organization of the business enterprise. ADMG 201 and ADMG 301 are equivalent courses; students may not receive credit for both.

ADMG 302. Financial Analysis for Administrative and IT Support (5).

This course addresses the financial analysis functions necessary for an administrative and IT support manager to complete requested financial documents. Administrative and IT support staff must understand the basis of financial accounting. Prerequisites: ADMG 271 and junior standing.

ADMG 310. Business Professional

Development (3). Develops strategies to enhance interpersonal skills for career success. Topics include behavioral traits, values, ethics, trust, self-disclosure, and essential functional skills such as time and stress management. Prerequisite: junior standing.

ADMG 317. Business Math Applications (4).

Business and merchandising mathematics applications. ADMG 271 and ADMG 317 are equivalent courses; students may not receive credit for both.

ADMG 355. Workplace Administration

(4). Knowledge and skills necessary for working efficiently and effectively in today's workplace. Topics include conference management, office health and safety, records management and scheduling.

ADMG 371. Administrative Management

(4). Administrative management techniques and practices.

ADMG 372. Leadership and Supervision

(3). Develop leadership techniques and behavioral traits to improve productivity of supervisors and leaders in the workplace.

ADMG 374. Project Management (5).

Development of skills in the core project management areas; scope management, time management, cost management, and quality management. ADMG 374 and IT 374 are equivalent courses; students may not receive credit for both. Prerequisite: ADMG 385.

ADMG 376. Project Management and Information Technology (3).

IT project management with a focus on facilitating project management areas; risk management, procurement management, HR management, and communication management. Microsoft Project will be used. Prerequisite: IT / ADMG 374.

ADMG 385. Business Communications and Report Writing (5). Planning and writing skills for business letters, memoranda, employment, and reports. Prerequisites: either ENG 102 or a direct transfer degree, and junior standing or above.

ADMG 424. Administrative Management

Policy (4). Administrative management policies dealing with technology and innovation; the analysis, decision making, implementation, and control of these policies; the intent and core competencies of an organization; and the competitive integration of technology. Prerequisites: ADMG 371, 372, 385, and senior standing.

ADMG 471. Contemporary Issues in Administrative Management (4).

This capstone course uses current administrative management literature to focus on a variety of topics pertaining to current issues in administrative management. Prerequisites: ADMG 371, 372, and 385.

ADMG 485. Managerial Communications

(3). Advanced written, oral, and non-verbal business communications including proposals, crisis management, international communication, international/domestic etiquette, meeting management, conflict resolution, negotiation, and collaboration. Prerequisite: ADMG 385.

ADMG 490. Cooperative Education (1-

12). An individualized, contracted field experience with business, industry, government, or social service agencies. This contractual arrangement involves a student learning plan, cooperating employer supervision, and faculty coordination. Offered summers only. May be repeated for credit. Grade will either be S or U. By permission.

ADMG 491. Workshop (1-6).

ADMG 493A. Undergraduate Research

Practicum (1-3). Conduct research under direct supervision of a professor with specific learning agreement required. ADMG / IT / RMT 493A are equivalent courses; students may not receive credit for more than one. May be repeated for a total of 3 credits. Grade will either be S or U. By permission.

ADMG 493B. Undergraduate Assistant

Practicum (1-3). Assist in monitoring, supervising, supporting, and tutoring instruction under direct supervision of a professor with specific learning agreements required. ADMG / IT / RMT 493B are equivalent courses; students may only receive credits for one. May be repeated for a total of 3 credits. Grade will either be S or U. By permission.

ADMG 496. Individual Study (1-6).

ADMG 498. Special Topics (1-6).

ADMG 499. Seminar (1-5).

Information Technology Courses

IT 101. Computer Applications (3). Basic skills in Windows, word processing, spreadsheets, databases, and presentations.

- IT 204. Word Processing Applications** (3). Developing microcomputer word-processing skills for producing business documents. Not intended for ITAM majors. Prerequisites: either IT 101 or CS 101.
- IT 228. Introduction to Information Technology** (2). Exploring information technology principles, practices, and applications in contemporary society. Not intended for ITAM majors.
- IT 248. Web Fundamentals** (2). Development of web pages and Internet skills for business, education, and training environments. Prerequisites: either IT 101 or CS 101.
- IT 258. Spreadsheet Applications** (3). Developing spreadsheets for business and workplace environments. Not intended for ITAM majors. Prerequisites: either IT 101 or CS 101.
- IT 260. Integrated Information Technology Application Projects** (5). Developing word processing, spreadsheets, database, and presentation skills to create integrated projects for business and workplace environments. IT 260 and IT 360 are equivalent courses; students may not receive credit for both. Prerequisites: IT 101 or CS 101.
- IT 268. Database Applications** (3). Develop databases for business and workplace environments. Not intended for ITAM majors. Prerequisites: either IT 101 or CS 101.
- IT 288. Business Presentation Applications** (2). Develop multimedia graphic presentations for business and workplace environments. Not intended for ITAM majors. Prerequisites: either IT 101 or CS 101.
- IT 301. Information Technology Security, Privacy, and Ethics** (3). Examination of information technology security and privacy issues in the context of law and ethics. Prerequisite: junior standing or above.
- IT 351. Computer Networks** (4). Computer network communications including LAN and WAN Topologies, Protocols and Services, such as TCP/IP, and Ethernet, within the context of the OSI Reference Model. Prerequisite: junior standing or above.
- IT 359. Advanced Spreadsheet Applications** (3). Advanced spreadsheets for business applications such as design of multiple sheet workbooks and templates, advanced functions and formulas, enhanced formats, lists, and pivot tables. Prerequisites: either IT 258 or IT 260.
- IT 360. Integrated Information Technology Application Projects** (5). Developing word processing, spreadsheets, database, and presentation skills to create integrated projects for business and workplace environments. IT 260 and IT 360 are equivalent courses; students may not receive credit for both. Prerequisites: IT 101 or CS 101.
- IT 362. Wireless Communications** (3). Broad introduction to wireless communications. Provides students with an exposure to a variety of technologies, standards, and concepts. Prerequisite: IT 351.
- IT 374. Project Management** (5). Development of skills in the core project management areas (scope management, time management, cost management, quality management). IT 374 and ADMG 374 are equivalent courses; students may not receive credit for both. Prerequisite: ADMG 385.
- IT 398. Special Topics** (1-6).
- IT 422. Web Site Construction** (4). Design and implementation of the information technology infrastructure needed to operate a business website. Prerequisite: IT 248.
- IT 426. Application of Web Languages** (4). Web languages for the non-computer science student. Prerequisite: IT 422.
- IT 428. Web Applications** (4). Web application design using web software such as Dreamweaver, Fireworks, and Flash. Prerequisite: IT 422.
- IT 456. Advanced Computer Network Management** (4). Advanced knowledge and skills to manage accounts and resources, maintain server resources, monitor server performance, and safeguard data in a computer network environment. Prerequisite: IT 453.
- IT 459. Workstation Administration** (4). Implementation, administration, and troubleshooting workstations as a desktop operating system in any network environment. Prerequisite: IT 453.
- IT 461. Systems Analysis** (4). Feasibility studies of systems, cost analysis, budgets, and tools of systems analysis. Prerequisite: senior standing.
- IT 462. Systems Design** (4). Analyze office information systems through selected analysis tools and procedures. Students will apply this knowledge by designing improved systems. Prerequisite: IT 461.
- IT 463. Computer Network Management** (4). Develop and improve network administration and management skills within a network server environment. Prerequisite: IT 351.
- IT 464. Directory Services** (4). Students will plan, implement, and maintain directory service features including forests, sites, domains, and organizational units to meet network accessibility, performance, and security goals. Prerequisite: IT 463.
- IT 465. Messaging Service** (4). Provides students with the knowledge and skills needed to install and support a reliable, secure e-mail messaging infrastructure in a medium-to large-sized (250 to 5,000 users) corporate environment. Prerequisite: IT 463.
- IT 467. Network Security** (4). Analysis and design of computer network security in the business environment. Prerequisite: IT 463.
- IT 468. Projects in Database** (4). Techniques in database design and management. Prerequisite: either IT 260 or IT 268.
- IT 469. Enterprise Database Systems: SQL** (3). Students will learn to write SQL statements, basic database administration, and report writing skills. Prerequisite: IT 468.
- IT 470. Database and the Web** (4). Creating dynamic web pages that interact with a database. Prerequisite: IT 422 and IT 468.
- IT 486. Critical Issues in Information Technology** (4). This seminar format and case study course is intended to expose pre-graduation IT seniors to a variety of topics pertaining to the IT industry. Prerequisites: IT 301 and ADMG 376, senior standing.
- IT 490. Cooperative Education** (1-12). An individualized, contracted field experience with business, industry, government, or social service agencies. This contractual arrangement involves a student-learning plan, cooperating employer supervision, and faculty coordination. May be repeated for credit. Grade will either be S or U. By permission.
- IT 491. Workshop** (1-6).
- IT 493A. Undergraduate Research Practicum** (1-3). Conduct research under direct supervision of a professor with specific learning agreement required. Department requirements must be met. ADMG/IT/RMT 493A are equivalent courses; students may not receive credit for both. May be repeated up to 3 credits. Grade will either be S or U.
- IT 493B. Undergraduate Assistant Practicum** (1-3). Assist in monitoring, supervising, supporting, and tutoring instruction under direct supervision of a professor with specific learning agreements required. Department requirements must be met. ADMG/IT/RMT 493B are equivalent courses; students may not receive credit for both. May be repeated up to 3 credits. Grade will either be S or U. By permission.
- IT 496. Individual Study** (1-6).
- IT 498. Special Topics** (1-6).
- IT 499. Seminar** (1-5).

Retail Management and Technology Courses

- RMT 320. Principles of Merchandising Management for Micro Brewing** (5). Emphasis on micro brewing merchandising and operations. Focus within channel on selling, distribution, promotion, policies, and regulations. By permission. Prerequisite: either admission to the Craft Beer Trade Certificate Program.
- RMT 330. Principles of Retailing** (4). Introduction to retailing including retail stores, merchandising, operations, store location and layout, internal organization, buying, personnel management, inventory control, and sales promotion.
- RMT 335. Retail Information Technology** (4). Use of contemporary technology in collecting, analyzing, and interpreting retail management data and writing and presenting retail management reports.

RMT 340. Principles of Selling (4).

Introduction to selling, its role in the economy, the sales process, types of selling, planning the sale, and sales organization.

RMT 350. Retailing and E-Commerce (4).

Examines the progress and potential of the Internet for the marketing, selling, promoting, and distributing of retail goods and services. Prerequisite: RMT 330.

RMT 366. Customer Relationship Management (4).

Developing and maintaining strong customer relationships is paramount to a successful business. Students learn to manage prospects and current customers by using information technology. Prerequisite: junior standing or above.

RMT 467. Retail Management (4).

Retail store ownership and management, including startup, location, market analysis, customer service, organization, merchandise management, human resource management, sales promotion, and financial planning. Prerequisites: RMT 330 and senior standing.

RMT 470. Critical Issues in Retailing (4).

Capstone course in retailing that focuses on current retail management and technology literature and case studies. Prerequisites: RMT 330 and senior standing.

RMT 485. International Merchandising

(4). Emphasis on international retailing and global trade. Focus on cross-cultural differences, work environments, policies and regulations. RMT 485 and FCSA 485 are equivalent courses; students may not receive credit for both. Prerequisite: RMT 330.

RMT 490. Cooperative Education (1-12).

An individualized, contracted field experience with business, industry, government, or social service agencies. This contractual arrangement involves a student learning plan, cooperating employer supervision, and faculty coordination. Available summer only. May be repeated for credit. Grade will either be S or U. By permission.

RMT 492. Practicum (5-15).

Grade will either be S or U. By permission.

RMT 493A. Undergraduate Research

Practicum (1-3). Conduct research under direct supervision of a professor with specific learning agreement required. ADMG/IT/RMT 493A are equivalent courses; students may only receive credit for one. May be repeated up to 3 credits. Grade will either be S or U. By permission.

RMT 493B. Undergraduate Assistant

Practicum (1-3). Assist in monitoring, supervising, supporting, and tutoring instruction under direct supervision of a professor with specific learning agreements required. ADMG/IT/RMT 493B are equivalent courses; students may only receive credit for one. May be repeated up to 3 credits. Grade will either be S or U. By permission.

RMT 496. Individual Study (1-6).**RMT 498. Special Topics (1-6).****RMT 499. Seminar (1-5).**

INTERDISCIPLINARY STUDIES

Undergraduate Studies

Ellensburg

Barge Hall, room 303

509-963-1456

www.cwu.edu/~avpugrad/interdisciplinary.html

See website for how this program may be used for educational and career purposes.

Program Directors

Tracy L. Pellett, EdD, associate vice president for undergraduate studies

Stephen Schepman, PhD, director of academic coordination-university centers

Program Information

Interdisciplinary studies-social sciences major is for students whose primary interest in the social sciences requires interdisciplinary programs and course selections which are not possible within single academic programs or established curricula. Program offers students an opportunity to devise an approved, coherent program of study with an academic advisor fulfilling academic or career goals and includes prerequisites consistent with the 300- 400-level major coursework. Since the program is a student-designed, interdisciplinary major, course selections will vary. Students in the interdisciplinary studies major must take courses in at least three disciplines within the major.

Additional Degree Requirements

Students must earn a minimum grade of C- in each course in an approved interdisciplinary studies major plan and achieve a minimum 2.25 GPA in the major. Courses in a student's minor or second major may not be included in the interdisciplinary studies major plan without advisor's consent. Students will not be allowed to enroll in IDS 289 and IDS 489 concurrently.

Bachelor of Science Interdisciplinary Studies - Social Sciences (62-Credit Major)

Required Courses

IDS 289 - Proposal Colloquium 1
IDS 489 - Senior Colloquium 1

Sixty credits must be taken from the list of courses approved for the social science major, 45 of which must be upper division. Students in the interdisciplinary studies-social sciences major must take courses in at least three disciplines within the major. No more than 15 credits may be numbered 398, 498, or 490. 60

Total Credits: 62

Interdisciplinary Studies - Social Sciences (47-Credit Major)

Required Courses

IDS 289 - Proposal Colloquium 1
IDS 489 - Senior Colloquium 1

Forty-five credits must be taken from the list of courses approved for the social sciences major, 30 of which must be upper division. Students in the interdisciplinary studies-social sciences major must take courses in at least three disciplines within the major. No more than 10 credits may be numbered 398, 498, or 490. 45

Total Credits: 47

In addition, a 47-credit major must complete either a traditional departmental minor or a second major.

Courses Approved for the Interdisciplinary Studies – Social Sciences Major

Africana and Black Studies (approved courses)

ABS 300 - Black Diaspora Studies

ABS 302 - Hip Hop as Global Culture

ABS 303 - African and African American

Fiction as History

ABS 305 - 20th Century Black Women's Literature

ABS 306 - African Women: Models of Empowerment

ABS 310 - Black Diaspora: France and French Caribbean

ABS 400 - Race and Literature

ABS 398 - Special Topics

Anthropology (all courses)

BIOL 302 and BIOL 304

Communication (all courses)

Economics (all courses)

English (all 300- and 400-level courses)

Environmental Studies (all courses)

Ethnic Studies (all courses)

Family Studies (all courses)

Geography (all courses)

History (all courses)

Interdisciplinary Studies - Social Sciences

IDS 490 - Cooperative Education

IDS 398 - Special Topics

IDS 498 - Special Topics

Law and Justice (all courses)

Library Science

LIB 345 - Library Research Methods

Management

HRM 381 - Management of Human

Resources

MGT 380 - Organizational Management

MKT 360 - Principles of Marketing

Philosophy (all courses)

Political Science (all courses)

Psychology (all courses)

Sociology (all courses)

Theatre (all courses)

University 301

Women's Studies (all courses)

Interdisciplinary Courses

IDS 289. Proposal Colloquium (1).

Introduction to the interdisciplinary studies major, interdisciplinary studies degree proposal design and preparation. Grade will either be S or U. By permission.

IDS 398. Special Topics (1-6).

IDS 489. Senior Colloquium (1). End-of-program assessment; preparation of comprehensive degree report and/or descriptive portfolio of project. Students must earn at least a C grade to pass this course. Grade will either be S or U. Prerequisite: IDS 289.

IDS 490. Cooperative Education (1-12). An individualized, contracted field experience with business, industry, government, or social service agencies. This contractual arrangement involves a student learning plan, cooperating employer supervision, and faculty coordination. May be repeated for credit. Grade will either be S or U. By permission.

IDS 498. Special Topics (1-6).

INTERNATIONAL STUDIES AND PROGRAMS

International Studies
Ellensburg
International Center, room 101

509-963-3612

Fax 509-963-1558

www.cwu.edu/~intlprog

See website for how these programs may be used for educational and career purposes.

Executive Director

Michael Launius, PhD

Staff

Bobbie Peterson, administrative assistant
Margaret (Greta) Herman, fiscal specialist
Roslyn Moes, international student advisor
Clarice Tan, international student recruiter
Nicole Burk, program assistant (SEVIS)
Jan Powell, office assistant

Program Information

The Office of International Studies and Programs (OISP) coordinates all internationally related activities on campus. This includes maintaining institutional linkages, facilitating faculty exchanges, recruiting international students, providing study abroad/exchange, and academic advising for both international students and American students, promoting English language acquisition through the Asia University America Program (AUAP), and the University English as a Second Language program (UESL), and collaborating with the academic deans and departments in support of the overall internationalization of the university curriculum.

OISP provides a variety of services to all segments of the university in order to meet the diverse needs of CWU's students, faculty, international students, research scholars, and professors. The following services are offered through the OISP: study abroad/exchange advising (SAEP), advising to international students, English language training through the UESL program, and a unique English language and cultural learning experience for Japanese students from Asia University in Japan through AUAP.

Institutional Linkages

Central and the Office of International Studies and Programs (OISP) maintain active inter-institutional and organizational relationships with the following universities: Anhui University, China; Gunma Prefectural Women's University, Japan; Herzen State Pedagogical University, Russia; University of Pecs, Hungary; various countries in the International Student Exchange Program; Mexico; Kyoto University of Foreign Studies, Japan; Beijing Jiaotong University, China; Queensland University of Technology, Australia; Charles Darwin University, Australia; Griffith University, Australia; Macquarie University, Australia; University of Shimane, Japan; Shimane Women's Junior College, Japan; Takushoku University, Japan; University of Hull, United Kingdom; Universidad Austral de Chile, Chile; Pukyong National University, Korea; Kyundong University, Korea; Ewha Women's University, Korea; various countries in the AHA International; Beijing University, China; Universidad Anahuac del Sur, Mexico; Universite de Pau et des Pays de l'Adour, France; College Consortium for International Studies, various countries; American Institute for Foreign Studies, various countries; Centro de Investigaciones en Medio Ambiente y Salud (CIMAS), Ecuador; University of Washington Cadiz Program, Spain; Universidad Autonoma de Guadalajara, Mexico; Asia University, Japan; American Pacific University, Vietnam and Napier University, Scotland.

Active student and faculty exchange opportunities exist between CWU and these institutions.

International Students and Scholars

International students and scholars receive academic advising, advocacy, and immigration regulations and procedures assistance through OISP. Support services are available to all international students including those here for language training in the UESL department, to take part in an academic year exchange, or to obtain a bachelor or master's degree, in International, and Area Studies.

International and Area Studies

CWU offers Chinese, French, German, Japanese, Russian, and Spanish language courses. Students studying a language are encouraged to have international experience in order to learn more about the cultural context of the language. Regular degree programs are offered in foreign languages with specializations in Chinese, French, German, Japanese, Russian, and Spanish. The foreign language broad area major may include studying abroad in a country where the target language is taken.

Students can internationalize their undergraduate education by completing a major or minor in Asia/Pacific Studies and/or Latino and Latin American Studies Program. There is also a minor in International Studies. These programs of study are interdisciplinary and incorporate courses in anthropology, art, economics, geography, history, languages, philosophy, and political science. Other area-focused courses are also available throughout the academic year.

International Studies Minor

Program Director

Michael Launius, PhD
International Center, room 117

Program Information

The international studies minor program goals are to provide a structured interdisciplinary opportunity for students to develop the analytical skills necessary to understand and evaluate the contemporary international system; to facilitate research and creative activities that focus on international issues; to provide opportunities to directly engage in meaningful cross-national interactions; and to encourage the apprehension of the fundamental commonalities as well as rich diversities that characterize the modern world system.

Required Courses

ECON 102 - World Economics Issue 5
GEOG 101 - World Regional Geography 5
POSC 270 - International Politics 5

International Studies Courses

INTL 110-465 - International Studies 3

Electives 18

Students must complete at least four of the following courses with no more than two from any one department.

ANTH 358 - Culture and Politics in a Global Economy (4)
COM 302 - Intercultural Communication (4)
ECON 310 - International Economics (5)
ECON 346 - Comparative Economics Systems (5)
ENG 360 - World Cinema (5)
GEOG 304 - Economic Geography (5)
GEOG 460 - Geography of International Trade (5)

HED 317 - International Health (3)
 MGT 384 - Introduction to International Business (5)
 POSC 373 - International Politics of the Pacific Rim (5)
 POSC 375 - The Middle East and International Politics (5)
 POSC 376 - International Organization (3)
 POSC 378 - International Political Economy (5)
 POSC 470 - Contemporary Issues in International Relations (3)
 RELS 201 - Sacred Books of the World (5)
 SOC 326 - Demography of Contemporary World Populations (5)
 WS 498 - Special Topics (1-6)
 INTL 198-498 - Special Topics (1-6)
 INTL 290/490 - Cooperative Education (1-6)

Total Credits: 36

STUDY ABROAD AND EXCHANGE PROGRAMS (SAEP)

International Studies
 Ellensburg
 International Center, room 101

509-963-3612
www.cwu.edu/~studyabroad
 See website for how this program may be used for educational and career purposes.

Program Director
 Larry Laffrey, MA

Staff

Roberta Lowe, secretary senior
 Ray Bates, study abroad advisor
 Kylie Gallagher, study abroad advisor

Program Information

Study Abroad and Exchange Programs offers more than 150 international programs in 50 countries and over 170 exchange locations within the U.S. International internships are also available. Programs range in length from 10 days to one year. Programs grant academic credit that can be applied to major, minor, or breadth requirements with departmental approval. Foreign language proficiency is not required and many programs offer coursework in English.

SAEP Standards

Minimum GPA 2.5 or higher; 2.0 for international internships.

Minimum sophomore standing for most programs; freshman standing for some faculty-led programs.

Must be in good academic and disciplinary standing.

Program-specific eligibility criteria are available on the SAEP website at www.cwu.edu/~studyabroad/.

Financial Obligations

Exempt from CWU tuition. Program-specific fees apply. For more information, see the SAEP website at www.cwu.edu/~studyabroad/.

Most types of financial aid apply toward program costs. Aid may be increased if necessary depending on student aid eligibility.

UNIVERSITY ENGLISH AS A SECOND LANGUAGE PROGRAM (UESL)

International Studies
 Ellensburg
 International Center, room 101

509-963-1375
www.cwu.edu/~esl/
 See website for how these programs may be used for educational and career purposes.

Program Director
 Steve Horowitz, MA

Senior Lecturers

Randi Freeman, MA, TESL
 Meiqi He, MA, TESL
 Carl Rosser, PhD, English
 Jenee Cazares, MA, second language teaching and learning for adults
 Suzanne Johnson, MA, TESL
 Robert (Bob) Woods, MA, applied linguistics (TESOL)

Staff

Patricia (Pat) Rice, secretary senior

Program Information

The UESL Program consists of a year-round intensive English program and short-term special programs. The year-round program focuses on language instruction and academic preparation for international students. Conditional undergraduate admission to CWU is an option through the UESL program. The program provides practical training for English department graduate students and an opportunity for American students to be conversation partners. Short-term special programs can be arranged for specific groups.

ASIA UNIVERSITY AMERICA PROGRAM (AUAP)

International Studies
 Ellensburg
 International Center, room 101

509-963-1373
www.cwu.edu/~auap/
 See website for how these programs may be used for educational and career purposes.

Program Director
 Nicki Kukar, MEd

Lecturers

Andrew Cottonwood MA, American and Japanese history
 John Katunich, MA, TESL, curriculum coordinator
 Rose Romfo, MA, English literature

Staff

Angela (Angie) Wedekind, secretary senior
 Mark Werdin, MA, English literature, student services coordinator
 Emily Kutzler, student services assistant

Program Information

The Asia University America Program (AUAP) is a study abroad program for freshman and sophomore students from Asia University in Tokyo, Japan. Two groups of students come to CWU each year for five months. The program is presently ongoing at two other universities in the northwest: WWU and EWU. AUAP provides students from Asia University the opportunity to improve their English skills and experience university life in the U.S. Students attend 18 hours of AUAP classes per week following the required curriculum from Asia University.

International Study Courses

INTL courses are offered only in university-approved study abroad/exchange programs. Courses may be offered and repeated for credit under different titles.

INTL 110. Agriculture (1-12). Offered only in university-approved, study-abroad/exchange programs. Courses may be offered and repeated for credit under different titles.



INTL 415. Business or Management (1-12).

Offered only in university-approved, study-abroad/exchange programs. Courses may be offered and repeated for credit under different titles.

INTL 420. Education (1-12).

Offered only in university-approved, study-abroad/exchange programs. Courses may be offered and repeated for credit under different titles.

INTL 421. Student Teaching Abroad (16).

Course is available for overseas student teaching placements through an approved CWU program. Course may substitute for CWU student teaching requirement with prior permission of director of field experiences only. Grade will either be S or U. By permission.

INTL 425. Engineering (1-12).

Offered only in university-approved, study-abroad/exchange programs. Courses may be offered and repeated for credit under different titles.

INTL 430. Fine or Applied Arts (1-12).

Offered only in university-approved, study-abroad/exchange programs. Courses may be offered and repeated for credit under different titles.

INTL 435. Foreign Languages (1-12).

Offered only in university-approved, study-abroad/exchange programs. Courses may be offered and repeated for credit under different titles.

INTL 440. Health Sciences (1-12).

Offered only in university-approved, study-abroad/exchange programs. Courses may be offered and repeated for credit under different titles.

INTL 445. Humanities (1-12).

Offered only in university-approved, study-abroad/exchange programs. Courses may be offered and repeated for credit under different titles.

INTL 450. Law (1-12).

Offered only in university-approved, study-abroad/exchange programs. Courses may be offered and repeated for credit under different titles.

INTL 455. Math or Computer Sciences (1-12).

Offered only in university-approved, study-abroad/exchange programs. Courses may be offered and repeated for credit under different titles.

INTL 460. Physical or Life Sciences (1-12).

Offered only in university-approved, study-abroad/exchange programs. Courses may be offered and repeated for credit under different titles.

INTL 465. Social Sciences (1-12).

Offered only in university-approved, study-abroad/exchange programs. Courses may be offered and repeated for credit under different titles.

INTL 490. Cooperative Education (1-12).

Internship credit offered only in university-approved, study-abroad/exchange programs. Courses may be offered and repeated for credit under different titles. Grade will either be S or U.

INTL 498. Special Topics (1-6).

LATINO AND LATIN AMERICAN STUDIES PROGRAM

College of Arts and Humanities

Ellensburg

Language and Literature Bldg., room 416E

509-963-3432

Fax 509-963-1561

www.cwu.edu/~la_studies

See website for how these programs may be used for educational and career purposes.

Co-directors

Stella Moreno, PhD, foreign languages

Chris Schedler, PhD, English

Faculty

Tracy Andrews, PhD, anthropology

Loran Cutsinger, PhD, anthropology

Gilberto Garcia, PhD, political science

Alejandro Lee, PhD, foreign languages

Jennifer Lipton, MA, geography

Eric Mayer, PhD, foreign languages

Stella Moreno, PhD, foreign languages

Nelson Pichardo, PhD, sociology

Craig Revels, PhD, geography

Chris Schedler, PhD, English

Program Information

The Latino and Latin American Studies Program (LLAS) seeks to engage CWU students, faculty, staff, and local communities in a study of Latino and Latin American experiences, peoples, and cultures. The LLAS minor provides students with broad, interdisciplinary training in the economic, social, political, and cultural realities of Latino and Latin American peoples. The minor will be extremely valuable for those pursuing careers in business, government, social work, law and justice, and teaching that require engagement with Latino communities in the United States, as well as for those who wish to travel and work in Latin America. Moreover, the Latino and Latin American Studies minor may also serve as preparation for graduate study in multiple academic or professional fields.

Latino and Latin American Studies Minor

Requirements for minors in Latino and Latin American Studies

- Prerequisite: Spanish, Portuguese, or French language equivalent to the end of the first year (153).
- Required Course (5 credits)
- LLAS 102, An Introduction to Latino and Latin American Studies
- Required Elective Credits (20 credits)
- A total of 20 approved elective credits in at least three different disciplines at the 300 level or above is required (see "List of Approved CWU Courses" below). Courses taken through CWU exchange

or study-abroad programs in a Latin American university may be applied for minor program credit. Courses that do not appear on the approved list but contain significant Latino and Latin American content may be used for minor program credit, upon approval of the LLAS director(s).

- An average GPA of 2.0 is required in all program courses.

List of Approved CWU Courses (By Department/Program)**(a) Anthropology**

ANTH 342 - Hispanic Cultures of the Western U.S. (4)

ANTH 346 - Cultures of Latin America and the Caribbean (4)

(b) English

ENG 331 - Latina/o Literature (5)

(c) Ethnic Studies

ETS 350 - Survey of Chicano Studies (5)

ETS 351 - Contemporary Chicano Issues (5)

ETS 352 - Chicano Social and Psychological Perspectives (4)

(d) Foreign Languages

SPAN 301 - Introduction to Spanish and Latin American Literature (4)

SPAN 310 - Hispanic Civilizations and Cultures (4)

SPAN 444 - Chicano/Latino Literature (4)

SPAN 446 - Hispanic Cinema (4)

SPAN 456 - The Spanish and Latin Short Story (4)

SPAN 457 - Latin American Theater (4)

SPAN 458 - Latin American Fiction (4)

SPAN 459 - Latin American Poetry (4)

SPAN 467 - Spanish and Latin American Literature and Film (4)

SPAN 471 - Spanish/English Bilingual Cultures in the U.S. (4)

(e) Geography

GEOG 470 - Geography of Latin America (4)

GEOG 471 - Geography of Middle America (3)

(f) History

HIST 328 - Modern Latin America (5)

HIST 386 - The Latin American Colonies (5)

HIST 464 - Latin American Revolutions (5)

HIST 488 - Mexico in the Modern Era (5)

(g) Latino and Latin American Studies

LLAS 398 - Special Topics (1-6)

LLAS 399 - Multi-disciplinary Seminar on Latino and Latin America (5)

LLAS 496 - Individual Study (1-6)

(h) Political Science

POSC 361 - Latin American Politics (5)

Latino and Latin American Studies Courses

LLAS 102. An Introduction to Latino and Latin American Studies (5). A multi-disciplinary introduction of Latino and Latin American studies, presented in

three main components: People and the Land, The Environment and the Human Condition, and Socio-Political Spectrum.
LLAS 398. Special Topics (1-6).
LLAS 399. Multi-disciplinary Seminar on Latino and Latin America (5).
LLAS 496. Individual Study (1-6).

LANGUAGE, LITERACY, AND SPECIAL EDUCATION DEPARTMENT (LLSE)

College of Education and Professional Studies
 Ellensburg
 Black Hall, room 205

509-963-2049

www.cwu.edu/~education

See website for how these programs may be used for educational and career purposes

Faculty and Staff Chairs

Carol Butterfield, PhD
 Daniel Fennerty, EdD

Professors

Carol Butterfield, PhD, elementary education, literacy, bilingual education, TESL
 Dan Fennerty, EdD, special education
 Connie Lambert, PhD, special education

Associate Professors

Janet Finke, PhD, literacy
 Terrance McCain, PhD, bilingual education, TESL
 Andrea C. Sledge, PhD, literacy

Assistant Professors

Yukari Amos, PhD, bilingual education
 YiShan Lea, EdD, bilingual education, TESL
 Cristina Santamaria, PhD, special education
 Janet Spybrook, Ed D, special education
 Sharryn Walker, PhD, literacy
 Sandra Wentworth, PhD, special education

Lecturer

Judy Backlund, MA, Literacy, TESL

Staff

Nancy Schnebly

Department Information

Major and/or minor programs in the Department of Language, Literacy, and Special Education include bilingual education/teaching English as a second language (TESL), literacy, and special education. The courses in these programs are designated by the course prefixes EDBL, EDLT, and EDSE, respectively.

In addition to major and/or minor in LLSE, students must complete the Professional Education Program. Students choosing to complete a major or minor without completing the Professional Education Program must have program approval at the time of declaration.

Students completing a special education major or minor must complete EDCS 424 if they are pursuing a secondary discipline-specific teaching major (or EDLT 308 for those also seeking an elementary-specific teaching major) as part of the Professional Education Program. All students completing a secondary discipline-specific program must complete EDCS 424. All other education department majors or minors do not require the completion of this course. Also, at least 75 percent of the endorsable major or minor must be completed prior to EDCS 442, Student Teaching.

Department Standards

All students completing an educational endorsement must maintain a 3.0 GPA or higher for the last 45 graded credits. Students must also earn a minimum grade of C in all required education courses.

Special Education Majors

The special education majors offered are specifically designed to prepare teachers for meeting the diverse competencies required for teaching individuals with disabilities. Students electing special education teaching must follow one of the outlined programs. EDSE 302 must be taken prior to or concurrently with EDSE 311.

Bachelor of Arts in Education Special Education (P-12)

This major satisfies the endorsement for special education. This major is for students planning to earn a teaching certificate with special education P-12 endorsement. This major requires a minor.

Required Courses

EDSE 310 - Introduction to Special Education	4
EDSE 311 - Foundations of Special Education	1
EDSE 410 - Behavior Management for Students with Disabilities	3
EDSE 411 - Assessment of Students with Disabilities	4
EDSE 422 - Teaching Strategies, Curriculum, and Materials for Students with Disabilities	5
EDSE 423 - Instructional Strategies and Practices in Literacy and Mathematics for Students with High Incidence Disabilities	4
EDSE 426 - The Child with Language Disabilities	3
EDSE 431 - Program Management for Students with Disabilities	4
EDSE 432 - Career Education for Students with Disabilities	3
EDSE 433 - Pre-school for Students with Developmental Delays	3
EDSE 460 - Collaboration with Parents, Paraprofessionals, and Community Agencies	4
EDSE 495 - Practicum	16

Total Credits: 54

Bachelor of Arts in Education Special Education (P-12) Broad Area

This major satisfies the endorsement for special education. This major is for students planning to earn a teaching certificate with special education P-12 endorsement. This major does not require a minor.

Required Courses

EDEL 323 - Teaching Elementary School Mathematics	4
EDLT 308 - Literacy I	3
EDLT 309 - Literacy II	5
EDLT 422 - Teaching the Language Arts	4
EDSE 310 - Introduction to Special Education	4
EDSE 311 - Foundations of Special Education	1
EDSE 410 - Behavior Management for Students with Disabilities	3
EDSE 411 - Assessment of Students with Disabilities	4
EDSE 422 - Teaching Strategies, Curriculum, and Materials for Students with Disabilities	5
EDSE 423 - Instructional Strategies and Practices in Literacy and Mathematics for Students with High Incidence Disabilities	4
EDSE 426 - The Child with Language Disabilities	3
EDSE 431 - Program Management for Students with Disabilities	4
EDSE 432 - Career Education for Students with Disabilities	3
EDSE 433 - Pre-school for Students with Developmental Delays	3
EDSE 460 - Collaboration with Parents, Paraprofessionals, and Community Agencies	4
EDSE 495 - Practicum	16
Department-approved electives	3

Total Credits: 73

Bilingual Education/Teaching English as a Second Language Minor

This minor satisfies the endorsements for bilingual education and English as a second language. This minor serves the goals and requirements of students wishing to teach in classrooms characterized by cultural and linguistic diversity. The bilingual/TESL minor leads to K-12 endorsements in bilingual education and English as a second language. Note the foreign language requirement below.

Required Courses

EDBL 312 - Foundations in Bilingual Education	3
EDBL 318 - Culture and Curriculum	3
EDBL 430 - Sheltering Instruction for Linguistically Diverse Students	3
EDBL 433 - Educational Linguistics	3
EDBL 435 - Bilingual Education in the Content Areas	3
EDBL 438 - Teaching English as a Second Language	3

EDBL 439 - Assessment of Linguistically Diverse Students	3
EDBL 440 - Development of Literacy with Linguistically Diverse Students	3
EDBL 492 - Practicum	3
Department-approved electives	3-4

Total Credits: 30-31

Literacy Minor

The literacy minor, with campus and field experiences, is designed to prepare reading teachers and strengthen background preparation of elementary teachers. *EDLT 308 and EDLT 309 are prerequisites for admittance to the minor. The minor should be commenced in the junior year.

*EDLT 493 requires permission of the department (designated as the instructor of EDLT 493). Permission will not be granted until six required courses in the literacy minor, excluding prerequisite courses, are completed or will be completed the quarter prior to enrollment.

Required Courses

*EDLT 308 - Literacy I	3
*EDLT 309 - Literacy II	5
EDLT 410 - Teaching Word Recognition Skills	3
EDLT 411 - Teaching Comprehension	3
EDLT 412 - Assessment of Literacy Skills	3
EDLT 413 - Methods and Materials for Literacy Instruction	3
EDLT 414 - Teaching Literacy in a Multi-cultural, Multi-lingual Setting	3
EDLT 418 - Literacy and Linguistics	3
EDLT 424 - Literacy Across the Curriculum	3
*EDLT 493 - Literacy Practicum	6

Choose one of the following electives	3
EDBL 440 - Development of Literacy with Linguistically Diverse Students (3)	
EDLT 415 - Literacy Strategies for Struggling and Advanced Learners (3)	
EDLT 417 - Early Literacy (3)	
EDLT 419 - Storytelling Techniques (3)	

Total Credits: 38

Special Education Minor

The special education programs offered are specifically designed to prepare teachers for meeting the diverse tasks required in teaching individuals with disabilities. The minor may serve as a "pre-endorsement" plan for those wishing to add the special education endorsement at a later date. See a special education advisor for your individualized pre-endorsement plan.

Required Courses

EDSE 310 - Introduction to Special Education	4
EDSE 311 - Foundations of Special Education	1
EDSE 410 - Behavior Management for Students with Disabilities	3
EDSE 411 - Assessment of Students with Disabilities	4
EDSE 422 - Teaching Strategies, Curriculum, and Materials for Students with Disabilities	5

EDSE 423 - Instructional Practices and Strategies in Literacy and Mathematics for Students with High Incidence Disabilities	4
EDSE 431 - Program Management for Students with Disabilities	4
EDSE 432 - Career Education for Students with Disabilities	3
EDSE 433 - Pre-school for Students with Developmental Delays	3
EDSE 460 - Collaboration with Parents, Paraprofessionals, and Community Agencies	4

Total Credits: 35

Endorsements for Special Education

Students who hold a current teaching certificate and are endorsed in other areas may earn endorsement in special education. See a special education advisor for more information.

Teaching English as a Second Language (TESL) Minor

This minor satisfies the endorsement for English as a second language. This minor prepares students to teach in classrooms where second language students are enrolled. While the bilingual / TESL minor leads to a bilingual education endorsement, the TESL minor leads to an English as a second language endorsement. Students must complete, or have already completed, one year of study in a foreign or second language or the equivalent (at either the high school or university level).

Required Courses

EDBL 312 - Foundations in Bilingual Education	3
EDBL 318 - Culture and Curriculum	3
EDBL 430 - Sheltering Instruction for Linguistically Diverse Students	3
EDBL 433 - Educational Linguistics	3
EDBL 438 - Teaching English as a Second Language	3
EDBL 439 - Assessment of Linguistically Diverse Students	3
EDBL 440 - Development of Literacy with Linguistically Diverse Students	3
EDBL 492 - Practicum	3
Department-approved electives	3

Total Credits: 27

Bilingual Education Courses

EDBL 296. Individual Study (1-6).	
EDBL 298. Special Topics (1-6).	
EDBL 299. Seminar (1-5).	
EDBL 312. Foundations in Bilingual Education (3). Education of students whose primary language is other than English. Research on linguistic, social and community issues pertaining to bilingualism and bilingual education. Prerequisite: conditional or full admission to the Teacher Preparation Program.	

EDBL 318. Culture and Curriculum (3). The importance of culture-based curriculum to children, families and communities, and its creation, use, and evaluation. Prerequisite: conditional or full admission to the Teacher Preparation Program. ANTH 130 is also a recommended prerequisite.

EDBL 396. Individual Study (1-6).

EDBL 398. Special Topics (1-6).

EDBL 401. Principles and Practices for Educating Linguistically Diverse Students (3). Required coursework that provides the fundamental background in language and learning theories needed to educate linguistically diverse students. The basics of sheltered instruction are introduced. Prerequisite: EFC 340 and admission to the Teacher Preparation Program.

EDBL 430. Sheltering Instruction for Linguistically Diverse Students (3). This course provides teacher candidates the basic competencies and skills needed to make appropriate modifications and accommodations for linguistically diverse students in content area instruction.

EDBL 432. Second Language Acquisition and Related Methodologies (3). This course examines different theories of second language acquisition and their relationships with the development of the methodologies for teaching a second language. Prerequisite: conditional or full admission to the Teacher Preparation Program.

EDBL 433. Educational Linguistics (3). Phonology, syntax, and semantics applicable to speech and learning situations in the school. Not recommended for undergraduates with no teaching experience. Prerequisite: full admission to the Teacher Preparation Program.

EDBL 435. Bilingual Education in the Content Areas (3). Designed to develop teacher competency related to the bilingual instruction of coursework in language arts, social studies, science, and mathematics in both English and Spanish. The use of ESL in these content areas is emphasized. Taught in English and Spanish. Prerequisite: conditional or full admission to the Teacher Preparation Program.

EDBL 438. Teaching English as a Second Language (3). Prepares teachers in the development and practice of research-based methods and techniques used to assist K-12 English Language Learners in acquiring academic English. Prerequisite: conditional or full admission to the Teacher Preparation Program.

EDBL 439. Assessment of Linguistically Diverse Students (3). This course prepares students to use effective assessment programs and techniques with linguistically diverse students in order to improve identification, reclassification, and teaching of such students. Prerequisite: conditional or full admission to the Teacher Preparation Program.

EDBL 440. Development of Literacy with Linguistically Diverse Students (3). Reading instruction for K-12 students

who are speakers of a language other than English. Linguistic theory and information for developing and implementing strategies and techniques for literacy acquisition in English. Prerequisite: full admission to the Teacher Preparation Program.

EDBL 492. Practicum (1-15). This course will provide students with experience working in bilingual education and/or English as a Second Language settings. Students may accumulate no more than 15 hours of practicum credit. Grade will be either S or U. By permission. Prerequisite: full admission to the Teacher Preparation Program.

EDBL 496. Individual Study (1-6).

EDBL 498. Special Topics (1-6).

EDBL 499. Seminar (1-5).

Literacy Education Courses

EDLT 296. Individual Study (1-6).

EDLT 298. Special Topics (1-6).

EDLT 299. Seminar (1-5).

EDLT 308. Literacy I (3). First of two courses designed to prepare prospective teachers to teach literacy in elementary school classrooms. Deals with processes and products of the literacy act, methods and materials, assessment procedures, and instruments.

EDLT 309. Literacy II (5). Content and methodology of early literacy, vocabulary development, phonic and structural analysis, comprehension, and study skills. Field experience in a local school embedded. Prerequisites: EDLT 308 and full admission to the Teacher Preparation Program.

EDLT 396. Individual Study (1-6).

EDLT 398. Special Topics (1-6).

EDLT 410. Teaching Word Recognition Skills (3). Methods for teaching word recognition skills will be developed. Decoding as an aid to comprehension, including phonetic analysis, context clues, structural analysis, and sight vocabulary. Prerequisites: EDLT 308, 309, and full admission to the Teacher Preparation Program.

EDLT 411. Teaching Comprehension (3). Comprehension strategies and techniques; techniques for vocabulary development. Prerequisites: EDLT 308, 309, and full admission to the Teacher Preparation Program.

EDLT 412. Assessment of Literacy Skills and Processes (3). Assessment instruments, procedures, and interpretive skills for determining student reading levels and needs. Emphasizes the selection, administration, and interpretation of evaluation tools. Prerequisites: EDLT 308, 309, and full admission to the Teacher Preparation Program.

EDLT 413. Methods and Materials for Literacy Instruction (3). Strategies for classroom management, implementation of learning theories. Prerequisites: EDLT 308, 309, and full admission to the Teacher Preparation Program.

EDLT 414. Teaching Literacy in a Multi-cultural, Multi-lingual Setting (3).

Strategies for teaching literacy and developing language skills in a multi-cultural, multi-linguistic setting.

Prerequisite: EDLT 308, 309, and admission to the Teacher Preparation Program.

EDLT 415. Literacy Strategies for Struggling and Advanced Learners (3). Techniques for identifying and differentiating instruction for both struggling and advanced literacy learners. Prerequisites: EDLT 308, 309, and admission to the Teacher Preparation Program.

EDLT 417. Early Literacy (3). Aspects of early literacy acquisition and instruction including language development, phonemic awareness, writing, play, and socio-cultural contexts are emphasized. Prerequisites: EDLT 308, 309, and full admission to the Teacher Preparation Program.

EDLT 418. Literacy and Linguistics (3).

This course is intended to provide literacy teachers with a general introduction to the major fields of linguistics, including phonology and phonetics, morphology, syntax, semantics, discourse analysis, language acquisition, and dialects.

Prerequisites: EDLT 308, 309, and full admission to the Teacher Preparation Program.

EDLT 419. Storytelling Techniques (3).

Storytelling in the integrated curriculum. Students become familiar with a variety of stories and demonstrate the ability to tell stories. Prerequisites: EDLT 308, 309, and full admission to the Teacher Preparation Program.

EDLT 421. Teaching Children's Literature (3).

The types of literature suited to children in grades 1-6; includes reading and evaluation of material from early folklore to present-day books for children. EDRD 421 and ENG 422 are equivalent courses; students may not receive credit for both.

EDLT 422. Teaching the Language Arts (4).

Primarily for prospective elementary school teachers. Listening, writing, speaking, spelling, and handwriting development. Emphasizes curriculum, methods, materials, and research. Experienced teachers see EDEL 531. Full admission to the Teacher Education Program and EDLT 308 are required for enrollment.

EDLT 424. Literacy Across the Curriculum (3).

For K-12 school teachers and administrators. Focuses on knowledge, strategies, and skills needed by K-12 students for efficient and effective use of print and non-print materials across the curriculum. Prerequisite: either EDLT 308 and admission to the Teacher Preparation Program, or permission of the literacy program.

EDLT 490. Cooperative Education (1-12). An individualized, contracted field experience with business, industry, government, or social service agencies. This contractual arrangement involves a student learning plan, cooperating employer supervision,

and faculty coordination. May be repeated for credit. Grade will be either S or U. By permission. Prerequisite: full admission to the Teacher Preparation Program.

EDLT 493. Literacy Practicum (6). Practical experience working with children in classroom settings. Grade will be either S or U. By permission. Prerequisite: EDLT 308 and EDLT 309, and 6 required courses in the literacy minor.

EDLT 496. Individual Study (1-6).

EDLT 498. Special Topics (1-6).

EDLT 499. Seminar (1-5).

Special Education Courses

EDSE 296. Individual Study (1-6).

EDSE 302. Introduction to Students with Exceptionalities (3). Designed to introduce effective teaching strategies and strategies for adapting standard instruction to meet the needs of a range of students found in the typical classroom. This course provides information about students considered disabled as well as gifted and students with multicultural heritages. Prerequisite: EFC 340 and admission to the Teacher Preparation Program.

EDSE 310. Introduction to Special Education (4).

Designed to introduce prospective teachers to the legal requirements of special education including eligibility, programming, and instruction. Skills necessary for collaborative relationships in the multidisciplinary team process will also be emphasized. Prerequisite to a special education course of study. Prerequisites: conditional or full admission to the Teacher Preparation Program, and junior or senior class standing.

EDSE 311. Foundations of Special Education (1).

Designed to provide prospective teachers with the necessary foundations for successful completion of the special education course of study including end-of-program assessment, undergraduate research, and written and oral communication skills. This course should be taken at the beginning of the special education course of study.

EDSE 396. Individual Study (1-6).

EDSE 398. Special Topics (1-6).

EDSE 410. Behavior Management for Students with Disabilities (3).

Fundamentals of behavior change related to the education of students with disabilities. Monitoring individual student progress and utilizing data collected for program instructional change. Prerequisites: EDSE 310, 311, and conditional or full admission to the Teacher Preparation Program.

EDSE 411. Assessment of Students with Disabilities (4).

Selecting, administering, scoring, and interpreting formal assessment tools. Designing and using informal testing techniques. Prerequisites: EDSE 310, 311, and conditional or full admission to the Teacher Preparation Program.

EDSE 422. Teaching Strategies, Curriculum, and Materials for Students with Disabilities (5). Individual, small, and

large group teaching strategies essential to individualized education programs, and selection, evaluation, and adaptation of commercially available materials, including computer applications. Prerequisites: EDSE 310, 311, either EDSE 410 or 411, and full admission to the Teacher Preparation Program.

EDSE 423. Instructional Practices and Strategies in Literacy and Math for Students with High-incidence Disabilities

(4). Specially designed instructional strategies and programming considerations for students with high incidence special needs in reading, written expression, and mathematics. By permission. Corequisite: EDSE 422. Prerequisites: EDSE 310, 311, 410, 411, EDLT 308, EDEL 323, and admission to the Teacher Preparation Program.

EDSE 426. The Child with Language Disabilities

(3). An exploration of the child with language disabilities (age birth-6) from the perspective of normal language development, assessment strategies, and remedial techniques. Recommended for teachers of children with mild and severe disabilities. Prerequisites: EDSE 311 and application or admission to the Teacher Preparation Program.

EDSE 427. American Sign Language I

(3). Introduces educational use of ASL including conversationally relevant signs, finger-spelling, numbers, grammatical principles and features of American Sign Language. Not accepted as general education credit. By permission. Prerequisites: full admission to the Teacher Preparation Program.

EDSE 428. American Sign Language II

(3). Educational use of ASL structure emphasized as well as both expressive and receptive skills in finger-spelling and sign emphasized. Not accepted as general education credit. Prerequisites: EDSE 427 and full admission to the Teacher Preparation Program.

EDSE 431. Program Management for Students with Disabilities

(4). Designed to introduce prospective teachers to the legal requirements of special education including eligibility, programming, and instruction. Also emphasizing skills necessary for collaborative relationships in the team process. Prerequisites: EDSE 310, 311, 410, 411, 422, and full admission to the Teacher Preparation Program.

EDSE 432. Career Education for Students with Disabilities

(3). Career awareness, prevocational, and vocational education. Prerequisites: EDSE 310, 311, 410, 411, 422, and full admission to the Teacher Preparation Program.

EDSE 433. Pre-school for Students with Developmental Delays

(3). An overview of services for children with disabilities, aged birth-6, including legislation, risk factors, educational development, alternative delivery systems and intervention approaches and environments. Prerequisites: either EDF 302 or EDSE 310, and admission to Teacher Preparation Program.

EDSE 460. Collaboration with Parents, Paraprofessionals, and Community Agencies

(4). Designed to introduce prospective teachers to the legal requirements of special education including eligibility, programming and instruction. Also emphasizing skills necessary for collaborative relationships in the team process. Prerequisite: conditional or full admission to the Teacher Preparation Program.

EDSE 489. Research and Inquiry

(2). Course designed to enhance understanding of research and inquiry skills related to disability topics and issues for prospective special educators. By permission. Prerequisites: EDSE 310, 311, 410, 411, 422, and full admission to the Teacher Preparation Program.

EDSE 490. Cooperative Education

(1-12). An individualized, contracted field experience with business, industry, government, or social service agencies. This contractual arrangement involves a student learning plan, cooperating employer supervision, and faculty coordination. May be repeated for credit. Grade will either be S or U. By permission. Prerequisite: full admission to the Teacher Preparation Program.

EDSE 491. Workshop

(1-6). May be repeated for credit. By permission. Prerequisite: full admission to the Teacher Preparation Program.

EDSE 495. Practicum

(5-16). Practical experience with children having learning, behavioral, or physical disabilities; using behavioral management techniques in an effort to bring the child up to maximum potential as determined by his/her flexibility, sociality, and capacity. May be repeated for credit. Grade will either be S or U.

EDSE 496. Individual Study

EDSE 498. Special Topics

EDSE 499. Seminar

LAW AND JUSTICE DEPARTMENT

College of the Sciences
Ellensburg
Farrell Hall, room 309
CWU-Des Moines (D)
CWU-Kent (K)
CWU-Lynnwood (L)
CWU-Pierce County (PC)
CWU-Yakima (Y)

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www.cwu.edu/~lajhome/

See website for how these programs may be used for educational and career purposes.

Faculty and Staff

Chair

Charles Reasons, PhD, JD

University Center Department Directors

Rodrigo Murataya, PhD (Y)
Krystal Noga-Styron, JD (L)
Mary Ellen Reimund, LLM (D)
Key Sun, PhD (PC)

Professors

J. Michael Olivero, PhD, corrections, criminology
Charles Reasons, PhD, JD, criminology, criminal justice, law, comparative justice
Key Sun, PhD, correctional counseling, comparative criminal justice, psychological criminology

Associate Professors

Sarah Britto, PhD, criminology, media and fear of crime, restorative justice
Rodrigo Murataya, PhD, criminal investigation, police-community relations, police personnel administration



Mary Ellen Reimund, LLM, criminal law, alternative dispute resolution, restorative justice

Assistant Professors

Teresa Francis, LLM, criminal law, correctional law

Krystal Noga-Styron, JD, criminal law, crime and the media

Cody Stoddard, ABD, policing, courts, criminological theory, quantitative methods

Lecturers

Cathy Busha, JD, family law, legal research, legal writing, paralegal

Robert Moore, MA, corrections, correctional counseling

Staff

Darlene Reinbold, secretary senior

Department Standards

Admission to the major and to the minor

- Grade requirement: overall grade point average of 2.25 or higher. The department chair may admit a limited number of students with grade point averages below 2.25 under extenuating circumstances.
- Students applying to the major must submit a major application form.
- The law and justice department reserves the right to modify these requirements in special cases or as the needs of the department change.

Exit Requirements

A minimum grade of C- must be earned in all courses used to fulfill the requirements of the major and of the minor.

Bachelor of Arts

(NOTE: Students seeking a BA degree must complete one year of college/university study or two years of high school study of a single foreign language.)

Law and Justice Core

Core Requirements

LAJ 300 - Administration of Criminal Justice	4
LAJ 302 - Criminal Procedure	4
LAJ 303 - Legal Research	4
LAJ 313 - Criminal Law	4
LAJ 400 - Research Methods in Criminal Justice (4)	4-5
OR	
SOC 363 - Methods of Social Research (5)	
OR	
PSY 300 - Research Methods in Psychology (5)	
LAJ 401 - Ethics, Diversity, and Conflict in Criminal Justice	4
LAJ 420 - Community and Social Justice	4
LAJ 451 - Crime in America	4

Core Requirement Total Credits: 32-33

Bachelor of Arts

Law and Justice Major

LAJ Core Requirements 32-33
 Select five (5) upper-division CWU LAJ courses (other than 490, 492, 495, or 496). 20
 Select eight credits from the list of approved electives* 8

Total Credits: 60-61

*See department for a complete listing of approved electives.

Law and Justice Minor

Required Courses

Select three (3) LAJ courses from Core Requirements 12-13
 LAJ 300 - Administration of Criminal Justice (4)
 LAJ 302 - Criminal Procedure (4)
 LAJ 303 - Legal Research (4)
 LAJ 313 - Criminal Law (4)
 LAJ 400 - Research Methods in Criminal Justice (4)
 OR
 SOC 363 - Methods of Social Research (5)
 OR
 PSY 300 - Research Methods in Psychology (5)
 LAJ 401 - Ethics, Diversity and Conflict in Criminal Justice (4)
 LAJ 451 - Crime in America (4)
 LAJ 420 - Community and Social Justice (4)

LAJ Electives

Select three (3) upper-division CWU LAJ courses (other than 490, 492, 495, or 496). 12

Total Credits: 24-25

Law and Justice Courses

(Note: for all 400-level LAJ courses, student must have completed either a DTA or ENG 101 and 102, MATH 101 or 153 or 154 or 164 or 170 or 172, MATH 102 or MATH 130 or PHIL 201 or CS 105 (basic skills in these categories.)

LAJ 300. Administration of Criminal Justice

(4). The sources of police power and authority in a democratic society, the internal organization and administration of federal, state and local agencies, their interaction with each other, and with the communities they serve.

LAJ 302. Criminal Procedure (4). A review of guidelines for police arrest, search, interrogation, and identification procedures based upon rules of criminal procedure derived from the U.S. Constitution. LAJ 300 is recommended. Prerequisite: admission to the major or minor.

LAJ 303. Legal Research (4). Techniques of legal research; the case system, statutes, court decisions, Shepardizing. LAJ 300 is recommended. Prerequisite: admission to the major or minor.

LAJ 311. Family Law (4). Marriage, divorce, state regulation, custody, and care and supervision of children. LAJ 300 is recommended.

LAJ 313. Introduction to Criminal Law

(4). Scope and nature of law; classification of offenses; act and intent; capacity to commit crime and defenses. Elements of major criminal statutes. LAJ 300 is recommended.

LAJ 316. Introduction to Paralegal Studies

(4). This course provides an introduction to paralegal studies. It provides analysis of the role of the paralegal and the tasks involved in being a paralegal including interviewing clients and witnesses, legal research, writing, legal writing, and attending trials. LAJ 300 is recommended. Prerequisite: admission to the major or minor.

LAJ 317. Introduction to Civil Practice

(4). This course is designed to provide students with a comprehensive overview of civil litigation from investigation through discovery, trial, and appeal. LAJ 300 is recommended. Prerequisite: admission to the major or minor.

LAJ 324. Correctional Law (4). This course examines transitions in prisoner civil rights since the U.S. Supreme Court ruled that inmates hold all rights as other citizens with the exception of those necessarily taken by fact of incarceration. Constitutional issues will be analyzed, including standards for shelter and medical care, discipline, religion, and access to the courts. LAJ 300 is recommended.

LAJ 326. Correctional Counseling (4). This course provides an analysis of the role of correctional counselor in rehabilitative efforts with offenders. Course focuses include criminal offender treatment methods and correctional or rehabilitative policy. LAJ 300 is recommended. Prerequisite: admission to the major or minor.

LAJ 327. Community Corrections (4). Maintaining, supervising, and counseling offenders in the community-based setting. LAJ 300 is recommended. Prerequisite: admission to the major or minor.

LAJ 331. Investigation (4). Function and propriety of investigations; methods of gathering evidence. LAJ 300 is recommended. Prerequisite: admission to the major or minor.

LAJ 332. Police Community Relations

(4). This course examines the relationship between the police and community and how to make this relationship a positive one. Analysis will be made of the history of police and friction with various groups in society. Attempts at positive police communication and community participation will also be examined. LAJ 300 is recommended. Prerequisite: admission to the major or minor.

LAJ 333. Police Personnel Administration

(4). History and philosophy of federal, state, and local police personnel programs; overview of personnel functions. LAJ 300 is recommended. Prerequisite: admission to the major or minor.

LAJ 334. Issues in Policing (4). This course provides a comprehensive examination of the current critical issues and policy

dilemmas within the American criminal justice system. LAJ 300 is recommended. Prerequisite: admission to the major or minor.

LAJ 342. Juvenile Justice Process (4). Includes historical, ideological development of juvenile justice process; analyses policies, mechanisms; examines integrated network of agencies; examines juvenile law, rights, treatment; examines current research. LAJ 300 is recommended. Prerequisite: admission to the major or minor.

LAJ 350. Criminal Justice and the Media (4). An exploration of media messages concerning crime and criminal justice, how these portrayals compare with the operation of the criminal justice system, and how media images influence both individual attitudes and public policy. LAJ 300 is recommended. By permission.

LAJ 351. Preparing for a Law Enforcement Career (2). This course provides crucial information to help students understand, prepare, compete, and promote themselves during the competitive testing and hiring process for law enforcement positions. LAJ 300 is recommended. By permission. Prerequisite: admission to the major or minor.

LAJ 353. Great American Trials (4). Famous American trials in history will be explored including the role of attorneys, trial advocacy, and whether justice has been achieved. LAJ 300 is recommended. By permission.

LAJ 398. Special Topics (1-6).

LAJ 400. Research Methods in Criminal Justice (4). This course examines current research in criminal justice and research methods and statistics. Students will critique current methods. LAJ 300 is recommended. Prerequisites: either a DTA or ENG 101 and 102, either MATH 101, 153, 154, 164, 170, or 172, either MATH 102 or 130, either PHIL 201 or CS 105, and admission to the major or minor.

LAJ 401. Ethics, Diversity, and Conflict in Criminal Justice (4). Introduce students to a multi-cultural approach to practical legal ethics within the criminal justice system. The course covers law enforcement, corrections, and Alternative Dispute Resolution. LAJ 300 is recommended. By permission. Prerequisites: either a DTA or ENG 101 and 102, either MATH 101, 153, 154, 164, 170, or 172, and either MATH 102 or 130, PHIL 201 or CS 105.

LAJ 402. African Americans and the Constitution (4). The law is the way a society governs itself and protects the freedom of all citizens. African Americans and the Constitution will examine legal issues engendered with dispute and division. LAJ 300 is recommended. Prerequisites: either a DTA or ENG 101 and 102, either MATH 101, 153, 154, 164, 170, or 172, either MATH 102 or 130, and either PHIL 201 or CS 105.

LAJ 403. Sexual Minorities, the Law, and Justice (4). This course examines

sexuality, homosexuality, bisexuality, and transgender/transsexual issues related to the legal system. It provides a political and sociological overview of history, morality, law, and law enforcement practices related to sexual orientation. LAJ 300 is recommended. Prerequisites: either a DTA or ENG 101 and 102, either MATH 101, 153, 154, 164, 170, or 172, either MATH 102 or 130, and either PHIL 201 or CS 105.

LAJ 410. Legal Writing (4). The pre-law or paralegal student will learn fundamental legal writing tools in conjunction with basic rules on correspondence, retainer agreements, and other commonly used documents. LAJ 300 is recommended. By permission. Prerequisites: either a DTA or ENG 101 and 102, either MATH 101, 153, 154, 164, 170 or 172, either MATH 102 or 130, either PHIL 201 or CS 105, and admission to the major or minor.

LAJ 420. Community and Social Justice (4). This course will examine the concepts of community justice and restorative justice in the larger context of social justice. Students will explore how community and restorative justice work with the traditional justice system. LAJ 300 is recommended. Prerequisites: either a DTA or ENG 101 and 102, either MATH 101, 153, 154, 164, 170, or 172, either MATH 102 or 130, and either PHIL 201 or CS 105.

LAJ 426. Advanced Correctional Counseling (4). This course will provide students with specialized training in theory and techniques required in the rapidly evolving practice of correctional counseling. LAJ 300 is recommended. Prerequisites: either a DTA, or ENG 101 and 102, either MATH 101, 153, 154, 164, 170, or 172, either MATH 102 or 130, either PHIL 201 or CS 105, and admission to the major or minor.

LAJ 440. Basic Mediation (4). Course provides an introduction to the philosophy, practice, and skills required for basic mediation, which are explored through readings, lectures, demonstrations, and skill-building role plays. LAJ 300 is recommended. By permission. Prerequisites: either a DTA or ENG 101 and 102, either MATH 101, 153, 154, 164, 170, or 172, either MATH 102 or 130, either PHIL 201 or CS 105, and admission to the major or minor.

LAJ 450. Report Writing (4). Law enforcement and corrections students will learn basic writing in the context of specialized reports utilized in their fields. LAJ 300 is recommended. By permission. Prerequisites: either a DTA or ENG 101 and 102, either MATH 101, 153, 154, 164, 170, or 172, either MATH 102 or 130, either PHIL 201 or CS 105, and admission to the major or minor.

LAJ 451. Crime in America (4). American crime problems in historical perspectives. Social and policy factors affecting crime. Crime impact and trends, offender, and victim profiles. LAJ 300 is recommended. Prerequisites: either a DTA or ENG 101 and

102, either MATH 101, 153, 154, 164, 170, or 172, either MATH 102 or 130, either PHIL 201 or CS 105, and admission to the major or minor.

LAJ 453. Domestic Violence Issues (4). This course provides an overview of domestic violence in our society and examines critical issues, including perspectives from the legislature, courts, police, prosecutors, and victims. Significant emphasis on these perspectives in Washington State. LAJ 300 is recommended. May be repeated for credit. Prerequisites: either a DTA or ENG 101 and 102, either MATH 101, 153, 154, 164, 170, or 172, either MATH 102 or 130, and either PHIL 201 or CS 105.

LAJ 455. Comparative Criminal Justice Systems (4). In this course, students will revisit the U.S. system of criminal justice and learn an appreciation for the criminal justice systems of other countries. By the end of the course students will be able to compare and contrast the different systems and their application, benefits, and weaknesses. LAJ 300 is recommended. Prerequisites: either ENG 101 and 102, either MATH 101, 153, 154, 164, 170, or 172, either MATH 102 or 130, and either PHIL 201 or CS 105.

LAJ 459. Current Issues (4). Current legal, correctional, and enforcement issues will be explored. LAJ 300 is recommended. By permission. Prerequisites: either a DTA or ENG 101 and 102, either MATH 101, 153, 154, 164, 170, or 172, either MATH 102 or 130, either PHIL 201 or CS 105, and admission to the major or minor.

LAJ 460. Terrorism (4). Survey of domestic terrorism and United States interests in international terrorism, including concepts and theories of terrorism, history of terrorism, terrorist organizations, specific terrorist incidents, investigative techniques, and developing legal issues. LAJ 300 is recommended. May be repeated for credit. Prerequisites: either a DTA or ENG 101 and 102, either MATH 101, 153, 154, 164, 170, or 172, either MATH 102 or 130, either PHIL 201 or CS 105, and admission to the major or minor.

LAJ 470. Victimology (4). In this course, students will focus on victims' rights, legal issues pertaining to victims, psychological trauma of crime victims and how to appropriately respond in the field to crime victims. LAJ 300 is recommended. Prerequisites: either a DTA or ENG 101 and 102, either MATH 101, 153, 154, 164, 170, or 172, either MATH 102 or 130, and either PHIL 201 or CS 105.

LAJ 490. Cooperative Education (1-12). An individualized contracted field experience with business, industry, government, or social service agencies. This contractual arrangement involves a student learning plan, cooperating employer supervision, and faculty coordination. LAJ 300 is recommended. May be repeated for credit. Grade will either be S or U. By permission.

LAJ 491. Workshop (1-6).

LAJ 492. Teaching Experience in Law and Justice (1-4). Completion of course in which teaching or assisting is to be done and approval of the instructor and department chair. May be repeated up to 8 credits.

Grade will either be S or U. By permission.

LAJ 495. Directed Research (1-5). Individual research project. LAJ 300 is recommended. May be repeated for up to a total of 10 credits. By permission.

LAJ 496. Individual Study (1-6).

LAJ 498. Special Topics (1-6).

LAJ 499. Seminar (1-5).

LIBRARY SCIENCE

Library
Ellensburg

James E. Brooks Library, room 206

509-963-1021

Fax 509-963-3684

www.lib.cwu.edu

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Faculty and Administration Dean

Patricia J. Cutright, M. Librarianship

Professors

Daniel G. CannCasciato, MLS, Head of cataloging department

John K. Creech, MLS, Head of systems department

Gerard P. Hogan, MLibr, Coordinator of reference services

Janice (Jan) L. Jorgensen, MLS, Head of government publications department

Mary J. Wise, MLS; MEd, cataloging

Associate Professors

Patrick A. Owens, MLS; MA Anthropology, Head of collection development

Marcus E. Kieltyka, MLIS; MA International Political/Economics Relations, instruction/outreach

Lecturers

Christopher D. Gwyn, MLIS, reference services

Mari D. Knirck, MLIS; MA History, Lead of serials and electronic resources department

Christopher R. Mayer, MLS; MA English, reference services and governmental publications

Program Information

At all times, students at Central have access to the library's 1.3 million books, films, government documents, and maps in print, microfiche, microfilm, and online electronic formats. The main library and two branch libraries at the University Centers at Des Moines and Lynnwood maintain subscriptions to over 20,000 newspapers, magazines, and journals in print and online full-text electronic formats, as well as audio recordings in CD, LP, and cassette formats

and videos in DVD and VHS formats. The libraries participate in the resource-sharing service that provides our students with access to more than 25 million information items.

The libraries' online Catrax catalog, as well as most full-text access, are available to students from any networked computer, whether on or off campus.

Library Science Courses

LIB 345. Library Research Methods and Information Literacy (4). Development of information literacy skills and theory through a discussion of internal and external information sources; knowledge of the organization of print and non-print resources; and creation of bibliographies, reports, and other academic materials. Open to all students.

LIB 498. Special Topic (1-4). Course content identified in schedule of classes. May be repeated for credit up to 6 credits under different titles.

MANAGEMENT DEPARTMENT

College of Business

Ellensburg (E)

Shaw-Smyser Hall, room 329

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CWU-Lynnwood (L)

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Faculty and Staff

Chair

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Laura M. Milner, PhD, marketing (E)

James L. Nimnicht, PhD, human resource management (E)

Don R. Nixon, PhD, management (D)

Mark Pritchard, PhD, marketing (E)

Associate Professors

Peter J. Boyle, PhD, marketing (L)

F. Lynn Richmond, PhD, management (L)

Assistant Professors

James Avey, PhD, human resource management (E)

Wendy Cook, PhD, management

S. Duane Hansen, PhD, management

Larry Hughes, PhD, management (E)

Nancy Graber Pigeon, JD, business law (E)

William Provaznik, ABD, management

Jeffrey L. Stinson, PhD, marketing (E)

Keke Wu, PhD, management (E)

Bachelor of Science in Business Administration Program

The Department of Management and the Department of Finance and Supply Chain Management jointly support the bachelor of science in business administration, the general-business specialization and business minor. The department offers coursework leading to the bachelor of science in business administration (BSBA) degree. In addition to the university general education requirements, the BSBA major is comprised of three principal components: 1) pre-admission courses that provide foundation knowledge and skills needed for further study in business; 2) business core courses that build on the pre-admission group and focus on decision making in the main functional areas of business; and 3) specialization courses that allow for advanced study in one of the functional areas.

Students matriculating in Ellensburg select a 25-credit specialization within the BSBA program in one of six areas: finance, general business, human resource management, management and organization, marketing management, or supply chain management. Students matriculating at a university center are limited to the 25-credit general-business specialization.

Program Goals for BSBA

The departments have identified overall educational outcomes related to knowledge, values, and skills for all BSBA graduates. The following are the outcomes for the bachelor of science in business administration (BSBA) programs:

1. Knowledge-based educational outcomes. Upon completion of the BSBA program, students should:
 - Have a working knowledge of business administration that will aid them in private, government, or non-profit careers and/or prepare them for additional study
2. Values-based educational outcomes. Upon completion of the BSBA program, students should:
 - Comprehend ethical issues and be able to apply an ethical decision-making framework to business decisions
3. Skills-based educational outcomes. Upon completion of the BSBA program, students should:
 - Function effectively when in teams both as a leader and as a member
 - Demonstrate effective oral communication skills
 - Demonstrate effective written communication skills
 - Apply quantitative and qualitative critical thinking skills to develop, access, and use information to analyze business problems and propose feasible solutions

Transfer Credits and Prior Learning Assessment

Equivalent lower-division (100-200 level) courses may be transferred toward meeting the pre-admission requirements. Upper-division (300- to 400-level) courses may also be transferred toward meeting the business core and specialization requirements, but only with the approval of the department chair and the college dean (or designee).

Repeat Policy

Business administration courses may be repeated only once.

Service to Other Majors

Students majoring outside of the College of Business who are required to take courses in this college for either their major or minor will be eligible to enroll on a space-available basis. These students will be given priority over other non-college majors wishing to enroll in upper-division courses.

Bachelor of Science Business Administration Major

BSBA Program Admission Requirements

Students must apply and be accepted into the major prior to beginning 300- or 400-level business coursework. At the time of application, the 40 credits of pre-admission coursework should be substantially completed. Application forms are available online and in the department offices. The completed form must be accompanied by transcripts that reflect all prior college work. Admission shall be based on grades earned in the following courses:

ACCT 251 - Financial Accounting	5
ACCT 252 - Managerial Accounting	5
BUS 221 - Introductory Business Statistics	5
BUS 241 - Legal Environment of Business	5
ECON 201 - Principles of Economics Micro	5
ECON 202 - Principles of Economics Macro	5
MATH 130 - Finite Mathematics	5
MATH 153 - Pre-Calculus Mathematics I	5
OR	
MATH 154 - Pre-Calculus Mathematics II (5)	
OR	
MATH 170 - Intuitive Calculus (5)	
OR	
MATH 172 - Calculus I (5)	
OR	
MATH 173 - Calculus II (5)	

Pre-admission Total Credits: 40

Additional Admission Information

A cumulative grade point average of 2.5 in the above courses must be achieved with a minimum grade of C- (1.70) in each course. The credit/no credit option will not be accepted for any of these courses. The applicant must have completed ENG 101/102. These criteria apply to equivalent courses transferred from other institutions.

Students who have met all of the above requirements will be admitted unless the number of applicants exceeds available space. In that case, acceptance will be competitive, based on a selection index.

Additional BSBA Graduation Requirements

The following special rules apply to students seeking the BSBA major:

- Students must earn a minimum cumulative GPA of 2.25 in the 99- to 100-credit in-the-major coursework to be eligible for a degree. In addition, the department requires a minimum GPA of 2.25 in the 59- to 60-credit upper-division component of the in-the-major total.
- Transfer students must complete at least 40 College of Business credits at CWU to be eligible for the BSBA degree, including MGT 489. Additionally, students seeking a human resource management specialization must complete HRM 486 at CWU and students seeking a marketing specialization must complete MKT 470 at CWU.
- The BSBA program requires a single specialization of at least 25 credits. Occasionally a student requests a second specialization. To be eligible for a second specialization, a minimum of 20 unique credits must be completed. Unique in this sense means the credits have not been used as part of any other BSBA specialization.

Pre-admission Requirements 40

Business Core Requirements

FIN 370 - Introductory Financial Management	5
MGT 382 - Principles of Management	5
MGT 489 - Strategic Management	5
MIS 386 - Management Information Systems	5
MKT 362 - Essential Marketing Concepts	5
SCM 310 - Supply Chain Management	5

Business Core Total Credits: 30

Communication Requirements

Select from the following.....4-5	
ADMG 385 - Business Communications and Report Writing (5)	
COM 345 - Business and Professional Speaking (4)	
ENG 310 - Technical Writing (4)	

Specialization Requirements 25

Select one of the following six specializations:

- Finance
- General Business
- Human Resource Management
- Management and Organization
- Marketing Management
- Supply Chain Management

Total Credits: 99-100

General Business Specialization

Advisors

All full-time faculty in the department.

This specialization is intended for the student who wishes to tailor a "unique" set of specialization courses to his or her needs or for the student who desires a broad-based "generalist" track within the business administration major. Twenty-five upper-division elective credits are required, including at least 20 credits from business (BUS), finance (FIN), human resource management (HRM), management (MGT), marketing (MKT), management information systems (MIS), or supply chain management (SCM) courses. The remaining five credits may be accounting (ACCT) or economics (ECON). The student is limited to 10 credits from any one area and the specialization must include at least 10 credits of 400-level courses

Total Credits: 25

Human Resource Management Specialization

Advisors

James Avey, PhD
Wendy Cook, PhD
Nancy Graber Pigeon, JD
Jim Nimmicht, PhD
Lynn Richmond, PhD

Students pursuing the HRM specialization will deal with fundamental organizational processes that must be developed and managed for continuous improvement by both HR specialists and by all managers in general. Thus, the study of HR takes on a dual emphasis. First, by pursuing an HR specialization, students will be thoroughly trained to focus decision-making as it pertains to the acquisition, utilization, development, and retention of employees. Alternatively, the study of HRM is also applicable as a strong supplement to other specializations or majors.

Required Courses

HRM 381 - Management of Human Resources	5
HRM 486 - Problems in Human Resource Management	5
Select from the following..... 15	
BUS 490 - Cooperative Education (1-12)	
ECON 355 - Economics of Labor (5)	
HRM 442 - Training and Development (5)	
HRM 445 - Organizational Staffing (5)	
HRM 479 - Industrial Relations/Collective Bargaining (5)	
HRM 488 - Compensation Policy and Administration (5)	
MGT 386 - Principles of Organizational Behavior (5)	
SCM 435 - Advanced Topics in Operations and Supply Chain Management (5)	

Total Credits: 25

Management and Organization Specialization

Advisors

S. Duane Hansen, PhD
Wendy Harman, PhD
Larry Hughes, PhD
Jim Nimnicht, PhD
Lynn Richmond, PhD

The Management and Organization specialization reflects the diverse activities required to productively utilize the organization's resources. The overall focus of this specialization will be on how to effectively coordinate people, technology, and structure in order to reach organizational objectives. Studies include both the theory and practice of management as preparation for leadership in public and private organizations.

Required Courses

MGT 386 - Principles of Organizational Behavior	5
MGT 484 - International Management	5
Select from the following	15
BUS 490 - Cooperative Education (1-12)	
ECON 352 - Managerial Economics (5)	
HRM 381 - Management of Human Resources (5)	
MGT 383 - Contemporary Management Practices (5)	
MGT 384 - Introduction to International Business (5)	
MGT 385 - Organizational Theory (5)	
MGT 389 - Business and Society (5)	
MGT 394 - Legal Considerations in Sport Business (5)	
MGT 395 - Leadership in Sport Organizations (5)	
MGT 482 - Applied Management and Organizational Behavior (5)	
MGT 483 - Organizational Change (5)	
MGT 487 - Entrepreneurism and Small Business Management (5)	
SCM 435 - Advanced Topics in Operations and Supply Chain Management (5)	

Total Credits: 25

Marketing Management Specialization

Advisors

Jim Beaghan, DBA
Peter Boyle, PhD
Mark Pritchard, PhD
Jeffrey Stinson, PhD

The marketing curriculum provides background for careers in sales, advertising, marketing management, research, analysis, and retail management. Marketing topics include researching and analyzing consumers, market demand, pricing, product distribution, and development, and communication in order to develop marketing strategies and policies. Students must earn a C or better in all required courses.

Required Courses

MKT 468 - Consumer Behavior	5
MKT 469 - Market Research	5
MKT 470 - Marketing Problems and Policy	5
Select a minimum of 10 credits from the following	10
BUS 490 - Cooperative Education (1-12)	
ECON 310 - International Economics (5)	
MKT 364 - Marketing Promotion Management (5)	
MKT 365 - International Marketing (5)	
MKT 370 - Sports Marketing and Sponsorship (5)	
MKT 371 - Sponsorship and Promotion in Sport Business (5)	
MKT 372- Revenue Generation and Finance in Sport Business (5)	

Total Credits: 25

Business Minor

The business minor provides students with an introduction to several key areas of business administration. Business minors are only available to students with declared majors. Declaration forms with instructions, are available online and, in department and center offices. Students must earn a cumulative grade point average of 2.25 in courses allowed in fulfilling the business administration minor requirements.

Required Courses

ACCT 301 - Financial Accounting Analysis	5
OR	
ACCT 252 - Managerial Accounting (5)	
BUS 241 - Legal Environment of Business	5
ECON 201 - Principles of Economics Micro	5
OR	
BUS 374 - Personal Investments (5)	
HRM 381 - Management of Human Resources	5
MGT 380 - Organizational Management	5
MKT 360 - Principles of Marketing	5

Total Credits: 30

Sport Business Certificate

Advisors

Mark Pritchard, PhD
Jeffrey Stinson, PhD

The sport business certificate is designed to augment the student's College of Business degree with a focused examination of the sport business industry. Students will explore the application of marketing, management, law, finance, and other business principles as they apply specifically to the sport industry. The sport certificate will provide curriculum to prepare students for a career in corporate, professional, intercollegiate, or amateur sport organizations.

Certificate prerequisites are admission to a College of Business major (except BS Economics-General Specialization).

Total Pre-admission requirements 40

Required Courses

MGT 382 - Principles of Management	5
MGT 394 - Legal Considerations in Sport Business	5
MKT 362 - Essential Marketing Concepts	5
MKT 371 - Sponsorship and Promotion in Sport Business	5
MKT 372 - Revenue Generation and Finance in Sport Business	5
MGT 395 - Leadership in Sport Organizations	5
MKT 370 - Sports Marketing and Sponsorship	5
BUS 499 - Seminar: Sport Sales "Boot Camp"	1

Certificate Credits: 36

Total Credits: 76

Business Courses

BUS 198. Special Topics (1-6).

BUS 221. Introductory Business Statistics

(5). Introduction to inferential business statistics. Using probability distributions and information from samples for business decisions. Prerequisite: MATH 130.

BUS 241. Legal Environment of Business (5).

An introduction to legal reasoning, ethics in business, the law of contracts, torts, agency, sales, bailments, and personal property. Prerequisite: sophomore standing or above.

BUS 298. Special Topics (1-6).

BUS 321. Intermediate Business Statistics

(5). Sampling techniques, the design of experiments, analysis of variance, linear regression and correlation, and time series analysis. Prerequisite: BUS 221.

BUS 341. Advanced Business Law (5). The law of negotiable instruments, suretyship, business structures including partnerships and corporations, trusts and estates, bankruptcy and government regulations of business. Prerequisite: BUS 241.

BUS 374. Personal Investments (5).

Introduction to investment goals, strategies, and securities, including certificates of deposit, money market instruments, stocks, bonds, and mutual funds. Additional topics introduced are risk analysis, taxes, and portfolio basics. Does not count for credit in the finance specialization.

BUS 396. Individual Study (1-6).

BUS 398. Special Topics (1-6).

BUS 490. Cooperative Education (1-12). An individualized, contracted field experience with business, industry, government, or social service agencies. This contractual arrangement involves a student learning plan, cooperating employer supervision, and faculty coordination. May be repeated for credit. Grade will either be S or U. By permission.

BUS 495. Directed Research (1-5). May be repeated for credit. Grade will either be S or U. By permission.

BUS 496. Individual Study (1-6).

BUS 498. Special Topics (1-6).

BUS 499. Seminar (1-5).

Human Resource Management Courses

HRM 381. Management of Human Resources

(5). Selection of personnel, methods of training and retraining workers, wage policy, utilization of human resources, job training, administration of labor contracts, and public relations.

HRM 442. Training and Development (5).

Application of training and development concepts and techniques used in assessing training requirements, planning and budgeting training programs, developing and facilitating training, and evaluating results. By permission. Prerequisites: HRM 381, and either admission to the business administration or accounting major.

HRM 445. Organizational Staffing (5).

Applied and conceptual analysis of employee recruitment, selection, placement, retention, and career development. By permission. Prerequisites: MGT 382, and either admission to the business administration or accounting major.

HRM 479. Industrial Relations/Collective Bargaining (5).

Statutory and case law governing labor relations. Contracts and negotiations. Impasse procedures. Arbitration cases and grievance procedures. Contemporary issues and cases. By permission. Prerequisites: HRM 381, and either admission to the business administration or accounting major.

HRM 486. Problems in Human Resource Management (5).

Analysis and research on selected topics involving contemporary issues in personnel management. This is the capstone course for the HRM specialization. By permission. Prerequisites: HRM 381, two other HRM courses, and either admission to the business administration or accounting major.

HRM 488. Compensation Policy and Administration (5).

Employee compensation policy and administration is studied on a broad perspective encompassing direct financial payments, employer benefits, and non-financial rewards. By permission. Prerequisites: MGT 382, and either admission to the business administration or accounting major.

Management Courses

MGT 380. Organizational Management (5).

MGT 380. Organizational Management (5). Principles of management class for non-business majors. Introduces students to the history and development of management ideas and contemporary practice. Overview of all the major elements of the managerial function. MGT 380 and MGT 382 are equivalent courses; students may not receive credit for both. Prerequisites: this course is only available to non-business majors. College of Business majors or pre-majors should be enrolling in MGT 382 instead of MGT 380, and MKT 362 instead of MKT 360.

MGT 382. Principles of Management (5).

History of management thought and practice, challenges of contemporary management, organizational theory, human behavioral aspects of management, introduce strategic management process. Open to Business majors only. MGT 382 and MGT 380 are equivalent courses; students may not receive credit for both. Prerequisites: students must be admitted to a business major, accounting or economics with a economic and business forecasting specialization in order to register for this course.

MGT 383. Contemporary Management Practices (5).

Exposure to and experience with contemporary management techniques and practices. Conceptual foundations are examined through case work, applied field activities, and team projects. Prerequisites: MGT 382 and admission to either the business administration, or accounting major.

MGT 384. Introduction to International Business (5).

Principles underlying international business; national policies influencing world trade and finance; and regional and international institutions. Prerequisite: either MGT 380 or MGT 382.

MGT 385. Organizational Theory (5).

An examination of the socio-technical system in a task-oriented organization focusing on the total organization as the unit of analysis; technology, structure, work design, and environment as determinants of effectiveness. Prerequisites: MGT 382 and admission to either the business administration, or accounting major.

MGT 386. Principles of Organizational Behavior (5).

Applied and conceptual analysis of behavior within organizations. Involves leadership, motivation, communications, group processes, decision-making, climate, and culture. Prerequisite: either MGT 380 or MGT 382.

MGT 389. Business and Society (5).

Ethics and social responsibility in an increasingly complex economic, political, social, and technological environments. Prerequisite: either MGT 380 or MGT 382.

MGT 394. Legal Considerations in Sport Business (5).

An exploration of the relationship between sports and the law. Issues to be explored include liability, legal rights of employees and athletes, as well as managing the legal risk in the sports profession. Prerequisite: admission to either the business, accounting, or economics major.

MGT 395. Leadership in Sport Organizations (5).

Examination of historical and current practices in leading sport organizations, including coaching, owning, managing, and playing. Prerequisites: MGT 382 and admission to either the business, accounting, or economics major.

MGT 482. Applied Management and Organizational Behavior (5).

Application of training and development practices to the personal and professional growth

of the human resource. Individual and small group exercises give students the opportunity to apply and experience a variety of management concepts and practices. Prerequisites: MGT 382 and admission to either the business administration, or accounting major.

MGT 483. Organizational Change (5).

Managing problem solving and change in organizations. An integration and application of theories adapted to organizational behavior. Prerequisites: MGT 382 and admission to either the business administration, or accounting major.

MGT 484. International Management (5).

A comparative study of management in selected countries as well as an analysis of key managerial problems encountered in the multinational corporation. Prerequisites: MGT 382 and admission to either the business administration, or accounting major.

MGT 487. Entrepreneurism and Small Business Management (5).

Investigation of entrepreneurship and small business management issues. Students learn to perform feasibility studies and develop business plans. Small business challenges in marketing, finance, etc., will also be addressed. Prerequisites: MGT 382 and admission to either the business administration, or accounting major.

MGT 489. Strategic Management (5). Basic policy decisions involved in managing the total enterprise. Prerequisites: FIN 370, MGT 382, MKT 362, SCM 310, either MIS 386 or ACCT 455, and admission to either the accounting or business administration major. It is strongly recommended that students not enroll until the quarter of graduation.

Marketing Courses

MKT 360. Principles of Marketing (5).

Principles of marketing class for non-business majors. Explores the function and processes of marketing, introducing students to the fundamental marketing concepts. MKT 360 and MKT 362 are equivalent courses; students may not receive credit for both. Prerequisites: this course is only available to non-business majors. College of business majors or pre-majors should be enrolling in MGT 382 instead of MGT 380 and MKT 362 instead of MKT 360.

MKT 362. Essential Marketing Concepts (5).

Introduction to the principles of marketing, creating, communicating, and delivering superior customer value, choosing target markets, managing customer relations. MKT 360 and MKT 362 are equivalent courses; students may not receive credit for both. Prerequisites: admission to either the business, accounting, or economics major, and a specialization in economic and business forecasting.

MKT 364. Marketing Promotion Management (5).

Communication problems of marketing goods and services

to consumers and industrial buyers; advertising management; personal selling; and sales promotion; analysis for the promotion mix; and public interest in marketing communication. Prerequisites: MKT 362 with a grade of C or better, and admission to business administration, accounting, or economics major.

MKT 365. International Marketing (5).

Marketing functions involved in doing business internationally, environmental conditions affecting international trade, and problems of securing employment internationally. Prerequisites: MKT 362 with a grade of C or better, and admission to business administration, accounting, or economics major.

MKT 370. Sports Marketing and Sponsorship (5).

This course takes a strong industry focus to the study of sports marketing. Work examines the range of promotional strategies and tactics used by different leagues/sport businesses to attract and retain sports fans. Additional topics include the nature of effective sports sponsorship campaigns. Prerequisites: MKT 362 with a grade of C or better, and admission to business administration, accounting, or economics major.

MKT 371. Sponsorship and Promotion in Sport Business (5).

Examination of sport sponsorship, sales, implementation, and evaluation; communication between sport sellers and consumers through advertising, sales promotion, public relations, and other forms of communication. Prerequisites: MKT 362 and admission to either the business, accounting, or economics major.

MKT 372. Revenue Generation and Finance in Sport Business (5).

Examination of historical and current practice in revenue generation and financing of sport organizations, including public and private sources of revenue. Prerequisites: MKT 362 and admission to either the business, accounting, or economics major.

MKT 398. Special Topics (1-6).

MKT 468. Consumer Behavior (5). An introduction to analysis of the consumer as a basis for marketing decisions. The analysis concerns who buys what, how the consumer uses the product, the significance of the product to the consumer, and the buying process. Prerequisites: MKT 362 and admission to either business administration, accounting, or economics major.

MKT 469. Market Research (5). Application of research to economic and business problems; tools of research design; planning investigations; gathering, organizing, and interpreting data; and presentation of findings. (Not open to students with credit in ECON 426.) Prerequisites: MKT 362 with a grade of C or better, and admission to business administration, accounting, or economics major.

MKT 470. Marketing Problems and Policy (5). The capstone course for the marketing specialty. Uses case analysis and other techniques to develop marketing decision

skills and policy determination abilities.

Prerequisite: senior standing, MKT 362, MKT 468, and MKT 469, all with a grade of C or better, and one marketing elective course, and admission to business administration or accounting major.

MATHEMATICS DEPARTMENT

College of the Sciences
Ellensburg
Bouillon Hall, room 108

509-963-2103

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www.cwu.edu/~cwumath

See website for how these programs may be used for educational and career purposes.

Faculty and Staff

Chair

Timothy Englund, PhD

Professors

Stuart F. Boersma, PhD, differential geometry, general relativity
Timothy Englund, PhD, group theory, representation theory, statistics
Stephen P. Glasby, PhD, computational algebra, representation theory
James D. Harper, PhD, harmonic analysis
Scott M. Lewis, PhD, mathematics education, history of mathematics
Cen-Tsong Lin, PhD, probability and mathematical statistics, actuarial science
Mark Oursland, EdD, mathematics education

Associate Professors

Christine Black, PhD, mathematics education
Yvonne Chueh, PhD, actuarial science, statistics
W. Dan Curtis, PhD, applied mathematics
Jonathan Fassett, PhD, topology, dynamical systems
Michael Lundin, PhD, mathematics education
Aaron Montgomery, PhD, topology, algebra
Teri Willard, EdD, mathematics education

Assistant Professors

James Bisgard, PhD, analysis
Richard Hilliard, MS, mathematics
Kathryn Temple, PhD, actuarial science
Jane Whitmire, PhD, mathematics education

Senior Lecturer

Richard Trudgeon, MA, administration and curriculum
Dale Width, MA, history

Lecturers

Erin Lee, MAT, mathematics
Fred McDonald, MT, finance, accounting
Douglas Olson, MS, mathematics
Janet Shiver, PhD, mathematics education
Stephen Stein, PhD, educational administration
Bruce Woodcock, MA, education

Staff

Debbie Thomas, secretary

Department Information

Mathematics is an expanding and evolving body of knowledge as well as a way of perceiving, formulating, and solving problems in many disciplines. The subject is a constant interplay between the worlds of thought and application. The student of mathematics will find worthy challenges and the subsequent rewards in meeting them.

The general student will find preparatory courses in pre-calculus mathematics and traditional mathematics courses such as calculus, linear algebra, geometry, abstract algebra, and analysis. Also, more specialized courses in discrete mathematics, number theory, and the history of mathematics are offered. Special needs of computer science majors, elementary education majors, and general education requirements are also met by courses in the mathematics department.

For those desiring concentrated work in mathematics, the mathematics department offers four programs leading to bachelor's degrees. A bachelor of arts or bachelor of science in mathematics prepares the student as a mathematician for industry or graduate work. A bachelor of arts in secondary teaching prepares the student to teach at the junior, middle, or high school levels. A bachelor of science in mathematics with an actuarial science specialization prepares the student to work as an actuary or in applied statistics. A mathematics minor and a secondary teaching minor are also available.

One graduate degree is offered: the master of arts for teachers. This is described in the graduate section of the catalog.

All programs (major, minor, including electives) must be on file and approved by the department at least one academic year preceding graduation.

Admission and Placement Notes

1. Enrollment in MATH 100C, MATH 101, MATH 102, MATH 130, and MATH 164 requires a satisfactory score on one of the following tests: SAT, ACT, COMPASS Test, or the Intermediate Assessment Test. The scores on the SAT or ACT tests must have been achieved within the last three years before math placement. The student with insufficient test scores is encouraged to enroll in developmental classes. For more information drop by the Math Center in Hertz Hall, room 101 or call 509-963-1834.
2. Students who wish to enroll in pre-calculus (MATH 153 or MATH 154) or calculus (MATH 170 or MATH 172) and who have not had the necessary prerequisite course at a college or university must take the mathematics placement test. Students will be placed in accordance with their results on this test as determined by the mathematics department. Students may be placed into pre-calculus I (MATH 153) if they received

a B or better in a one-year high school calculus course. See the mathematics department for more details.

- Admission to any mathematics course having prerequisites requires either a suitable math placement test score or a grade of 2.0 or better in each listed prerequisite to that course.

Admission Requirements for Mathematics Teaching Secondary Major and Minor

Admission to the mathematics teaching secondary major or minor is selective. A cumulative grade point average of 2.50 is required in the pre-admission courses listed below. Further, students must successfully complete MATH 260 by spring quarter of the academic year of their acceptance into the program. The mathematics department will process applications once a year and notify students of their status by February 15. The deadline for submission of applications to the department is January 15. A completed application must include the standard major application form and a mathematics-advisor-approved graduation plan. Students planning to major or minor in secondary mathematics teaching must first take all Tier I courses (MATH 172, MATH 173, MATH 260, MATH 265, and MATH 272). Students must be accepted as a mathematics education major or minor prior to enrolling in Tier II courses (MATH 299E, MATH 320, MATH 324, MATH 311, MATH 331, MATH 332, MATH 355, MATH 360, MATH 361, MATH 430, MATH 455, and MATH 499E). MATH 311 is the only exception; this course may be taken after having completed MATH 130. Students applying for admission to the major may register for courses for the following quarter but will be dropped if not admitted. Upon admission to the major, all students will enroll in MATH 299E, Orientation Seminar: Secondary Mathematics, for the subsequent fall quarter.

Students interested in the Secondary Mathematics Teaching Program need to meet with a mathematics education advisor during their first quarter at CWU.

Applicants for admission into the Secondary Mathematics Teaching Program:

- Must have a 2.5 or better GPA in the following courses:
ENG 102 - Composition II: Reasoning and Research 4
MATH 130 - Finite Mathematics 5
MATH 172 - Calculus I 5
MATH 173 - Calculus II 5

Pre-admission Total: 19

AND

- Must have completed MATH 260 and MATH 265 with a grade of C or better, or be enrolled in MATH 260 concurrently with MATH 299E

Bachelor of Arts Mathematics: Teaching Secondary Major

This major satisfies the endorsement for mathematics. Students taking this major are required to complete the Professional Education Program requirements offered through the Department of Educational Foundations and Curriculum.

Required Courses

MATH 172 - Calculus I	5
MATH 173 - Calculus II	5
MATH 260 - Sets and Logic	5
MATH 265 - Linear Algebra I	4
MATH 272 - Multivariable Calculus I	5
MATH 299E - Orientation Seminar:	
Secondary Mathematics	2
MATH 311 - Statistical Concepts and Methods	5
MATH 320 - History of Mathematics	3
MATH 324 - Methods and Materials in Mathematics-Secondary	4
MATH 331 - Continuous Models	3
MATH 332 - Discrete Models	4
MATH 355 - College Geometry I	4
MATH 360 - Algebraic Structures I	3
MATH 361 - Algebraic Structures II	3
MATH 430 - Introduction to Theory of Numbers	3
MATH 455 - College Geometry II	3
MATH 499E - Senior Seminar: Secondary Mathematics	3

Total Credits: 64

Mathematics: Teaching Secondary Minor

This is an endorsable minor for student teaching.

Required Courses

MATH 172 - Calculus I	5
MATH 173 - Calculus II	5
MATH 260 - Sets and Logic	5
MATH 265 - Linear Algebra I	4
MATH 272 - Multivariable Calculus I	5
MATH 299E - Orientation Seminar:	
Secondary Mathematics	2
MATH 311 - Statistical Concepts and Methods	5
MATH 320 - History of Mathematics	3
MATH 324 - Methods and Materials in Mathematics-Secondary	4
MATH 355 - College Geometry I	4
MATH 360 - Algebraic Structures I	3
MATH 455 - College Geometry II	3
MATH 499E - Senior Seminar: Secondary Mathematics	3

Total Credits: 51

Bachelor of Arts Middle-level Mathematics and Science Teaching Major

This major is designed for students who wish to teach mathematics and science at the middle level (grades 5-8). The coursework provides experiences in

math and science content and pedagogy including field experience and addresses the Washington State competencies for middle level math teachers and the Washington State competencies for middle-level science teachers. Students must be accepted into the teacher preparation program (47-52 credits) and successfully demonstrate competency equivalent to the completion of MATH 154 prior to acceptance into this major. Students with strong high school mathematics preparation should take the math placement exam. According to the results of the exam, students may satisfy the MATH 153 and/or MATH 154 requirements. Students completing this major are required to demonstrate knowledge, skill, and disposition proficiencies through a program portfolio prior to student teaching. Students who complete this major and receive a passing score on the WEST-E exams for middle-level mathematics and middle-level science are eligible to receive both the middle level math and science endorsements.

Required Courses

Science

BIOL 101 - Fundamentals of Biology	5
CHEM 101 -Contemporary Chemistry and Contemporary Chemistry Lab	5
PHYS 106 - Physics by Inquiry	5
GEOL 101/101LAB - Physical Geology and Physical Geology Lab	5
OR	
GEOL 102/101LAB - Geology of National Parks and Physical Geology Lab (5)	
PHYS 101 - Introductory Astronomy	5
SCED 301 - Interdisciplinary K-8 Science Inquiry	5
SCED 354 - Science, Society, and the Teaching Community	3

Mathematics

MATH 130 - Finite Mathematics	5
MATH 164 - Foundations of Arithmetic	5
MATH 250 - Intuitive Geometry for Elementary Teachers	4
MATH 170 - Intuitive Calculus	5
MATH 232 - Discrete Modeling for Middle Level Teachers	4
MATH 486 - Mathematics, Problem Solving, and Teaching	4

Integrated Math and Science

MATH/SCED 323 - Teaching Middle School Mathematics and Science	3
Education	
EDEL 477 - Middle School Students and Their Environment	4
EDEL 478 - Developmentally Responsive Curriculum in Middle Grades	3
Advisor-approved course (EDEL 323, SCED 322, MATH 324, or SCED 324)	3-4

Total Credits: 73-74

Middle Level Mathematics Teaching Minor

This minor is designed for students who wish to teach math at the middle level (grades 5-9). Completion of this minor results

in a middle-level math endorsement for Washington State. The coursework provides experiences in math content and pedagogy including field experience and addresses the Washington State competencies for middle-level math teachers. This program is only open to students admitted to majors that are endorsable or currently hold teaching endorsements. Students must be accepted into the Teacher Preparation Program and have completed MATH 153 and MATH 154 prior to acceptance into this program. Students with a strong high school mathematics preparation should take the Math Placement Exam.

According to the results of the exam, students may satisfy the MATH 153 and/or MATH 154 requirements. Students completing this minor are required to demonstrate knowledge, skill, and dispositions proficiency through a program portfolio prior to student teaching. Students must pass the WEST-E exam for middle level mathematics to receive the middle level math endorsement.

Required Courses

MATH 130 - Finite Mathematics	5
MATH 164 - Foundations of Arithmetic	5
MATH 170 - Intuitive Calculus	5
MATH 232 - Discrete Modeling for Middle-level Teachers	4
MATH 250 - Intuitive Geometry for Elementary Teachers	4
MATH 323 - Teaching Middle School Mathematics and Science	3
MATH 486 - Mathematics, Problem Solving, and Teaching	4
EDEL 323 Teaching Elementary School Mathematics	4
EDEL 477 - Middle School Students and Their Environment	4
EDEL 478 - Developmentally Responsive Curriculum in Middle Grades	3
Total Credits:	41

In addition: elementary education majors must take EDCS 424 - Reading in the Content Fields (3).

Admission Requirements for Mathematics Major and Minor

Admission to any major in the mathematics department will be considered after the first two quarters of calculus are taken (MATH 172 and MATH 173). Transfer students with the calculus background will generally take and successfully complete (2.0 or better) 10 hours of math beyond calculus to be admitted to a major. Application forms are available from the mathematics department office. Students must meet with an advisor in the mathematics department before being considered for major or minor. In addition, students must earn a minimum grade of C in any course that fulfills a major or minor requirement.

Bachelor of Science (60-61 Credits) (93-94 Credits)

Mathematics Major

Required Courses

MATH 172, 173 - Calculus I, II	10
MATH 260 - Sets and Logic	5
MATH 265 - Linear Algebra I	4
MATH 272, 273 - Multivariable Calculus I, II	10
MATH 499S - Senior Seminar	2
Select two of the following sequences. 18-19 (One of which must be abstract algebra or advanced analysis):	
MATH 411A, 411B, 411C - Probability Theory and Mathematical Statistics, I, II	10
MATH 451, 452, 453 - Topology I, II, III	9
MATH 461, 462, 463 - Abstract Algebra I, II, III	9
MATH 471, 472, 473 - Advanced Analysis I, II, III	9
MATH 475, 476, 477 - Applied Analysis I, II, III	9
Department-approved upper-division electives	11
Total Credits:	60-61

Students in the 93- to 94-credit major are also required to take:

MATH 311 - Statistical Concepts and Methods	5
MATH 365 - Linear Algebra II	3
MATH 376, 377 - Differential Equations I, II	6

Select one from the following 4

CS 105 - The Logical Basis of Computing (4)	
CS 110 - Programming Fundamentals I (4)	

Lab science sequence culminating in calculus-based course 15

Total Credits: 93-94

Bachelor of Science in Mathematics Actuarial Science

An actuary uses specialized mathematical skills from probability and statistics to define, analyze, and solve financial and social problems. Actuaries create and manage insurance programs that reduce the adverse financial impact of both expected and unexpected things that happen to people, such as illnesses, accidents, and death. In addition, actuaries design pension programs, making sure there are sufficient resources to pay retirement and death benefits while also charging participants in the insurance or retirement plan a fair price.

The bachelor of science in actuarial science is listed below and is designed to prepare a student in both the mathematics and business areas necessary for success in the rigorous but rewarding actuarial profession.

Required Courses

ACCT 251 - Financial Accounting	5
CS 110 - Programming Fundamentals I	4
CS 367 - Advanced Visual Basic Programming	4
ECON 201 - Principles of Economics Micro	5
ECON 202 - Principles of Economics Macro	5
FIN 370 - Introductory Financial Management	5
FIN 475 - Investments	5
MATH 172 - Calculus I	5
MATH 173 - Calculus II	5
MATH 265 - Linear Algebra I	4
MATH 272 - Multivariable Calculus I	5
MATH 273 - Multivariable Calculus II	5
MATH 311 - Statistical Concepts and Methods	5
MATH 410A - Advanced Statistical Methods	3
MATH 410B - Advanced Statistical Methods	3
MATH 411A - Probability Theory	4
MATH 411B - Mathematical Statistics I	3
MATH 411C - Mathematical Statistics II	3
MATH 414 - Time Series Analysis	3
MATH 418A - Financial Mathematics I	3
MATH 418B - Financial Mathematics II	3
MATH 418C - Financial Mathematics III	3
MATH 440 - Mathematical Theory of Financial Economics	5

Select one of the following sequences. 9

Loss Models

MATH 417A - Loss Models I (3)	
MATH 417B - Loss Models II (3)	
MATH 417C - Loss Models III (3)	

Actuarial Mathematics

MATH 419A - Actuarial Mathematics I (3)	
MATH 419B - Actuarial Mathematics II (3)	
MATH 419C - Actuarial Mathematics III (3)	

Total Credits: 104

Mathematics Minor

Required Courses

MATH 172 - Calculus I	5
MATH 173 - Calculus II	5

Electives:

At least 12 credits of electives in mathematics at the 200 level or above, which MUST include at least one of Math 260 or Math 265. 12

Total Credits: 22

Mathematics Courses

MATH 100A. Pre-algebra (5). This course is designed to prepare students for college mathematics. Symbolic, graphical, and numeric representations will be studied to understand and apply the concepts underlying algebra. Credits will not be allowed toward meeting bachelor's degree requirements. Prerequisite: must receive advising from the university math center prior to enrolling in this course.

MATH 100B. Introductory Algebra (5). This course is designed to prepare students for college mathematics. Symbolic, graphical, and numeric representations will be studied to understand and apply the concepts of algebra. Credits will not be allowed toward meeting bachelor's degree requirements. Prerequisite: must receive advising from the university math center prior to enrolling in this course.

MATH 100C. Intermediate Algebra (5). This course is designed to prepare students for college-level precalculus mathematics. Symbolic, graphical, and numeric representations will be studied to understand and apply the concepts needed to be successful in precalculus. Credits will not be allowed toward meeting bachelor's degree requirements. Prerequisite: must receive advising from the university math center prior to enrolling in this course.

MATH 101. Mathematics in the Modern World (5). Selected topics from the historical development and applications of mathematics together with their relationship to the development of our present society. Prerequisites: either at least 500 on the SAT, 19 on the ACT, a Compass test score of either 50-Pre-Algebra, 26-Algebra, 31-College Algebra, or 31-Trigonometry, or completed MATH 100B or a higher level math class.

MATH 102. Mathematical Decision Making (5). Selected topics from probability, statistics and mathematical decision making with real-world application. Prerequisites: either at least 500 on the SAT, 19 on the ACT, a Compass test score of either 50-Pre-Algebra, 26-Algebra, 31-College Algebra, or 31-Trigonometry, or completed MATH 100B or a higher level math class.

MATH 130. Finite Mathematics (5). The language of sets, counting procedures, introductory probability, and decision making, introductory descriptive statistics. Meets General Education "reasoning" requirement and prepares student for introductory statistics courses in various departments. Prerequisites: either at least 500 on the SAT, 19 on the ACT, a Compass test score of either 50-Pre-Algebra, 26-Algebra, 31-College Algebra, or 31-Trigonometry, or completed MATH 100B or a higher level math class.

MATH 153. Pre-calculus Mathematics I (5). A foundation course which stresses those algebraic and elementary function concepts together with the manipulative skills essential to the study of calculus. Prerequisites: either MATH 100C with a grade of C or better, a score of 18 or better on the Intermediate Math Placement Test, or a score of 66 or better on the Compass Algebra test.

MATH 154. Pre-calculus Mathematics II (5). A continuation of MATH 153 with emphasis on trigonometric functions, vectors, systems of equations, the complex numbers, and an introduction to analytic geometry. Prerequisites: either MATH 153 with a

grade of C or better, a score of 17 or better on the Advanced Math Placement Test, or a score of 46 or better on the Compass College Algebra Test.

MATH 164. Foundations of Arithmetic (5). Structure of the real number system. Properties of and operations on integers, rationals, decimal representation, percentages, proportion, graphing, and elementary problem solving. Recommended for the prospective elementary school teacher. Prerequisites: 45 earned credits, and either at least a 500 on the SAT, a 19 on the ACT, or a score of 50 on the Compass test.

MATH 170. Intuitive Calculus (5). An intuitive approach to the differential and integral calculus specifically designed for students in the behavioral, managerial, and social sciences. Not open to students with credit for MATH 172 or higher. Prerequisites: either MATH 153 with a grade of C or better or a score of 19 or better on the Advanced Placement Test.

MATH 172. Calculus I (5). Theory, techniques, and applications of differentiation and integration of the elementary functions. Prerequisites: either MATH 154 with a grade of C or better, a score of 19 on the Advanced Math Placement Test, or a score of 46 or better on the Compass Trigonometry test.

MATH 173. Calculus II (5). Theory, techniques, and applications of differentiation and integration of the elementary functions. Prerequisite: MATH 172 with a grade of C or better.

MATH 232. Discrete Modeling for Middle-level Teachers (4). Discrete models including recurrence relations finite differences, logic, applications of graph theory, applications of linear programming, and simple combinatorics. Prerequisites: MATH 170 and MATH 250.

MATH 250. Intuitive Geometry for Elementary Teachers (4). An intuitive approach to the geometry topics relative to the elementary school curriculum. Prerequisite: MATH 164 with a grade of C or better.

MATH 260. Sets and Logic (5). Essentials of mathematical proofs, including use of quantifiers and principles of valid inference. Set theory as a mathematical system. Prerequisites: either MATH 173 or both MATH 172 and CS 301, all with grades of C or better.

MATH 264. Functions for Middle-level Teachers (5). Analyze and create algebraic models of functions on both continue and discrete systems. Apply function techniques to solve problems. Apply knowledge of functions and of society to communicate concepts of mathematical functions to a diverse group of middle school students. Prerequisites: either MATH 100C with a grade of C or better or a score of 18 or better on the Intermediate Math Placement Test.

MATH 265. Linear Algebra I (4). Vector spaces, linear systems, matrices, and determinants. Prerequisite: MATH 173 with a grade of C or better.

MATH 272. Multivariable Calculus I (5). Differential and integral calculus of multivariable functions and related topics. Prerequisite: MATH 173 with a grade of C or better.

MATH 273. Multivariable Calculus II (5). Differential and integral calculus of multivariable functions and related topics. Prerequisite: MATH 272 with a grade of C or better.

MATH 274. Principles of Calculus for Middle-level Teachers (3). Demonstrate a conceptual and procedural understanding of the fundamental elements of calculus including limits, continuity, differentiation, and integration. Apply knowledge of calculus and society to communicate concepts of motion mathematics to a diverse group of middle school students. Prerequisites: either MATH 154 or 264.

MATH 275. Calculus for Secondary Teachers (5). Conceptual and procedural understanding of the fundamental elements of calculus including limits, continuity, differentiation, and integration of single and multivariable functions. Substitute for MATH 272 only for students in an endorsement or certification-only program. By permission. Prerequisite: MATH 173.

MATH 298. Special Topics (1-6).

MATH 299E. Orientation Seminar: Secondary Mathematics (2). Introductory seminar for new mathematics education students focusing on problem solving, technical presentation of solutions, and electronic portfolio preparation. Prerequisite: admission to the mathematics education major or minor.

MATH 311. Statistical Concepts and Methods (5). Hands-on activities for exploring data. Surveys, planned experiments, and observational studies. Modeling, sampling distributions, and statistical inference. MINITAB statistical computing language introduced and used extensively. By permission. Prerequisites: either MATH 130 or 173.

MATH 320. History of Mathematics (3). A study of the development of mathematics and the personalities involved. Prerequisite: MATH 260 with a grade of C or better.

MATH 323. Teaching Middle School Mathematics and Science (3). Prospective teachers will learn and use the methods and materials needed to teach middle school students mathematics and science with emphasis on the use of experiments, manipulatives, problems solving, cooperative learning, and communication of understanding. MATH 323 and SCED 323 are equivalent courses; students may not receive credit for both. Prerequisites: either MATH 324, EDEL 323, SCED 324, or SCED 322, and application to the Teacher Preparation Program.

MATH 324. Methods and Materials in Mathematics Secondary (4). Prerequisites: MATH 355, MATH 265, EDCS 311, and conditional or full admission to the Teacher Preparation Program.

MATH 330. Discrete Mathematics (5).

Topics from logic, combinatorics, counting techniques, graph theory, and theory of finite-state machines. Prerequisite: MATH 260 with a grade of C or better.

MATH 331. Continuous Models (3). Students will use multiple integrals, line integrals, and differential equations to model physical situations. Prerequisite: MATH 272 with a grade of C or better.

MATH 332. Discrete Models (4). Discrete models including graph theory, difference equations, and the models of social choice, inherent logic combinatorics, and algebra. Prerequisite: admission to the mathematics education major or minor.

MATH 355. College Geometry I (4). An inductive and deductive approach to intuitive geometry, modern Euclidean geometry, history of geometry, and axiomatic systems in geometry. Prerequisite: admission to the mathematics education major or minor.

MATH 360. Algebraic Structures I (3). First course in the structure of algebraic systems includes the study of real number systems and other algebraic systems in the development of group theory. Prerequisite: admission to the mathematics education major or minor.

MATH 361. Algebraic Structures II (3). The second course in the structure of algebraic systems, including rings, modules, and fields, and their associated morphisms.

MATH 364. Axiomatic Systems (4). An introduction to the idea of an axiomatic system, including concepts such as consistency and completeness. This course is designed to provide students with the proof writing skills required for more advanced courses. Prerequisite: MATH 260 with a grade of C or better.

MATH 365. Linear Algebra II (3). Vector spaces, linear transformations, bilinear and quadratic forms, eigenvalues, eigenvectors, similarity, inner products, and norms. Prerequisites: MATH 260 and 265 with grades of C or better.

MATH 371. Advanced Calculus (4). The basic concepts of the real numbers and calculus are presented from an axiomatic standpoint. This course also offers basic proof writing skills that are necessary for more advanced mathematics. Prerequisites: MATH 260 and 272 with grades of C or better.

MATH 372. Complex Analysis . Arithmetic of complex numbers and functions of a complex variable, linear fractional transformations, Cauchy-Reimann equations, contour integration, Cauchy's theorem, residue theorem, power series and applications. Prerequisites: MATH 260 and 273 with grades of C or better.

MATH 376. Differential Equations I (3). Elementary methods of solutions of ordinary differential equations. Some numerical methods for solving ordinary differential equations with applications. Prerequisites: MATH 265 and 272 with grades of C or better.

MATH 377. Differential Equations II

(3). Elementary methods of solutions of ordinary differential equations. Some numerical methods for solving ordinary differential equations with applications. Prerequisite: MATH 376 with a grade of C or better.

MATH 410A. Advanced Statistical Methods I (3). A thorough treatment of regression and correlation. Chi-square and other enumeration statistics. Non-parametric statistical principles of experimental design. Examples will be from a variety of fields. Prerequisite: MATH 311 with a grade of C or better.

MATH 410B. Advanced Statistical Methods II (3). A thorough treatment of regression and correlation. Chi-square and other enumeration statistics. Non-parametric statistical principles of experimental design. Examples will be from a variety of fields. Prerequisite: MATH 410A with a grade of C or better.

MATH 411A. Probability Theory (4). Principal topics include: combinatorial theory, conditional probability, random variables, expectation and moments, generating functions, various discrete and continuous distributions, law of large numbers, central limit theorem. Prerequisite: MATH 273 with a grade of C or better.

MATH 411B. Mathematical Statistics I (3). Derived distributions, point and interval estimation, hypothesis testing. Correlation and regression theory. Distribution free methods. Bayesian inference. Prerequisite: MATH 411A with a grade of C or better.

MATH 411C. Mathematical Statistics II (3). Derived distributions, point and interval estimation, hypothesis testing. Correlation and regression theory. Distribution free methods. Bayesian inference. Prerequisite: MATH 411B with a grade of C or better.

MATH 413. Introduction to Stochastic Processes (5). The Wiener Process, conditional probability and conditional expectation. Stationary and evolutionary processes. Various Poisson processes. Renewal counting processes. Discrete parameter Markov chains. Prerequisite: MATH 411A with a grade of C or better.

MATH 414. Time Series Analysis (3). Model building, parameter estimation, diagnostic checking of time series data; ARIMA models and forecasting. Analysis of seasonal models. Co- or prerequisite: MATH 410B.

MATH 416A. Actuarial Science Problems II (1-2). Students discuss and present problems in probability and mathematical statistics important for actuaries. May be repeated up to 3 credits. Prerequisite: MATH 411B with a grade of C or better.

MATH 416B. Actuarial Science Problems III (1-2). Students discuss and present problems in applied statistics important for actuaries. May be repeated up to 3 credits. Co- or prerequisite: MATH 410B.

MATH 417A. Loss Models I (3). Modeling process, calibration, and evaluation. Analyzing data, determining a suitable model including parameter values, and providing measures. Prerequisite: MATH 411A with a grade of C or better.

MATH 417B. Loss Models II (3). Modeling process, calibration, and evaluation. Analyzing data, determining a suitable model including parameter values, and providing measures of confidence for decisions based upon the model. Prerequisite: MATH 417A with a grade of C or better.

MATH 417C. Loss Models III (3). Modeling process, calibration, and evaluation. Analyzing data, determining a suitable model including parameter values, and providing measures of confidence for decisions based upon the model. Prerequisite: MATH 417B with a grade of C or better.

MATH 418A. Financial Mathematics I (3). Fundamental concepts and calculations for cash flows as a basis for future use in reserving, valuation, pricing, asset/liability management, investment, and capital budgeting. Prerequisite: MATH 173 with a grade of C or better.

MATH 418B. Financial Mathematics II (3). Fundamental concepts and calculations for cash flows as a basis for future use in: reserving, valuation, pricing, asset/liability management, investment, and capital budgeting. Prerequisite: MATH 418A with a grade of C or better.

MATH 418C. Financial Mathematics III (3). Introduction to financial instruments, including derivatives, and the concept of no-arbitrage as it relates to financial mathematics. Introduction to financial economics and key terms: derivatives, forwards, short and long positions, call and put options, spreads, collars, hedging, arbitrage, and swaps. Prerequisite: MATH 418B with a grade of C or better.

MATH 419A. Actuarial Mathematics I (3). Mathematics of analyzing and pricing insurance, annuities, and pension products. Life contingencies, risk theory, and techniques in reserving and valuation. Prerequisite: MATH 411A with a grade of C or better.

MATH 419B. Actuarial Mathematics II (3). Mathematics of analyzing and pricing insurance, annuities, and pension products. Life contingencies, risk theory, and techniques in reserving and valuation. Prerequisite: MATH 419A with a grade of C or better.

MATH 419C. Actuarial Mathematics III (3). Mathematics of analyzing and pricing insurance, annuities, and pension products. Life contingencies, risk theory, and techniques in reserving and valuation. Prerequisite: MATH 419B with a grade of C or better.

MATH 430. Introduction to Theory of Numbers (3). Euclidean algorithm, fundamental theorem of arithmetic,

Diophantine equations, primitive roots and indices, and other number theory topics. Prerequisite: MATH 260 with a grade of C or better.

MATH 440. Mathematical Theory of Financial Economics (5). Concepts, principles, and techniques needed for the professional actuarial SOA/CAS Exam MFE are covered in this course. Topics to explore include interest rate models, bond price models, rational valuation of derivative securities, and delta-hedging as risk management techniques. Prerequisite: MATH 418C.

MATH 451. Topology I (3). An introduction to point-set and algebraic topology. Topics may include metric spaces, topological spaces, homotopy theory, and the fundamental group. Prerequisites: MATH 260 and 265 with grades of C or better.

MATH 452. Topology II (3). An introduction to point-set and algebraic topology. Topics may include metric spaces, topological spaces, homotopy theory, and the fundamental group. Prerequisite: MATH 451 with a grade of C or better.

MATH 453. Topology III (3). An introduction to point-set and algebraic topology. Topics may include metric spaces, topological spaces, homotopy theory, and the fundamental group.

MATH 455. College Geometry II (3). Introduction to non-Euclidean geometry including history, deductive reasoning, and topics in hyperbolic and elliptical geometry. Prerequisites: MATH 355 and 260 with grades of C or better.

MATH 461. Abstract Algebra I (3). Algebraic structures such as groupoids, groups, rings, and fields. Prerequisites: MATH 260 and 265 with grades of C or better.

MATH 462. Abstract Algebra II (3). Algebraic structures such as groupoids, groups, rings, and fields. Prerequisite: MATH 461 with a grade of a C or better.

MATH 463. Abstract Algebra III (3). Algebraic structures such as groupoids, groups, rings, and fields. Prerequisite: MATH 462 with a grade of C or better.

MATH 471. Advanced Analysis I (3). Further development of properties of calculus. Prerequisites: MATH 260 and 273 with grades of C or better.

MATH 472. Advanced Analysis II (3). Further development of properties of calculus. Prerequisite: MATH 471 with a grade of C or better.

MATH 473. Advanced Analysis III (3). Further development of properties of calculus. Prerequisite: MATH 472 with a grade of C or better.

MATH 475. Applied Analysis I (3). Selected topics from advanced analysis especially useful to the engineer, chemist, physicist, and applied mathematician. Prerequisite: MATH 376 with a grade of C or better.

MATH 476. Applied Analysis II (3). Selected topics from advanced analysis especially useful to the engineer, chemist, physicist,

and applied mathematician. Prerequisite: MATH 475 with a grade of C or better.

MATH 477. Applied Analysis III (3). Selected topics from advanced analysis especially useful to the engineer, chemist, physicist, and applied mathematician. Prerequisite: MATH 476 with a grade of C or better.

MATH 486. Mathematics, Problem Solving, and Teaching (4). Written and oral projects to show mastery in teaching the middle-level math concepts from a problem solving approach. Prerequisite: MATH 164, MATH 250, MATH 153, and MATH 154.

MATH 490. Cooperative Education (1-12). An individualized, contracted field experience with business, industry, government, or social service agencies. This contractual arrangement involves a student learning plan, cooperating employer supervision, and faculty coordination. May be repeated for credit. Grade will either be S or U. By permission.

MATH 491. Workshop (1-6). The title of the workshop and the credit to be earned shall be determined at the time the workshop is approved. Designed to give an opportunity for individual and group study of problems in mathematics. May be repeated for credit.

MATH 495. Undergraduate Research (1). May be repeated up to 5 credits.

MATH 496. Individual Study (1-6).

MATH 498. Special Topics (1-6).

MATH 499. Seminar (1-5).

MATH 499E. Senior Seminar: Secondary Mathematics (3). Individualized projects using oral presentations and written electronic portfolio to show mastery in all program outcomes for teaching secondary mathematics. Prerequisite: MATH 324 with a grade of C or better.

MATH 499S. Senior Seminar (2). Individualized projects using oral presentations and written portfolio to show mastery in all program outcomes for mathematics.

McNAIR SCHOLARS PROGRAM

Undergraduate Studies
Ellensburg

Farrell Hall, room 136
509-963-2869
www.cwu.edu/~mcnair

See website for how these programs may be used for educational and career purposes

Program Director
Karen Francis-McWhite, MA

Faculty Coordinator
Timothy Englund, PhD

Staff
Kristina Owens, secretary senior
Delayna Breckon, office assistant

Program Information

The Ronald E. McNair Scholars Program at CWU is funded by a grant from the Department of Education under the TRIO Programs. This is an academically rigorous program, not a scholarship. The program is designed to provide underrepresented (low-income and first-generation, and/or ethnic minority) students with the training and opportunity to prepare for and successfully apply to graduate school programs. To this end, admitted scholars are required to complete graduate school preparation seminars. The goal of the program is for scholars to attain their doctorates and teach at universities.

A cornerstone of this program is the linking of scholars with faculty mentors. Students are expected to complete a summer research internship under the supervision of a research mentor. Scholars also have the option of a teaching internship during one academic



quarter and/or pursuing a leadership development track during their second year as a McNair Scholar.

CWU students are encouraged to apply to the McNair Scholars Program as sophomores or juniors and are selected on the basis of their academic excellence, career objectives and faculty recommendations.

Admission Requirements

Students must meet the following eligibility requirements:

- Be a U.S. citizen or permanent resident;
- Be a low-income student who is also a first-generation college student; or must be a member of a group that is underrepresented in graduate education (African American, American Indian/Alaskan Native, Hispanic/Latino, or Native Hawaiian/Pacific Islander);
- Be currently enrolled as an undergraduate in a degree program at CWU
- Must have completed 90 quarter credits by the time you begin the McNair Scholars Program
- Must have at least one year remaining before graduation
- Must have a minimum cumulative GPA of 2.9 and a major GPA of at least 3.1
- Must express a desire to attain a PhD

Complete an application, complete with form, two letters of recommendation, and a personal statement. Application materials and deadlines are available on the program website.

McNair Scholars Courses

MCNA 301. Creating a Research Project

(1). A seminar designed to guide McNair Scholar students through the steps of writing a research proposal. May be repeated up to 2 credits. Grade will either be S or U. Prerequisite: admission to the McNair Scholar Program.

MCNA 302. Finding a Graduate School (1). A seminar designed to assist McNair Scholar students research and locate graduate schools in their field of study. May be repeated up to 2 credits. Grade will either be S or U. Prerequisite: MCNA 301 and admission to the McNair Scholar Program.

MCNA 303. Completing the Graduate School Application (1). A seminar designed to assist McNair Scholar students through completing their graduate school application materials. May be repeated up to 2 credits. Grade will either be S or U. Prerequisite: MCNA 302.

MCNA 395. Undergraduate Research Methods (2). An introduction to research methods in preparation for an undergraduate summer research internship. Grade will either be S or U. Prerequisite: admission to the McNair Scholars Program.

MILITARY SCIENCE DEPARTMENT

(Army Reserve Officers' Training Corps-ROTC)

College of Education and Professional Studies
Ellensburg
Peterson Hall, room 202

509-963-3518

Fax 509-963-3588

www.cwu.edu/~roo

See website for how these programs may be used for educational and career purposes.

Faculty and Staff

Chair

LTC Karl D. Neal, military intelligence, MS

Professor

LTC Karl D. Neal, military intelligence, Command General Staff College, MS, engineering (models and simulations)

Assistant Professors

MAJ Jay R. Cook, engineer, BS, environmental management

CPT Dale A. Wright, armor, BA, business management

CPT Johnny L. Landon, field artillery, BA, fine arts

CPT Luis O. Guzman, field artillery, BA, liberal arts

Instructors

MSG Victor Vicente, infantry

SFC Isaiah L. Brown, air defense artillery

Staff

Kevin I. Bannister, supply technician

Muffie Corbin, program coordinator

David M. Mirro, human resource technician

Deborah J. Newton, human resource technician

Department Information

The Department of Military Science's courses are designed to prepare scholars, athletes, and junior leaders for commissioning in the U.S. Army. Students who complete the Military Science Program and meet commissioning requirements will be eligible for a commission as a second lieutenant in the U.S. Army, Army Reserve, or Army National Guard. The on-campus instructional program is designed to fit into the regular academic schedule of the university and is taught by Army professors and instructors.

The academic program consists of military science, leadership labs, and off-campus summer training. Academic studies include courses in basic military tactics, principles of leadership, officership, communication, personnel and logistics management, staff management procedures, physical conditioning, land navigation, and military law. Various training activities are

scheduled each quarter to further familiarize the student with the ROTC Program.

Textbooks and uniform items are furnished through the Department of Military Science. The MSL 100 and MSL 200 classes are open to any student to explore their military interests and are non-contractual. Advancement to MSL 300 and MSL 400 courses to complete a minor in military science is by permission only.

Upon completion of the military science core (OPTION 1, 2, or 3; see below) requirements, leadership development and assessment course, and receipt of a bachelor's degree, students seeking an officer commission are able to select full-time employment (active Army) or part-time employment through the Army National Guard or the Army Reserve.

Additional information concerning the Military Science Program may be obtained by writing: Central Washington University, Military Science, Peterson Hall, 400 E. University Way, Ellensburg, Washington 98926-7569, stopping by the military science department in Peterson Hall, room 202, calling 509-963-3518, or by visiting the military science website at www.cwu.edu/~roo/.

POST BACHELOR'S DEGREE

FELLOWSHIPS: Graduating seniors may compete for several fully-funded Army graduate fellowships.

TRANSFER STUDENTS: Students transferring from other institutions, including community colleges considering entrance in the Military Science Program must make an appointment for a departmental interview for candidacy and scholarships.

GRADUATE STUDENTS: Graduate students interested in obtaining a commission as a second lieutenant should contact the Department of Military Science in Peterson Hall for academic planning and application.

VETERANS: Veterans are encouraged to contact one of the military science academic advisors for information and outline of benefits available while participating in the ROTC program.

SCHOLARSHIPS: ROTC scholarships pay tuition and required fees. They're awarded on merit-academic achievements, extracurricular activities, and personal interviews. Four-, three- and two-year scholarships are available each academic year to qualified students. Applications can be obtained from the military science department.

STIPENDS: All fully contracted cadets receive a stipend (\$300 freshman, \$350 sophomore, \$450 junior, \$500 senior) for each academic month plus an allowance for books and other educational items. Non-scholarship students can receive the stipend as a contracted cadet during their last two years.

SPECIAL TRAINING OPPORTUNITIES:

Summer training opportunities are through the Department of the Army Schools. The available schools include: airborne (parachute) training, air assault training, Northern Warfare School, and special forces. Additionally, Cadet Troop Leadership Training (CTLT) is also available to all cadets who have completed the military science minor core, been accepted in the military science minor, completed the MSL 301, 302, and 303 courses of study, and the leader development and assessment course. CTLT provides leadership experience in an active Army unit for two weeks prior to returning for the senior year of college study. CTLT is available in the U.S., Europe, and the Pacific Rim. Specialized training opportunities are by permission only.

Prerequisites for Advancement to the Military Science Minor

1. Admission into the MSL minor will be based upon an overall grade point average (GPA) of 2.5.
2. The department chair may admit a limited number of students with GPAs under 2.5.
3. Students seeking the military science minor must complete all application requirements prior to declaring military science as a minor.
4. Complete the core requirements with a GPA of 3.0 or higher.
5. The Department of Military Science reserves the right to modify these requirements in special cases.

Military Science Minor Core**Option 1*****Required Courses**

MSL 101 - Foundations of Officership	1
MSL 102 - Basic Leadership	2
MSL 103 - Advanced Leadership	2
MSL 201 - Individual Leadership Studies	2
MSL 202 - Leadership and Teamwork	2
MSL 211 - Land Navigation	2

Military Science Core Total Credits: 11

Option 2**Required Courses**

Select 3 credits from the list of approved electives	3
**MSL 292 - Leader's Training Course, Internship	8
**This course can be taken as non-credit	

Option 3*

Verification of completion of prior military service initial entry program. This option is by permission only. See department for further information

*No military obligation is incurred under Option 1 or Option 3.

Military Science Minor

Participation in this minor is contingent upon completion of the ROTC core (Option 1, 2, or 3) listed above and acceptance as a contracted student in the advanced course in

the Army ROTC Program. Application may be made at the Department of Military Science in Peterson Hall.

Required Courses

HIST 314 - Military History of the United States	5
MSL 301 - Leadership and Problem Solving	3
MSL 302 - Leadership and Ethics	3
MSL 303 - Leadership and Small Group Tactics	3
MSL 401 - Leadership and Management	4
MSL 402 - Officership	4
MSL 403 - Officership II	2
Select from the following credits	2-5
BSED 102 - Computer Keyboarding Skill Building (2)	
IT 101 - Computer Applications (3)	
CS, Any Course (4-5)	

Total Credits: 26-29

Military Science Courses**MSL 101. Foundations of Officership**

(1). Introduces students to issues and competencies that are central to a commissioned officer's responsibilities. Establishes framework for understanding officership, leadership, Army values, and life skills, such as physical fitness and time management. Open to all students.

MSL 102. Basic Leadership (2). Establishes foundation of basic fundamentals such as problem solving, communications, briefings, effective writing, goal setting, techniques for improving listening and speaking skills, and an introduction to counseling. Open to all students.

MSL 103. Advanced Leadership (2). Studies in problem solving, communications, effective writing, goal setting, techniques of listening, advanced speaking skills and professional counseling. Open to all students.

MSL 201. Individual Leadership Studies

(2). Students identify successful leadership characteristics through personal experience and observation of others during hands-on team building exercises. Explores persuasion techniques and the continuum of guidance to determine leadership styles. Open to all students.

MSL 202. Leadership and Teamwork (2).

Examines how to build successful teams, various methods for influencing action, effective communication in setting and achieving goals, the importance of timing the decision, creativity in the problem solving process, and obtaining team buy-in through immediate feedback. Open to all students.

MSL 211. Land Navigation (2). Principles of land navigation and orienteering with practical field applications.

MSL 212. Leadership Laboratory (1). Practical experience in leadership and basic military skills. May be repeated for credit.

MSL 292. Leader's Training Course, Internship (8). Basic military skills and leadership techniques taught at Ft. Knox,

Kentucky, during the summer. Qualifies the student for enrollment in the ROTC advanced course. Training emphasizes leadership development and can be taken in place of the basic course. Students receive pay, food, lodging, and travel expenses to and from Ft. Knox. By permission.

MSL 293. Ranger Challenge Training (2).

Prepares students to compete as a team member on the CWU Ranger Challenge team. Corequisite: PEF 118.

MSL 296. Individual Studies in Military Science (1-15).**MSL 298. Special Topics (1-6).**

MSL 301. Leadership and Problem Solving (3). Students conduct self-assessment of leadership style, develop personal fitness regimen, and learn to plan and conduct individual/small unit tactical training while testing reasoning and problem solving techniques. Students receive direct feedback on leadership abilities. Required for commissioning. Prerequisite: MSL 102.

MSL 301LAB. Military Science and Tactics III Laboratory (1). Requires concurrent enrollment in MSL 301. Practical experience and application in first aid, weapons, communications, and advanced land navigation. Corequisite: MSL 301.

MSL 302. Leadership and Ethics (3). Students learn small-group leadership methods with emphasis on problem solving and dealing with situational change required for commissioning. Prerequisite: MSL 301.

MSL 302LAB. Military Science and Tactics III Laboratory (1). Practical experience and application in small-unit leadership techniques, and small-unit tactics. Corequisite: MSL 302.

MSL 303. Leadership and Small Group

Tactics (3). Students learn and demonstrate small-unit tactics and land navigation methods while using advanced problem-solving techniques. Emphasis on decision making and communication skills. Required for commissioning. Prerequisite: MSL 302.

MSL 303LAB. Military Science and Tactics III Laboratory (1). Practical experience integration of small-unit tactics, land navigation, techniques of fire support, and military skills. Corequisite: MSL 303.

MSL 314. Military History of the United

States (5). A comprehensive and systematic survey and analysis of the American military experience from colonial times through the Vietnam War. MSL 314 and HIST 314 are equivalent courses; students may not receive credit for both.

MSL 392. Leader Development and

Assessment Course Preparation (2).

Practical exercise in small-unit leadership and tactics. Prepares the student for leader development and assessment course. Prerequisite: MSL 302.

MSL 398. Special Topics (1-6).**MSL 401. Leadership and Management (4).**

Develops student proficiency in planning and executing complex operations, functioning as a member of a staff, and mentoring subordinates. Students explore

training management, methods of effective staff collaboration, and developmental counseling techniques. Required for commissioning. Prerequisite: MSL 303.

MSL 402. Officership (4). Study includes case analysis of military culture and practical exercises on establishing a command climate. Students must complete a quarter-long Senior Leadership Project that requires them to plan, organize, collaborate, analyze, and demonstrate their leadership skills. Required for commissioning. Prerequisite: MSL 401.

MSL 403. Officership II (2). Emphasis on analyzing case and situational studies which cover contemporary leadership problems. Required for commissioning. Prerequisite: MSL 402.

MSL 492. Leader Development and Assessment Course Internship (8-15). Practical exercise in small-unit leadership and tactics. Five-week camp at Ft. Lewis, Washington. Required for commissioning. May be repeated for credit. Prerequisites: MSL 301, 302, and 303.

MUSIC DEPARTMENT

College of Arts and Humanities
Ellensburg

Jeryllyn S. McIntyre Music Building, room 144

509-963-1216

Fax: 509-963-1239

www.cwu.edu/~music

See website for how these programs may be used for educational and career purposes.

Faculty and Staff Chair

Todd Shiver, DMA

Associate Chair

Chris Bruya, MM, jazz studies

Professors

Joseph Brooks, MM, clarinet, saxophone, woodwind methods

Larry D. Gookin, MM, bands, low brass, music education, conducting

Carrie Rehkopf-Michel, MM, violin, chamber music, Kairos String Quartet

John Michel, MM, cello, chamber music, pedagogy, Kairos String Quartet

Hal Ott, DM, flute, literature

John F. Pickett, DM, piano, literature, pedagogy

Vijay Singh, MAT, jazz studies, choir, voice

Jeffrey Snedeker, DMA, horn, brass methods, music history

Associate Professors

Mark Goodenberger, MM, percussion

John Harbaugh, MME, trumpet, jazz studies

Daniel Lipori, DMA, music history, bassoon, double reed methods

Bret Smith, PhD, music education, string pedagogy

Assistant Professors

Gayla Blaisdell, PhD, voice, opera

Nikolas Caoile, DMA, orchestra, conducting
Mark Lane, MM, music education, band
Elaine Ross, PhD, theory, composition
Gary Weidenaar, DMA, choir, conducting, music education

Lecturers

Tim Betts, MM, viola, theory, Kairos String Quartet

Tor Blaisdell, MM, voice

James Durkee, MM, guitar, music literature

Brent Hages, BM, oboe

Jon Hamar, MM, string bass

Sidney Nesselroad, DMA, voice

Heather Netz, MM, violin, music

appreciation, Kairos String Quartet

John Neurohr, DMA, trombone, theory

Curtis Peacock, MM, tuba, euphonium,

history of jazz

Barbara Pickett, MM, piano, class piano

Maria Roditeleva-Wibe, PhD, music history, theory, world music

Florie Rothenberg, DMA, clarinet

Melissa Schiel, DMA, voice

Leslie Schneider, MM, music education

Emelie Spencer, MM, voice, theory

Staff

Marcie Brown, program assistant

Star Heger, fiscal specialist

Allen Larsen, hall manager, audio technician, web manager

Harry Whitaker, piano technician

Tinja Wyman, office supervisor

Department Information Mission Statement

The Department of Music is a community of artists, scholars, and educators dedicated to achieving the highest standards of musical knowledge, performance, and teaching. The department is committed to preparing students for careers in music, providing the opportunity to become literate, skilled, knowledgeable, and confident music educators, performers, and practitioners, able to influence and enrich the musical lives of the communities in which they serve. The department provides opportunities for the general student to study music as an essential part of a liberal arts education and engage in artistic experiences, serve as a leader for K-12 music education, and provide opportunities for the general public to experience music performances of the highest quality in a broad range of styles and genres.

Department Vision

The Department of Music will be recognized and respected for its challenging curriculum and supportive environment, for the excellence of its student, ensemble, and faculty performances, and for the fulfillment of its motto: "Where teaching is a performing art."

Accreditation

The department is an institutional member of the National Association of Schools of Music (NASM).

Admission Requirement

All entering students who plan to pursue either a major or minor in the music department must audition for acceptance into the program before a faculty committee. See the department's website for audition information.

Common Exit Requirements

All music majors must pass a keyboard proficiency exam as a graduation requirement. Music education majors will not be scheduled for student teaching until this proficiency is completed.

Standards

Music education majors must meet the standards for acceptance into the Professional Education Program.

Required Participation:

1. All entering music majors with no previous college music theory credits must pass an online exam in music fundamentals as a prerequisite for MUS 144, the first quarter of the theory sequence (fee required). All entering music majors with college credits in music theory must take an in-house diagnostic theory exam, which will be given during the transfer student orientation sessions and before the fall quarter begins. Credit for previous college theory courses may be given based on the results of this exam. Details about both exams can be found on the department website.
2. All music majors must enroll in a large ensemble appropriate to their major performance area during each quarter of enrollment as a full-time student. Enrollment in either Women's Choir or Men's Choir can be substituted for enrollment in a choral large ensemble for a maximum of three quarters.
3. All students enrolled in applied music (private lessons) must attend all biweekly music major convocations and studio classes and at least seven recitals each quarter. See the music department's website for large ensemble details and the music student handbook.

Departmental Honors

Consult the department website for information about the departmental honors program.

Certification Programs

The department offers post-baccalaureate students the opportunity to earn Teaching Certification in three endorsement areas. To enter the certification program, a baccalaureate degree in music is required. Endorsement for certification requires completion of all courses listed in the CWU curricular requirements of each specialization. Consultation with the faculty music education specialist is mandatory for students entering this program.

Department Fees

All fees are billed to students' accounts.

A \$75 fee two credits and \$125 fee for 4 credits for each enrolled MUS _64 applied music course

A \$75 fee for each enrolled MUS _71 applied music course

A \$40 fee each quarter for students enrolled in Vocal Jazz I

A \$40 fee for each scheduled student recital

A \$15 fee for each MUS 252, 253, and 254 (Class Instrumental Methods) course

A \$5 annual locker fee

A \$5 fee for students enrolled in Percussion Ensemble

A university \$25 tech fee covers use of electronic equipment used in all music courses. Part-time students enrolled in theory, class piano, composition, or electronic music courses will be assessed this fee.

Applied Music (Individual Lessons)

Student advancement through performance levels (164-464) is determined by jury examination, conducted at the end of the quarter in which a level change is attempted. Students studying at the 364 level must present a full recital as a graduation requirement. Students studying at the 464 level must present at least a one-half recital as a graduation requirement. See the Undergraduate Handbook for policies regarding applied music study. The handbook is available on the department website at www.cwu.edu/~music. Applied music requirements differ according to the degree.

Ensemble Participation

Participation in performance ensembles is an essential part of the music major experience. Rehearsing and performing as part of a band, orchestra, or choir provides many benefits. It develops musical listening and performing skills, expands knowledge of repertoire, including contemporary and traditional works, provides the opportunity to learn the style characteristics of historical periods and elements of musical structures, and promotes cohesiveness in the musical community.

For future music directors and educators, the ensemble directors serve as models of how to develop such ensembles and how to utilize efficient and productive rehearsal techniques. To ensure that all music majors derive full benefit of this experience, participation in a large ensemble (defined below) appropriate to the major performing area is required of all music majors every quarter in residence as a full-time student, regardless of the number of credits required in each degree.

When circumstances justify not being in a large ensemble, a large ensemble

participation waiver form, available in the music department office and signed by the applied instructor/advisor and ensemble director, must be submitted for approval by the department chair.

Only the following are designated as large ensembles: Wind Ensemble, MUS 266/466; Choir, MUS 267/467; Chamber Choir, MUS 268/468; Orchestra, MUS 277/477; Marching and Concert Band, MUS 287/487 (fall quarter only); Concert Band, MUS 288/488.

Bachelor of Music - Composition Major

Bachelor of music in composition is intended for students whose primary interest is in composition and for those who intend to pursue graduate work in music theory or composition. Audition requirement: Submit 2 or 3 short contrasting compositions and demonstrate proficiency on a primary instrument. (Formal declaration of a major in composition cannot occur until the end of the first-year theory sequence 146 and 146A with the grade of at least a B- in all theory courses, completion of MUS 120, and permission of instructor.) Transfer students may bypass MUS 120 with permission based upon composition knowledge, submissions, and sufficient audition on primary instrument. It will normally take transfer students three years to compete the degree requirements.

BM Composition Core Requirements

Music Theory

Students must pass an online fundamental exam with 75% (\$10 fee) or take and pass (75%) an online fundamental course (\$99 fee) to enroll in MUS 144. Students must take a placement exam to waive any of the following courses. Concurrent enrollment of the following is required: (MUS 144, 144A, 152A), (MUS 145, 145A, 153A) and (MUS 146, 146A, 154A). A grade of C or better is required in both the written and aural components to continue in the theory sequence.

MUS 144 - Theory 1	3
MUS 144A - Aural Skills 1	1
MUS 145 - Theory 2	3
MUS 145A - Aural Skills 2	1
MUS 146 - Theory 3	3
MUS 146A - Aural Skills 3	1
MUS 244 - Theory 4	3
MUS 245 - Theory 5	3
MUS 246 - Theory 6	3

Class Piano

A waiver of this requirement can be obtained by demonstrating sufficient keyboard skills to designated piano faculty members.

MUS 152A - Class Piano I	1
MUS 153A - Class Piano II	1
MUS 154A - Class Piano III	1

Ensembles

Large Ensembles (14-16)

Only the following are designated as large ensembles: MUS 267-467 (Choir), MUS 268-468 (Chamber Choir), MUS 266-466 (Wind Ensemble), MUS 277-477 (Orchestra), MUS 287-487 (Marching and Concert Band-fall quarter only) and MUS 288-488 (Symphonic Band). Chamber Ensembles (4-6)

Applied Music

Individual Instruction	12
MUS 164, 264, and 364 (at least 2 credits of 364 are required)	
MUS 300 - Recital Performance	1
(Must be concurrently enrolled in 364)	

Upper-division Music Theory

MUS 340 - Form and Analysis	3
MUS 343 - Counterpoint I	3
MUS 422 - Orchestration	3

Conducting

MUS 341 - Conducting I	3
MUS 342 - Conducting II	3

Music History

MUS 359 - Survey of Music in Cross-cultural Perspectives	2
MUS 372 - Music History 1	3
MUS 373 - Music History 2	3
MUS 374 - Music History 3	3

Total Core Credits: 83

Additional Required Courses

Music Composition

MUS 120 - Composition I	3
MUS 220 - Composition II (2)	6
MUS 320 - Composition III (3)	6
MUS 420 - Composition IV (3)	9
(Full Composition Recital is required to complete MUS 420)	

Secondary Applied Area (Keyboard)

MUS 171A - Secondary Applied Area Piano (1)	3
(If piano is major applied area then select another area of study)	
MUS 255 - Keyboard Harmony and Improvisation	1

Additional Courses

MUS 347 - Electronic Music	2
MUS 423 - Advanced Orchestration	3
MUS 440 - Analytical Techniques II	3
MUS 485 - Choral Arranging	3
MUS 486 - Jazz Band Arranging	3
Music Electives	3

Total Credits: 128



Bachelor of Music - Performance

BM Performance Core Requirements

Music Theory

Students must pass an online fundamental exam with 75% (\$10 fee) or take and pass (75%) an online fundamental course (\$99 fee) to enroll in MUS144. Students must take a placement exam to waive any of the following courses. Concurrent enrollment of the following is required: (MUS 144, 144A, 152A), (MUS 145, 145A, 153A), and (MUS 146, 146A, 154A). A grade of C or better is required in both the written and aural components to continue in the theory sequence.

MUS 144 - Theory 1	3
MUS 144A - Aural Skills 1	1
MUS 145 - Theory 2	3
MUS 145A - Aural Skills 2	1
MUS 146 - Theory 3	3
MUS 146A - Aural Skills 3	1
MUS 244 - Theory 4	3
MUS 245 - Theory 5	3
MUS 246 - Theory 6	3

Class Piano

A waiver of this requirement can be obtained by demonstrating sufficient keyboard skills to designated piano faculty members.

MUS 152A - Class Piano I	1
MUS 153A - Class Piano II	1
MUS 154A - Class Piano III	1

Applied Music

Individual Instruction (29 credits)

MUS 164 - Major Applied Area	6
MUS 264 - Major Applied Area	6
MUS 300 - Recital Performance	1
(Must be concurrently enrolled in 364)	
MUS 364 - Major Applied Area	6
MUS 300 - Recital Performance	1
(Must be concurrently enrolled in 364)	
MUS 464 - Major Applied Area	9

Upper-division Music Theory

MUS 340 - Form and Analysis	3
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Conducting

MUS 341 - Conducting I	3
MUS 342 - Conducting II	3

Music History

MUS 359 - Survey of Music in Cross-cultural Perspectives	2
MUS 372 - Music History 1	3
MUS 373 - Music History 2	3
MUS 374 - Music History 3	3

Total Core Credits: 73



Bachelor of Music - Vocal Performance

Student advancement through performance levels (164-464) is determined by jury examination. Prior to completion of the bachelor's degree, vocal performance majors must:

1. Demonstrate the ability to translate musical texts in French and German
2. Demonstrate competency in French or German equal to the successful completion of French 153 or German 153.

BM Performance Core Requirements 73

Additional Required Courses

Ensembles 30

Large Ensemble (20-24)

Only the following are designated as large ensembles: MUS 267-467 (choir), MUS 268-468 (chamber choir), MUS 266-466 (wind ensemble), MUS 277-477 (orchestra), MUS 287-487 (marching and concert band-fall quarter only), and MUS 288-488 (symphonic band). Chamber Ensemble (6-10)

Additional Courses

MUS 240 - Diction for Singers 1	2
MUS 241 - Diction for Singers 2	2
MUS 242 - Diction for Singers 3	2
MUS 425B - Pedagogy, Vocal	3
MUS 426B - Literature, Vocal	3
MUS 462 - Opera Production	1-3
Music Electives	0-2

Total Credits: 118

Bachelor of Music Keyboard Performance Major

Student advancement through performance levels (164-464) is determined by jury examination

BM Performance Core Requirements 73

Additional Required Courses

Ensembles 21

Large Ensembles (6-12)

Only the following are designated as large ensembles: MUS 266-466 (wind ensemble), MUS 268-468 (chamber choir), MUS 277-477 (orchestra), MUS 287-487 (marching and concert band-fall quarter only), and MUS 288-488 (symphonic band).

Note: All ensemble courses have 200-level and 400-level numbers. The 200-level numbers are freshmen and sophomores, the 400-level numbers are used by juniors and seniors.

Chamber Ensembles (9-15)

Upper-division Music Theory

MUS 343 - Counterpoint I	3
MUS 422 - Orchestration	3

Additional Courses

MUS 292 - Accompanying Practicum	4
MUS 425A - Pedagogy (Studio Piano)	3
MUS 426A - Literature (Studio Piano)	3
MUS 492 - Accompanying Practicum	4
Music Electives	7

Total Credits: 118

Bachelor of Music - Percussion/Wind/String Performance

Student advancement through performance levels (164-464) is determined by jury examination.

BM Performance Core Requirements 73

Additional Required Courses

Ensembles 30

Large Ensemble (20-24)

Only the following are designated as large ensembles: MUS 267-467 (choir), MUS 268-468 (chamber choir), MUS 266-466 (wind ensemble), MUS 277-477 (orchestra), MUS 287-487 (marching and concert band-fall quarter only), and MUS 288-488 (symphonic band).

Chamber Ensemble (6-10)

Upper-division Music Theory

MUS 422 - Orchestration	3
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Additional Courses

MUS 425 C, D, E, or G* - Pedagogy (Studio)	3
MUS 426 C, D, E, or G* - Literature (Studio)	3

*In appropriate performance area:

C=string, D=woodwinds, E=brass, G=percussion.

Music Electives	6
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Total Credits: 118

Bachelor of Music - Music Education with Specializations

All students majoring in music education will be reviewed and counseled by the Music Education Committee during each year of full-time enrollment. The purpose of these reviews is to assist the student in developing all the skills necessary to be an effective music educator. One year before student teaching, the student's accomplishments are reviewed by the entire music faculty. In order to receive an endorsement to student teach, the student must receive a satisfactory evaluation in all areas of music study. All music education majors must pass the required piano proficiency examination prior to endorsement for student teaching. Students taking this major must apply for admission into the Teacher Preparation Program with the education foundations and curriculum department and are required to complete the Professional Education Program requirements offered through the education foundations and curriculum department.

BM Music Education Core Requirements

Music Theory

Students must pass an online fundamental exam with 75% (\$10 fee) or take and pass (75%) an online fundamental course (\$99 fee) to enroll in MUS144. Students must take a placement exam to waive any of the following courses. Concurrent enrollment of the following is required: (MUS 144, 144A, 152A), (MUS 145, 145A, 153A), and (MUS 146, 146A,

154A). A grade of C or better is required in both the written and aural components to continue in the theory sequence.

MUS 144 - Theory 1	3
MUS 144A - Aural Skills 1	1
MUS 145 - Theory 2	3
MUS 145A - Aural Skills 2	1
MUS 146 - Theory 3	3
MUS 146A - Aural Skills 3	1
MUS 244 - Theory 4	3
MUS 245 - Theory 5	3
MUS 246 - Theory 6	3

Class Piano

A waiver of this requirement can be obtained by demonstrating sufficient keyboard skills to designated piano faculty members.

MUS 152A - Class Piano I	1
MUS 153A - Class Piano II	1
MUS 154A - Class Piano III	1

Ensembles

Only the following are designated as large ensembles: MUS 267-467 (Choir), MUS 268-468 (Chamber Choir), MUS 266-466 (Wind Ensemble), MUS 277-477 (Orchestra), MUS 287-487 (marching and concert band-fall quarter only), and MUS 288-488 (Symphonic Band).

Applied Music

Individual Instruction	11
MUS 164, 264, and 364 (at least 2 credits of 364 are required)	
MUS 300 - Recital Performance	1
(Must be concurrently enrolled in 364)	

Upper-division Music Theory

MUS 422 - Orchestration	3
OR Choral Music Specialization may take MUS 340 - Form and Analysis (3)	

Conducting

MUS 341 - Conducting I	3
MUS 342 - Conducting II	3

Music History

MUS 359 - Survey of Music in Cross-cultural Perspectives	2
MUS 372 - Music History 1	3
MUS 373 - Music History 2	3
MUS 374 - Music History 3	3

Total Core Credits: 78

Bachelor of Music - Music Education - Broad Area Specialization

This major satisfies the endorsements for music-general, music-instrumental, and music-choral, K-12. To qualify for student teaching, the following courses must be completed: MUS 325, MUS 329, MUS 341, and MUS 342.

BM Music Education Core

Requirements	78
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Additional Required Courses

MUS 154B - Class Instruction, Voice I	1
MUS 171 - Secondary Applied Area	1
(Must be voice for non-voice primary applied area or instrumental for voice primary applied area)	

MUS 253C - Class Instrumental Methods Strings I	1
MUS 253D - Class Instrumental Methods Woodwinds I	1
MUS 253E - Class Instrumental Methods Brass I	1
MUS 253G - Class Instrumental Methods Percussion I	1
MUS 254C - Class Instrumental Methods Strings II	1
MUS 254D - Class Instrumental Methods Woodwinds II	1
MUS 254E - Class Instrumental Methods Brass II	1
MUS 323 - Choral Music Education	3
MUS 325 - Instrumental Music Education	3
MUS 329 - General Music Methods	3
Music Electives	1

Total Credits: 97

Bachelor of Music - Music Education - Instrumental Music Specialization

This major satisfies the endorsements for Music-General and Music-Instrumental, K-12. To qualify for student teaching, the following courses must be completed: MUS 325, MUS 329, MU 341, and MUS 342.

BM Music Education Core

Requirements	78
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Additional Required Courses

MUS 154B - Class Instruction, Voice I	1
MUS 253C - Class Instrumental Methods Strings I	1
MUS 253D - Class Instrumental Methods Woodwinds I	1
MUS 253E - Class Instrumental Methods Brass I	1
MUS 253G - Class Instrumental Methods Percussion I	1
MUS 254C - Class Instrumental Methods Strings II	1
MUS 254D - Class Instrumental Methods Woodwinds II	1
MUS 254E - Class Instrumental Methods Brass II	1
MUS 325 - Instrumental Music Education	3
MUS 329 - General Music Methods	3

Total Credits: 92

Bachelor of Music - Music Education - Choral Music Specialization

This major satisfies the endorsements for Music-General and Music-Instrumental, K-12. To qualify for student teaching, the following courses must be completed: MUS 325, MUS 329, MU 341, and MUS 342.

BM Music Education Core

Requirements	78
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Additional Required Courses

MUS 240 - Diction for Singers 1	2
MUS 241 - Diction for Singers 2	2
OR MUS 242 - Diction for Singers 3 (2)	
MUS 323 - Choral Music Education	3
MUS 329 - General Music Methods	3
MUS 425B - Pedagogy, Vocal	3

Total Credits: 91

Bachelor of Arts - Music

(NOTE: Students seeking a BA degree must complete one year college/university study or two years high school study of a single foreign language.)

BA Music Core Requirements

Music Theory

Students must pass an online fundamental exam with 75% (\$10 fee) or take and pass (75%) an online fundamental course (\$99 fee) to enroll in MUS144. Students must take a placement exam to waive any of the following courses. Concurrent enrollment of the following is required: (MUS 144, 144A, 152A), (MUS 145, 145A, 153A), and (MUS 146, 146A, 154A). A grade of C or better is required in both the written and aural components to continue in the theory sequence.

MUS 144 - Theory 1	3
MUS 144A - Aural Skills 1	1
MUS 145 - Theory 2	3
MUS 145A - Aural Skills 2	1
MUS 146 - Theory 3	3
MUS 146A - Aural Skills 3	1
MUS 244 - Theory 4	3
MUS 245 - Theory 5	3
MUS 246 - Theory 6	3

Class Piano

A waiver of this requirement can be obtained by demonstrating sufficient keyboard skills to designated piano faculty members.

MUS 152A - Class Piano I	1
MUS 153A - Class Piano II	1
MUS 154A - Class Piano III	1

Music History

MUS 359 - Survey of Music in Cross-cultural Perspectives	2
MUS 372 - Music History 1	3
MUS 373 - Music History 2	3
MUS 374 - Music History 3	3

Total Core Credits: 35

Additional Required Courses

Ensembles

Large Ensemble (minimum)	12
Only the following are designated as large ensembles: MUS 267-467 (choir), MUS 268-468 (chamber choir), MUS 266-466 (wind ensemble), MUS 277-477 (orchestra), MUS 287-487 (marching and concert band-fall quarter only), and MUS 288-488 (symphonic band).	

Applied Music

Individual Instruction	12
MUS 164, 264, and 364 (1-2 credits)	
(Note: at least two credits of 364 on primary instrument or at least two credits of 264 on primary instrument and additional 164 credits on a secondary instrument)	

Upper-division Music Theory

MUS 340 - Form and Analysis	3
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Conducting

MUS 341 - Conducting I 3

Upper-division Music TheoryMUS 379, 382, 384, 385, and 386
(choose one) 3**Additional Courses**

MUS 495 - Senior Project 2

Total Credits: 70**Music Jazz Specialization****BA Music Core Requirements** 35**Required Courses****Ensembles**

Large Ensemble (minimum) 6

Only the following are designated as large ensembles: MUS 267-467 (choir), MUS 268-468 (chamber choir) MUS 266-466 (wind ensemble), MUS 277-477 (orchestra), MUS 287-487 (marching and concert band-fall quarter only), and MUS 288-488 (symphonic band).

Jazz Ensembles

Choose from 6

MUS 210/410 (vocal jazz), MUS 232/432 (jazz band).

Jazz Combos 6

MUS 218/418.

Applied Music

Individual Instruction 12

MUS 164 and 264 (1-2 credits)

MUS 366

(At least 3 credits of 264 and 6 credits of 366 are required)

Additional Courses

MUS 255 - Keyboard Harmony and

Improvisation. 1

MUS 353 - Jazz Improvisation I 1

MUS 354 - Jazz Improvisation II 1

MUS 355 - Jazz Improvisation III 1

MUS 356 - Jazz Styles 3

MUS 357 - Jazz Composition and

Arranging 3

MUS 485 - Choral Arranging. 3

OR

MUS 486 - Jazz Band Arranging (3)

MUS 495 - Senior Project 2

Total Credits: 80**Music Minor****Required Courses****Ensembles**

Large ensemble or chamber ensemble. 6

Applied Music

Individual Instruction 6

MUS 164 or 264

Class Piano

A waiver of this requirement can be obtained by demonstrating sufficient keyboard skills to designated piano faculty members.

MUS 152A - Class Piano I 1

MUS 153A - Class Piano II 1

MUS 154A - Class Piano III 1

Music Theory

Students must pass an online fundamental exam with 75% (\$10 fee) or take and pass (75%) an online fundamental course (\$99 fee) to enroll in MUS144. Students must take a placement exam to waive any of the following courses. Concurrent enrollment of the following is required: (MUS 144, 144A, 152A), (MUS 145, 145A, 153A), and (MUS 146, 146A, 154A). A grade of C or better is required in both the written and aural components to continue in the theory sequence.

MUS 144 - Theory 1 3

MUS 144A - Aural Skills 1 1

MUS 145 - Theory 2 3

MUS 145A - Aural Skills 2 1

MUS 146 - Theory 3 3

MUS 146A - Aural Skills 3 1

Additional Required Courses

MUS 359 - Survey of Music in Cross-cultural Perspectives (2) 2-3

OR

MUS 379 - Philosophy of Music (3)

Music Electives 3

Total Credits: 33-34**Non-profit Organization****Administration Minor**

The minor in non-profit organization administration is an interdisciplinary minor designed to provide an understanding of the organization, financing, and management issues in non-profit organizations. It is designed to complement majors in artistic, advocacy, and educational endeavors. The minor provides practical, hands-on skills as well as discussion of the issues facing non-profit organizations.

Required Courses

ACCT 301 - Financial Accounting Analysis . 5

COM 312 - Introduction to Non-profit

Leadership 3

COM 427 - Grant Writing/Fund-raising 3

COM 470 - Applied Public Relations (5) ... 4-5

OR

COM 475 - Public Relations and Advertising Management (4)

Choose one of the following: 5

ANTH 490 - Cooperative Education (Internship) (5)

ART 490 - Cooperative Education (Internship) (5)

COM 490 - Cooperative Education (Internship) (5)

MUS 490 - Cooperative Education (Internship) (5)

TH 490 - Cooperative Education (Internship) (5)

Areas of Interest

Choose any of the following for a total of at least 9 credits. 9

ANTH 360 - Introduction to Museum Studies (4)

ANTH 361 - Museum Exhibit Design (4)

COM 370 - Writing for Public

Relations (4)

COM 487 - Public Relations Professional Seminar (3)

MUS 482 - Music Business (3)

TH 350 - Theatre Management (3)

TH 351 - Theatre Management (3)

TH 360 - Stage Management (3)

Total Credits: 29-30**Non-profit Organization Administration Certificate**

The certificate in non-profit organization administration is an interdisciplinary approach designed to provide an understanding of the organization, financing, and management issues in non-profit organizations. It is designed to complement majors in artistic, advocacy, and educational endeavors. The courses provide practical, hands-on skills as well as discussion of the issues facing non-profit organizations.

Required Courses

ACCT 301 - Financial Accounting Analysis . 5

COM 312 - Introduction to Non-profit

Leadership 3

COM 427 - Grant Writing/Fund-raising 3

COM 470 - Applied Public Relations (5) ... 4-5

OR

COM 475 - Public Relations and

Advertising Management (4)

Choose one of the following: 5

ANTH 490 - Cooperative Education

(Internship) (5)

ART 490 - Cooperative Education

(Internship) (5)

COM 490 - Cooperative Education

(Internship) (5)

MUS 490 - Cooperative Education

(Internship) (5)

TH 490 - Cooperative Education

(Internship) (5)

Total Credits: 20-21**Music Courses**

Performance activities are designated by the following code:

A. Piano

B. Voice

C. Strings

D. Woodwinds

E. Brass

F. Organ

G. Percussion

H. Guitar

I. Recorder

K. Harpsichord

L. Mixed

MUS 101. History of Jazz (5). America's only indigenous art form, late 1800s to present. Emphasis on artists and cultural/societal forces shaping music's evolution. Extensive listening, reading; required attendance of performances.

MUS 102. Introduction to Music (5).

Fundamental musical concepts (melody, harmony, rhythm, form, etc.) through illustrations of the instrumental and vocal

music of major composers from the earliest period through the present day.

MUS 104. Introduction to Musical Studies

(3). Attitudes and concepts relevant to the music profession. Listening repertoire and reference materials. Designed for entering music majors.

MUS 120. Composition 1

(3). Introduction to composition addressing such topics as phrase structure, melodic development, modulations, textures, and transitions. Small compositional projects emphasizing certain stylistic traits for piano and other genres. May be repeated up to 3 credits. Prerequisites: MUS 145 and MUS 145A with a C or better.

MUS 143. Introduction to Music Theory

(3). Introduction of fundamental music theory: scales, keys, meter, and rhythm, triads, ear-training, and keyboard fundamentals. Course is designed for non-majors seeking basic musical skills, and for music majors with limited theoretical backgrounds. Does not count toward a music degree.

MUS 144. Theory 1

(3). Basic theoretical concepts dealing with fundamental elements of common-practice period melody, harmony, and rhythm. This course is the first in the six-course harmony sequence. Courses must be taken in sequence. Prerequisite: online fundamental exam with 75 percent or better, or successful completion of the online fundamental course. Corequisite: MUS 144A and MUS 152A.

MUS 144A. Aural Skills 1

(1). Basic fundamental concepts of common-practice period melody, harmony, and rhythm through ear training, sight-singing, dictation, rhythm, and basic keyboard applications. This course is the first in the three quarter, first year aural skills sequence. Courses must be taken in sequence. Prerequisite: online fundamental exam with 75 percent or better, or successful completion of the online fundamental course. Corequisite: MUS 144 and MUS 152A.

MUS 145. Theory 2

(3). Basic theoretical concepts dealing with fundamental elements of common-practice period melody, harmony, rhythm, and voice leading as demonstrated through analytical and compositional perspectives. This course is the second in the six-course harmony sequence. Courses must be taken in sequence. Prerequisite: MUS 144 with a C or better. Corequisite: MUS 154A or demonstrate equivalent proficiency.

MUS 145A. Aural Skills 2

(1). Basic fundamental concepts of common-practice period melody, harmony, and rhythm through ear training, sight-singing, dictation, rhythm, and basic keyboard applications. This course is the second in the three quarter, first year aural skills sequence. Courses must be taken in sequence. Prerequisites: MUS 144 and MUS 144A with grades of C or better. Corequisite: MUS 145 and MUS 153A.

MUS 146. Theory 3 (3). Basic theoretical concepts dealing with fundamental elements of common-practice period melody, harmony, rhythm, and voice leading as demonstrated through analytical and compositional perspectives. This course is the third in the six-course harmony sequence. Courses must be taken in sequence. Prerequisites: MUS 145 and MUS 145A with grades of C or better. Corequisite: MUS 146A and MUS 154A.

MUS 146A. Aural Skills 3 (1). Basic fundamental concepts of common-practice period melody, harmony, and rhythm through ear training, sight-singing, dictation, rhythm, and basic keyboard applications. This course is the third in the three quarter, first year aural skills sequence. Courses must be taken in sequence. Prerequisites: MUS 145 and MUS 145A with grades of C or better. Corequisite: MUS 146 and MUS 154A.

MUS 152A. Class Piano I (1). Group instruction providing beginning skills to prepare for the piano proficiency requirement and to reinforce music theory concepts. Corequisite: MUS 144 and MUS 144A.

MUS 153A. Class Piano II (1). Group instruction providing beginning/intermediate skills to prepare for the piano proficiency requirement and to reinforce music theory concepts. Prerequisite: MUS 152A. Corequisites: MUS 145 and MUS 145A.

MUS 154. Class Instruction (1). May be repeated for credit. Prerequisite: each course prerequisite to the next numeral (A.) Piano I, II, III; (B.) Voice I, II; (H.) Guitar I, II.

MUS 154A. Class Piano III (1). Group instruction providing intermediate skills to prepare for the piano proficiency requirement and to reinforce music theory concepts. May be repeated up to 3 credits. Prerequisite: MUS 153A. Corequisites: MUS 146 and MUS 146A.

MUS 154B. Class Instruction, Voice I (1). May be repeated for credit. Prerequisite: each course prerequisite to the next numeral (A.) Piano I, II, III; (B.) Voice I, II; (H.) Guitar I, II.

MUS 164. Major Applied Area (Individual Instruction) (1-2). Instruction available in performance areas A-H and K. May be repeated for credit. By permission.

MUS 171. Secondary Applied Area (Individual Instruction) (1). Private study on instruments secondary to a student's major performance area. Intended particularly for beginning students who wish to develop additional skills on an instrument or in voice to enrich their total music background. Instruction available in performance areas A-I and K. One credit any quarter, may be repeated. May be repeated for credit.

MUS 171A. Secondary Applied Area Piano (1). Private study on instruments secondary to a student's major performance area. Intended particularly for beginning

students who wish to develop additional skills on an instrument or in voice to enrich their total music background. One credit any quarter, may be repeated. May be repeated for credit. By permission.

MUS 198. Special Topics (1-6).

MUS 210. Vocal Jazz Choir (1). Must attend all scheduled rehearsals and performances. An ensemble specializing in performance of repertoire from jazz choir tradition established in the Northwest and beyond. Limited to SATB singers and rhythm-section instruments. May be repeated for credit. Prerequisite: freshmen or sophomore standing.

MUS 211. Women's Choir (1). Two hours of rehearsal per week plus all scheduled rehearsals and performances. May be repeated for credit. Prerequisite: freshmen or sophomore standing.

MUS 213. Flute Choir (1). Previous experience in flute performance and permission of instructor. Two hours of rehearsal per week plus all scheduled rehearsals and performances. May be repeated for credit. Prerequisite: freshmen or sophomore standing.

MUS 214. Brass Choir (1). Two hours of rehearsal per week plus all scheduled rehearsals and performances. May be repeated for credit. By permission. Prerequisite: freshmen or sophomore standing.

MUS 215. Chamber Orchestra (1). Two hours of rehearsal per week plus all scheduled rehearsals and performances. May be repeated for credit. By permission. Prerequisite: freshmen or sophomore standing.

MUS 217. Chamber Music Ensemble (1). One hour coaching plus two hours of rehearsal per week plus all scheduled rehearsals and performances. Instruction available in performance areas A, C-I and L. By permission.

MUS 218. Jazz Combo (1). Performance in jazz combos in various configurations. May be repeated for credit. Prerequisite: freshmen or sophomore standing.

MUS 220. Composition 2 (2). Intermediate study in composition. May be repeated up to 6 credits. Prerequisite: 3 credits of MUS 120.

MUS 225. Foundations of Music Education (3). Provides basis for combining musical, teaching, and methodological knowledge to create effective learning experiences as an instructional leader. Prerequisites: MUS 146 with a grade of C or better.

MUS 228. Men's Choir (1). Two hours of rehearsal per week plus all scheduled rehearsals and performances. May be repeated for credit. Prerequisite: freshmen or sophomore standing.

MUS 229. Percussion Ensemble (1). May be repeated for credit. Two hours of rehearsal per week plus all scheduled rehearsals and performances. May be repeated for credit. By permission. Prerequisite: freshmen or sophomore standing.

MUS 232. Big Band (1). Must attend all scheduled rehearsals and performances. MUS 432 for juniors and seniors. May be repeated for credit. By permission. Prerequisite: freshmen or sophomore standing.

MUS 235. Laboratory Choir (1). Two hours of rehearsal per week plus all scheduled rehearsals and performances. Open to all students to participate as singers. May be repeated for credit. By permission.

MUS 240. Diction in Singers I (Intro to IPA, Italian, Latin, English) (2). A fundamental course to teach the singer and choral director the International Phonetic Alphabet symbols, the correct execution of Italian, Latin, and English sounds, and the basic pronunciation rules of the three languages.

MUS 241. Diction for Singers 2 (Advanced IPA and German) (2). A course designed to teach the singer and choral director the International Phonetic Alphabet symbols as specifically applied to the German languages, the correct execution of German sounds, and the basic pronunciation rules of German. Prerequisite: MUS 240.

MUS 242. Diction for Singers 3 (Advanced IPA and French) (2). A course designed to teach the singer and choral director the International Phonetic Alphabet symbols as specifically applied to the French language, the correct execution of French sounds and the basic pronunciation rules of French. Prerequisite: MUS 240.

MUS 244. Theory 4 (3). Intermediate theoretical concepts dealing with fundamental elements of common-practice period melody, harmony, rhythm, and voice leading as demonstrated through analytical and compositional perspectives. This course integrates written topics and ear training, singing, dictation, rhythm, and practical keyboard applications. This is the fourth in the six-course harmony sequence. Courses must be taken in sequence. Prerequisites: MUS 146 and MUS 146A with grades of C or better.

MUS 245. Theory 5 (3). Advanced theoretical concepts dealing with fundamental elements of common-practice period melody, harmony, rhythm, and voice leading as demonstrated through analytical and compositional perspectives. This course integrates written topics and ear training, singing, dictation, rhythm, and practical keyboard applications. This is the fifth in the six-course harmony sequence. Courses must be taken in sequence. Prerequisite: MUS 244 with a C or better.

MUS 246. Theory 6 (3). Advanced theoretical concepts dealing with fundamental elements of common-practice period melody, harmony, rhythm, and voice leading as demonstrated through analytical and compositional perspectives. This course integrates written topics and ear training, singing, dictation, rhythm, and practical keyboard applications. This is the sixth in the six-course harmony sequence. Courses must be taken in sequence. Prerequisite: MUS 245 with a C or better.

MUS 252D. Class Instrumental Methods:

Double Reeds (1). Techniques and methods in applied instruction in music education. May be repeated for credit.

MUS 253C. Class Instrumental Methods

Strings I (1). Lower strings (cello and bass). Techniques and methods in applied instruction for music education. May be repeated for credit.

MUS 253D. Class Instrumental Methods

Woodwinds I (1). Lower woodwinds (single reeds). Techniques and methods in applied instruction for music education. May be repeated for credit.

MUS 253E. Class Instrumental Methods

Brass I (1). Lower brass (trombone and tuba). Techniques and methods in applied instruction for music education. May be repeated for credit.

MUS 253G. Class Instrumental Methods

Percussion I (1). Techniques and methods in applied instruction for music education. May be repeated for credit.

MUS 254C. Class Instrumental Methods

Strings II (1). Upper strings (violin and viola). Techniques and methods in applied instruction for music education. May be repeated for credit.

MUS 254D. Class Instrumental Methods

Woodwinds II (1). Upper woodwinds (flute). Techniques and methods in applied instruction for music education. May be repeated for credit.

MUS 254E. Class Instrumental Methods

Brass II (1). Upper brass (horn and trumpet). Techniques and methods in applied instruction for music education. May be repeated for credit.

MUS 255. Keyboard Harmony and

Improvisation (1). For instrumental, choral, and studio teachers providing practical/working knowledge of keyboard harmony, chord voicing, bass line construction, and improvisation in jazz and pop genres. Prerequisites: MUS 146 and MUS 154A.

MUS 261. Opera Workshop (1). A class leading to the performance of scenes and single acts from opera. May be repeated for credit. By permission. Prerequisite: freshmen or sophomore standing.

MUS 262. Opera Production (1-3). A class leading to performance of a complete opera. May be repeated up to 9 credits. Prerequisite: freshman or sophomore standing.

MUS 264. Major Applied Area (Individual Instruction) (1-2). Instruction available in performance areas A-H and K. May be repeated for credit. By permission. Prerequisite: MUS 164 (A-H, and K) in appropriated applied area.

MUS 266. Wind Ensemble (1-2). Open to students with demonstrated proficiency on band instruments by audition or permission of the instructor. Five hours of rehearsal per week plus all scheduled rehearsals and performances. One credit if offered one term only during summer session. May be repeated for credit. Prerequisite: freshmen or sophomore standing.

MUS 267. Choir (1-2). Open to all students by audition. Five hours rehearsal per week plus all scheduled rehearsals and performances. One credit if offered one term only during summer session. May be repeated for credit. Prerequisite: freshmen or sophomore standing.

MUS 268. Chamber Choir (2). Open to all students by audition. Three hours rehearsal per week plus all scheduled rehearsals and performances. May be repeated for credit. Prerequisite: freshmen or sophomore standing.

MUS 271. Secondary Applied Area

(Individual Instruction) (1). Private study on instruments secondary to a student's major performance area. Intended particularly for intermediate students who wish to develop additional skills on an instrument or in voice to enrich their total music background. Instruction available. May be repeated 1 credit any quarter.

MUS 277. Orchestra (1-2). Open to all students proficient on orchestral instruments by permission of director. Five hours of rehearsal per week plus all scheduled rehearsals and performances. One credit if offered one term only during summer session. May be repeated for credit. Prerequisite: freshmen or sophomore standing.

MUS 287. Marching and Concert Band (2). Fall quarter only. Five hours of rehearsal per week plus all scheduled rehearsals and performances. This band functions as a marching band and is organized into a concert band at completion of the football season. May be repeated for credit. Prerequisite: freshmen or sophomore standing.

MUS 288. Symphonic Band (2). Winter and spring quarters only. Five hours of rehearsal per week plus scheduled rehearsals and performances. During winter and spring quarters the symphonic band will present several formal concert programs. May be repeated for credit. Prerequisite: freshmen or sophomore standing.

MUS 292. Accompanying Practicum (1-3). By assignment of instructor. Minimum three hours of rehearsal weekly per credit plus performances. May be repeated for credit. Prerequisite: freshmen or sophomore standing.

MUS 296. Individual Study (1-6).

MUS 298. Special Topics (1-6).

MUS 299. Seminar (1-5).

MUS 300. Recital Performance (1). Recital performance required for completion of degrees requiring 364-level applied study. Grade will either be S or U. Prerequisite: at least 1 credit of MUS 364 (any letter). Corequisite: MUS 364.

MUS 304. Introduction to Musical

Studies for Transfer Students (2). 1. An introduction to the techniques of research in music; 2. A brief survey of concepts in world music.

MUS 320. Composition 3 (2). Advanced study in composition. May be repeated up to 6 credits. Prerequisite: MUS 220.

- MUS 321. Administration and Assessment in Music Instruction** (3). Prepares students to advocate for, organize, and administer comprehensive music programs in schools; deliver and manage classroom music instruction; and assess student musical learning. Prerequisites: MUS 225 and MUS 264.
- MUS 323. Choral Music Education** (3). Philosophy, methods, and materials. Individual research and presentation of teaching unit in class. Prerequisite: MUS 341.
- MUS 325. Instrumental Music Education** (3). Philosophy and psychology of music education through methods and materials; observation of teachers in the rehearsal, individual research. Prerequisite: admission to the Teacher Preparation Program.
- MUS 326. Music in the Classroom** (3). For the general classroom teacher. (Not for music majors or minors.). Techniques used in helping children to develop musically through singing, rhythmic activities, creative activities, listening, and playing instruments. Prerequisite: admission to the Teacher Preparation Program.
- MUS 329. General Music Methods** (3). Materials, methods, and instructional techniques for general music, grades K-12. Prerequisite: MUS 146 and MUS 146A with grades of C or better.
- MUS 330. Literature and Materials for General Music Teaching** (2). Covers instructional materials and resources for teaching general music in individual and group settings. Prerequisite: MUS 329.
- MUS 331. Literature and Materials for Choral Music Teaching** (2). Covers instructional materials and resources for teaching choral/vocal music in individual and group settings. Prerequisites: MUS 323 and MUS 341.
- MUS 332. Literature and Materials for Instrumental Music Teaching** (2). Covers instructional materials and resources for teaching instrumental music in individual and group settings. Prerequisites: MUS 325 and MUS 341.
- MUS 340. Form and Analysis** (3). Analysis of the structure of tonal music from both a historical and theoretical perspective. Prerequisites: MUS 246 with a grade of C or better.
- MUS 341. Conducting I** (3). Fundamental principles of baton techniques, practical experience in conducting. Prerequisites: MUS 146.
- MUS 342. Conducting II** (3). A continuation of MUS 341 and conducting literature of junior-senior high school performing groups. Prerequisite: MUS 341.
- MUS 343. Counterpoint I** (3). Independent melodic line, harmonic background, motive structure, and two-point counterpoint as practiced by the composers of the 18th and 19th centuries. Written exercises and analysis. Prerequisite: MUS 244.
- MUS 344. Theory Review** (3). A complete review of traditional harmony from rudiments of music through chromatic harmony. Prerequisite: MUS 246
- MUS 346. Counterpoint II** (3). Three-voice counterpoint, imitation in three voices, the three-voice invention, and the trio sonata. Prerequisite: MUS 343.
- MUS 347. Electronic Music** (2). Study of contemporary technologies and techniques as used to compose music. May be repeated for credit. Prerequisite: MUS 246.
- MUS 348. Applications of Music Technology for the Professional** (3). A course exploring the applications of technology for the music educator, composer, and performer. Includes website design, software for teaching, notation, administration, public relations, recording technology, electronic instruments, and electronic composition. Prerequisites: MUS 146 with a grade of C or better and admission to a music major or minor.
- MUS 353. Jazz Improvisation I** (1). Beginning basic jazz improvisation techniques for upper-division wind, percussion, guitar, acoustic bass, and keyboard instruments. May be repeated for credit. Prerequisites: MUS 246 and MUS 255.
- MUS 354. Jazz Improvisation II** (1). Intermediate basic jazz improvisation techniques for upper-division wind, percussion, guitar, acoustic bass, and keyboard instruments. May be repeated for credit. Prerequisites: MUS 246, MUS 255, and MUS 353.
- MUS 355. Jazz Improvisation III** (1). Advanced basic jazz improvisational techniques for upper-division wind instruments, percussion, guitar, acoustic bass, and keyboard instruments. May be repeated up to 2 credits. Prerequisites: MUS 246, MUS 255, and MUS 353.
- MUS 356. Jazz Styles** (3). A survey of jazz history with regard to evolution of jazz styles. Course activities include analysis, transcription, guided listening, imitative composition, research, and essay writing. Prerequisite: MUS 355.
- MUS 357. Jazz Composition and Arranging** (3). Development of skills in songwriting, melody and chord progression, construction, and arranging in the jazz idiom through student projects and score analysis. Prerequisites: MUS 355 and MUS 356.
- MUS 359. Survey of Music in Cross-cultural Perspectives** (2). An introduction to ethnomusicology: the cultural context of music with emphasis on Africa, Asia, Native North and South America, Oceania. ANTH 359 and MUS 359 are equivalent courses; students may not receive credit for both.
- MUS 364. Major-applied Area (Individual Instruction)** (1-2). Instruction available in performance areas A-H and K. May be repeated for credit. Prerequisite: MUS 264 (A-H, and K) in appropriated applied area.
- MUS 366. Applied Jazz (Individual Instruction)** (1). Private study on instruments secondary to a student's major performance area. Intended particularly for advanced students who wish to develop additional skills on an instrument or in voice to enrich their total music background. Instruction available in performance areas A-E, G and H. May be repeated 1 credit any quarter. Prerequisites: at least two quarters at the MUS 264 level and admission to the BA music jazz specialization.
- MUS 370. Applied Area (Individual Instruction: Secondary or Major Supplementary)** (1). Private study in area secondary to major performance area, or supplemental instruction in major performance area. Intended for advanced students who wish to develop additional performance skills to enrich their total music background. May be repeated for credit. By permission.
- MUS 372. Music History 1** (3). Study of music history. The first in a three-quarter sequence. Prerequisites: MUS 146 with a C or better, and MUS 154A.
- MUS 373. Music History 2** (3). A study of music history. The second of a three-quarter sequence. Prerequisites: MUS 244 and MUS 372.
- MUS 374. Music History 3** (3). A study of music history. The third of a three-quarter sequence. Prerequisites: MUS 245 and MUS 373.
- MUS 379. Philosophy of Music** (3). Great music as a source of insights into human beings and the world. MUS 379 and PHIL 379 are equivalent courses; students may not receive credit for both.
- MUS 380. Music History Review** (3). A review of the material presented in the required undergraduate music history sequence. Specifically intended for graduate students. The final exam will be equivalent to the graduate music history diagnostic examination. May not be used to satisfy upper-division undergraduate or graduate degree requirements. Required for graduate students not passing Music History diagnostic test. Grade will either be S or U.
- MUS 382. Survey of Chamber Music** (3). Prerequisite: MUS 372.
- MUS 383. Survey of Symphonic Music** (3). Prerequisite: MUS 372.
- MUS 384. Survey of Choral Music** (3). Prerequisite: MUS 372.
- MUS 385. Survey of Opera** (3). Prerequisite: MUS 372.
- MUS 386. Survey of 20th century Music** (3). Prerequisite: MUS 372.
- MUS 398. Special Topics** (1-6).
- MUS 400. Recital Performance** (1). Recital performance required for the completion of degrees requiring MUS 464-level applied study. Grade will either be S or U. Prerequisite: 3 credits of any MUS 464. Corequisite: any MUS 464.
- MUS 410. Vocal Jazz Choir** (1). An ensemble specializing in performance of repertoire from jazz choir tradition established in the Northwest and beyond. Must attend all scheduled rehearsals and performances.

- For juniors and seniors. Limited to SATB singers and rhythm section instruments. May be repeated for credit. Prerequisite: junior standing or above.
- MUS 411. Women's Choir** (1). May be repeated for credit. Prerequisite: junior standing or above.
- MUS 413. Flute Choir** (1). Previous experience in flute performance and permission of instructor. Two hours of rehearsal per week plus all scheduled rehearsals and performances. May be repeated for credit. Prerequisite: junior standing or above.
- MUS 414. Brass Choir** (1). See MUS 214 for description. May be repeated for credit. Prerequisite: junior standing or above.
- MUS 415. Chamber Orchestra** (1). See MUS 215 for description. May be repeated for credit. Prerequisite: junior standing or above.
- MUS 417. Chamber Music Ensemble** (1). One hour coaching plus two hours rehearsal per week plus all scheduled rehearsals and performances. Instruction available in performance areas A, C-F, H and L. By permission.
- MUS 418. Jazz Combo** (1). Performance in jazz combos in various configurations. May be repeated for credit. Prerequisite: junior standing or above.
- MUS 420. Composition 4** (3). May be repeated up to 9 credits. Prerequisite: 6 credits of MUS 320.
- MUS 422. Orchestration** (3). Instrumentation. May be repeated for credit. Prerequisite: MUS 246 with a C or better and MUS 372.
- MUS 423. Advanced Orchestration** (3). Study of various scores and treatises. Individual projects. Prerequisite: MUS 422A.
- MUS 424. Jazz Music Education** (3). Course is designed to give music educators the tools and knowledge to direct a jazz program in a public school setting. Prerequisite: full admission to the Teacher Preparation Program.
- MUS 425. Pedagogy (Studio)** (3). Teaching methods and materials. Instruction available in performance areas A-E, G, and H. By permission.
- MUS 425A. Pedagogy (Studio Piano)** (3). Teaching methods and materials. By permission.
- MUS 425B. Pedagogy, Vocal** (3). Teaching methods and materials. By permission.
- MUS 425H. Pedagogy (Studio Guitar)** (3). Teaching methods and materials. By permission.
- MUS 426. Literature (Studio)** (3). Literature related to the specific applied area for teaching and performance purposes. Instruction available in performance areas A-E, and G. By permission.
- MUS 426A. Literature (Studio Piano)** (3). Literature related to the specific applied area for teaching and performance purposes. By permission.
- MUS 426H. Literature (Studio Guitar)** (3). Literature related to the specific applied area for teaching and performance purposes. By permission.
- MUS 428. Men's Choir** (1). May be repeated for credit. Prerequisite: junior standing or above.
- MUS 429. Percussion Ensemble** (1). See MUS 229 for description. May be repeated for credit. Prerequisite: junior standing or above.
- MUS 432. Big Band** (1). Must attend all scheduled rehearsals and performances. MUS 232 for freshmen and sophomores. May be repeated for credit. Prerequisite: junior standing or above.
- MUS 435. Laboratory Choir** (1). See MUS 235 for description. May be repeated for credit.
- MUS 440. Analytical Techniques II** (3). Emphasis on 20th century music, including contemporary extrapolations from Schenker's methods, pitch class, and parametric analysis techniques. Prerequisite: MUS 340.
- MUS 461. Opera Workshop** (1-2). A class leading to the performance of scenes or single acts from opera. May be repeated for credit. By permission. Prerequisite: junior standing or above.
- MUS 462. Opera Production** (1-3). A class leading to performance of a complete opera. MUS 462 and MUS 562 are equivalent courses; students not receive credit for both. May be repeated for credit. Prerequisite: junior standing for above.
- MUS 464. Major Applied Area (Individual Instruction)** (3). Instruction available in performance areas A-H and K. Additional fee's required. Lessons available in applied areas. May be repeated for credit. Prerequisite: MUS 364 A-E, G, H, and L.
- MUS 466. Wind Ensemble** (1-2). See MUS 266 for description. One credit if offered one term only during summer session. May be repeated for credit. By permission. Prerequisite: junior standing or above.
- MUS 467. Choir** (1-2). Open to all students by audition. Five hours rehearsal per week plus all scheduled rehearsals and performances. One credit if offered one term only during summer session. May be repeated for credit. Prerequisite: junior standing or above.
- MUS 468. Chamber Choir** (2). See MUS 268 for complete description. May be repeated for credit. Prerequisite: junior standing or above.
- MUS 477. Orchestra** (1-2). Open to all students proficient on orchestral instruments by permission of director. Five hours of rehearsal per week plus all scheduled rehearsals and performances. One credit if offered one term only during summer session. May be repeated for credit. Prerequisite: junior standing or above.
- MUS 480. Reed Making for Double Reed Instruments** (1).
- MUS 482. Music Business** (3). A survey and overview of the business of music including licensing, copyright, production, management, marketing and arts administration. Prerequisite: MUS 372.
- MUS 485. Choral Arranging** (3). Course will focus skills needed to write and arrange music junior and senior high school vocal ensembles.
- MUS 486. Jazz Band Arranging** (3). Orchestration/arranging techniques in the jazz band idiom, including writing for smaller jazz ensembles, specialized instrumentation, and the big band. Especially useful for music educators. Prerequisites: MUS 246 and MUS 255.
- MUS 487. Marching and Concert Band** (2). Fall quarter only. May be repeated for credit. Prerequisite: junior standing or above.
- MUS 488. Symphonic Band** (2). Winter and spring quarters only. See MUS 288 for description. May be repeated for credit. Prerequisite: junior standing or above.
- MUS 490. Cooperative Education** (1-12). An individualized, contracted field experience with business, industry, government, or social service agencies. This contractual arrangement involves a student learning plan, cooperating employer supervision, and faculty coordination. May be repeated for credit. Grade will either be S or U. By permission.
- MUS 491. Workshop or Clinic** (1-6).
- MUS 492. Accompanying Practicum** (1-3). By assignment of instructor. Minimum of three hours of rehearsal weekly per credit plus performances. May be repeated for credit. Prerequisite: junior standing or above.
- MUS 495. Senior Project** (2). Students are required, as a senior project, to present a recital, composition, or piece of research. May be repeated for credit.
- MUS 496. Individual Study** (1-6).
- MUS 498. Special Topics** (1-6).
- MUS 499. Seminar** (1-5).



NUTRITION, EXERCISE, AND HEALTH SCIENCES DEPARTMENT

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See website for how these programs may be used for educational and career purposes.

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Vincent M. Nethery, PhD

Professors

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Leonardo J. D'Acquisto, EdD, sport

physiology, kinesiology, human anatomy
David L. Gee, PhD, nutrition & metabolism, nutrition and chronic diseases, sports nutrition

Vincent M. Nethery, PhD, clinical physiology, sport physiology, environmental physiology, human anatomy

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Keith A. Monosky, PhD, MPM, EMT-P, emergency medical services, emergency services management, health policy

Charilaos Papadopoulos, PhD, clinical physiology, sport physiology, physical activity interventions

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Virginia Bennett, PhD, RD, cultural nutrition, developmental nutrition

Linda Cashman, MS, RD, dietetics

Kelly Pritchett, PhD, RD, sports nutrition, clinical nutrition, eating disorders

Robert Pritchett, PhD, sport physiology, environmental physiology

Lecturers

Susan Brunner, MS, AT-C, athletic training-sports medicine, exercise physiology, human anatomy

Bryan Contreras, MS, sport physiology, kinesiology, biomechanics

Abigail Larson, PhD, RD, clinical physiology, exercise physiology, clinical and sport nutrition

James Pierce, EMT-P, emergency medical services

Danielle Szabo, ND, human anatomy, human physiology, nutrition

Staff

Rhonda Busch-Gehlen, assistant to the chair
Lucinda Engel, instructional classroom support technician - food science

Edith Fowler, office manager

Lori Hauser, office assistant, EMS-Paramedicine

Department Information

The Department of Nutrition, Exercise, and Health Sciences prepares students in a variety of professions that focus on the physical and functional abilities of humans. Human functioning is the overriding theme of all curricula offerings. In addition to didactic aspects, many classes provide experiential learning through structured laboratories, practicums, and internships. All programs provide opportunities to interact with faculty and to participate in both undergraduate and graduate research.

NEHS offers the following undergraduate degrees:

Bachelor of Science: Clinical Physiology

Bachelor of Science: Exercise Science

Bachelor of Science: FSN-Dietetics

Specialization

Bachelor of Science: FSN-Nutrition

Science Specialization

Bachelor of Science: FSN-Foods and

Nutrition Specialization

Bachelor of Applied Science: Food Service Management

Bachelor of Science: Paramedics

NEHS offers the following supporting minors:

Exercise Science

Athletic Training

Nutrition

Food Service Management

NEHS offers the following certificate programs:

Paramedic

Emergency Medical Technician

Dietetic Internship (Accredited by the American Dietetic Association-Commission on Accreditation for Dietetic Education)

NEHS offers the following graduate degrees – (For details: See Graduate Studies and Research section:

Master of Science: Exercise Science

Master of Science: Nutrition

Admission Requirements

To be admitted to a major or minor, all students must:

- Meet with an advisor in the specific program of interest. Because of the variety of options and the pre-admission requirements of programs, it is advisable to meet with an advisor early to plan the program schedule and to facilitate timely graduation.

- Complete specific pre-admission requirements (see individual programs).
- Complete and file a major application with the department office, signed by the academic advisor and the program director. Application forms can be obtained from the advisor or the department office.
- Complete and file with the department office, a program of study that lists the required and elective courses necessary for program completion. Course of study forms can be obtained from the academic advisor.

Student Scholarly Activities:

The department is student oriented and all programs provide a wide range of laboratory and field experiences as part of specific degree requirements and degree options. Students who engage early in optional learning experiences gain a better understanding of their profession, are more competitive in the job market, and increase their chances for graduate school admission.

Student Organizations:

Exercise Science Club: All EXSC students are required to join the EXSC Club. This student-run organization meets regularly to discuss academic planning and career opportunities, performs service activities, and plans recreational outings.

Nutrition Science Club: The NSC provides opportunities for students to use their knowledge and skills in performing service activities, learn about career opportunities, discuss academic planning, and engage in recreational activities.

EMT Club:

The EMT Club is a student organization that is purposed to provide basic life support services to on-campus activities as a means of first-line-response. The EMT Club is comprised of current students that are certified emergency medical technicians. The EMT Club is supervised by a faculty member of the Paramedic Program and is provided the necessary emergency medical equipment and continuing education to provide essential emergency medical services.

Fees:

Additional fees are assessed for many of the department's laboratory and field experience courses. These fees are used to partially support materials purchased and transportation costs.

Graduation Requirements

- Satisfactory completion of all requirements of the university and of the specific degree program of study.
- Application for the bachelor's degree must be filed by the second Friday of the quarter preceding the quarter in which the degree is to be received. Instructions and deadlines are available through Registrar Services.

Bachelor of Science Clinical Physiology

Program Director

Timothy Burnham, PhD

Faculty

Susan Brunner, MS, AT-C
Timothy Burnham PhD
Bryan Contreras, MS
Leonardo D'Acquisto, EdD
David L. Gee, PhD
Abigail Larson, PhD, RD
Keith A. Monosky, PhD, MPM, EMT-P
Vincent Nethery, PhD
Charilaos Papadopoulos, PhD
Kelly Pritchett, PhD, RD
Robert Pritchett, PhD
Danielle Szabo, ND

The bachelor of science in clinical physiology prepares students to enter clinical areas of health and allied health care where exercise is an integral part of prophylactic and rehabilitative programs. Such areas include cardiopulmonary rehabilitation, specialized metabolic disorder clinics, athletic training/sports medicine, and as exercise physiology assistants to physical therapists. Many clinical jobs require a master's degree and/or additional certification. This degree also prepares students for eligibility to enter graduate school or specialized post-graduate certification programs in several areas including physical and occupational therapy, physical therapy assistant, physician assistant, athletic training, and master/doctoral level studies in integrated human physiology, and exercise science. Additional courses may be required to satisfy all prerequisites for admission eligibility to some graduate and professional programs.

Pre-admission Requirements ("C+" or better required for all pre-admission courses):

*BIOL 201 - Human Physiology 5
*CHEM 111/111LAB - Introduction to Chemistry (5) 5
OR



CHEM 181/181LAB - General Chemistry I (5)
EXSC 250 - Anatomical Kinesiology 5
*MATH 130 - Finite Mathematics or higher . 5
*NUTR 101 - Introduction to Human Nutrition 5

Pre-admission Total Credits: 25

*All pre-admission courses except EXSC 250 may satisfy general education requirements.

Required Courses

BIOL 355 - Human Anatomy and Physiology 5
BIOL 356 - Human Anatomy and Physiology 5
CHEM 112/112LAB - Introduction to Organic Chemistry (5) 5
OR
CHEM 182/182LAB - General Chemistry II (5)
AND
CHEM 113/113LAB - Introduction to Biochemistry (5) 5
OR
CHEM 183/183LAB - General Chemistry III (5)
AND
EXSC 348 - Prevention and Treatment of Athletic Injuries 4
EXSC 351 - Scientific Foundations 5
EXSC 446 - Sports Nutrition and Weight Control 3
EXSC 450 - Physiology of Exercise 5
EXSC 455 - Fitness Assessment and Exercise Prescription 5
EXSC 456 - Administration of Exercise Programs for Special Populations 4
EXSC 490 - Cooperative Education 12
EXSC 495B - Practicum: Clinical 2
PSY 362 - Introductory Statistics 5

Required Courses Total Credits: 65

Choose from the following electives:

BIOL 322 - Introductory to Microbiology(5)
BIOL 323 - Microbiology (5)
EMS 443 - Myocardial Disease and Basic Electrocardiography (3)
EXSC 438 - Therapeutic Exercise (3)
EXSC 452 - Advanced Athletic Training(3)
EXSC 457 - Exercise Adherence Strategy (3)
NUTR 344 - Medical Nutrition Therapy I (3)
NUTR 433 - Macronutrients (3)
NUTR 443 - Metabolism and Micronutrients (5)
NUTR 444 - Medical Nutrition Therapy II (3)
PHYS 111/111LAB - Introductory Physics I (5)
PHYS 112/112LAB - Introductory Physics II (5)
PHYS 113/113LAB - Introductory Physics III (5)
PSY 449 - Abnormal Psychology (4)
PSY 478 - Physiological Psychology (4)

Total Elective Credits: 20

Total Credits: 110

Bachelor of Science Exercise Science

Program Director

Timothy Burnham, PhD

Faculty

Susan Brunner, MS, AT-C
Timothy Burnham PhD
Bryan Contreras, MS
Leonardo D'Acquisto, EdD
Abigail Larson, PhD, RD
Vincent Nethery, PhD
Charilaos Papadopoulos, PhD
Kelly Pritchett, PhD, RD
Robert Pritchett, PhD
Danielle Szabo, ND

The Exercise Science Program prepares student to enter career areas where exercise is an integral part of general health and human performance. Such areas include corporate health-wellness, private health-fitness clubs, diverse non-profit fitness-wellness agencies such as YMCA, and athletic performance including strength and conditioning.

Admission Requirements

Admission to the bachelor of science in exercise science is selective. For details on eligibility for admission, please see program components noted below, paying special attention to pre-admission requirements.

Students must be admitted to the exercise science major prior to enrolling in 300- and above- level EXSC classes and a "C" or better grade is required for all courses in major and minor programs.

Required Pre-admission Courses

EMS 245 - First Aid 3
EXSC 250 - Anatomical Kinesiology 5
EXSC 254 - Foundations of Fitness 3

Additional Required Courses

IT 101 - Computer Applications 3
NUTR 101 - Introduction to Human Nutrition 5
COM 345 - Business and Professional Speaking 4
HED 324 - Noninfectious Disease 4
EXSC 318 - Aerobic Fitness 3
EXSC 348 - Prevention and Treatment of Athletic Injuries 4
EXSC 351 - Scientific Foundations of Health and Fitness 5
EXSC 360 - Scientific Principles of Strength Training 4
EXSC 446 - Sports Nutrition and Weight Control 3
EXSC 450 - Physiology of Exercise 5
EXSC 455 - Fitness Assessment and Exercise Prescription 5
EXSC 456 - Administration of Programs for Special Populations 4
EXSC 457 - Exercise Adherence Strategies .. 3
EXSC 461 - Current Issues in Fitness and Exercise Science 2
EXSC 464 - Management of Fitness Facilities and Programs 4

EXSC 490 - Cooperative Education	10-12
EXSC 495A - Practicum: Fitness Centers/Clubs	2
OR	
EXSC 495B - Practicum: Clinical (2) OR	
EXSC 495C - Practicum: Management (2)	
EXSC 495D - Practicum: Laboratory Assessment	2
Total Credits: 83-85	

Exercise Science Minor

This minor is designed primarily for those individuals who major in disciplines such as nutrition, biology, physical education, public health, and business. This minor may also be of interest for students in pre-professional programs including pre-medicine, pre-chiropractic, pre-occupational therapy, and pre-physical therapy. Courses in this minor may also be used to satisfy requirements in other major programs. The exercise minor courses are:

Required Courses

EXSC 250 - Anatomical Kinesiology	5
EXSC 254 - Foundations of Fitness	3
EXSC 351 - Scientific Foundations of Health and Fitness	5
EXSC 450 - Physiology of Exercise	5
EXSC 455 - Fitness Assessment and Exercise Prescription	5
Select from one of the following.	3-4
EXSC 360 - Scientific Principles of Strength Training (4)	
EXSC 456 - Administration of Programs for Special Populations (4)	
EXSC 457 - Exercise Adherence Strategies (4)	

Total Credits: 26-27

Athletic Training Minor

This minor provides students with exposure to the knowledge and skills needed to become an athletic trainer; however, it does not qualify students to sit for board certification. Students interested in becoming NATA certified should contact the National Athletic Trainer's Association for more information. This minor is designed primarily for those individuals who major in disciplines such as nutrition, biology, physical and health education, and public health. This minor may also be of interest for students in pre-professional programs including pre-medicine, pre-chiropractic, pre-occupational therapy, and pre-physical therapy. Courses in this minor may also be used to satisfy requirements in other major programs. The athletic training minor courses are:

Required Courses

HED 101 - Health Essentials	4
EMS 245 - First Aid	3
NUTR 101 - Introduction to Human Nutrition	5
EXSC 250 - Anatomical Kinesiology	5
EXSC 348 - Prevention and Treatment of Athletic Injuries	4

EXSC 351 - Scientific Foundations of Health and Fitness	5
EXSC 438 - Therapeutic Exercise	3
EXSC 450 - Physiology of Exercise	5
EXSC 452 - Advanced Athletic Training	3
Total Credits: 37	

Food Science and Nutrition

Program Director
David Gee, PhD

Faculty

Susan Adams, MS, RD
Virginia Bennett, PhD, RD
Ethan Bergman, PhD, RD
Linda Cashman, MS, RD
David Gee, PhD
Susan Hawk, PhD, RD
Kelly Pritchett, PhD, RD

Bachelor of Science Food Science and Nutrition Ma- jor with Specialization

The bachelor of science in food science and nutrition prepares students for employment or advanced study in one of several professions in the broad area of foods and nutrition. To complete degree requirements, students must complete the required core courses listed below. Students must also complete courses listed in their chosen specialization (foods and nutrition, dietetics, nutrition science).

Admission Requirements

Students wishing to attain full admission to the BS in food science and nutrition major must meet the following requirements:

- Successful completion of NUTR 101, Introduction to Human Nutrition, NUTR 240, Introduction to Foods and NUTR 240LAB, Introduction to Foods Laboratory with a grade of B (3.0) or better.
- Students must receive a grade of C (2.0) or better in all of the other major courses.

In addition to the requirements listed above, students wishing to enter any of the food science and nutrition specializations must successfully complete CHEM 111, Introduction to Chemistry, CHEM 111LAB, Chemistry Laboratory or CHEM 181, General Chemistry I and CHEM 181LAB, General Chemistry Laboratory I, and MATH 100C, Intermediate Algebra, or their equivalents, before being admitted to the major. Students must consult with a major advisor for approval of the program specialization.

Students are highly encouraged to complete at least five credits of NUTR 490, Cooperative Education.

Food Science and Nutrition Core Requirements

EDCS 312 - Educational Statistics (4)	4-5
OR	
PSY 362 - Introductory Statistics (5)	

NUTR 240/240LAB - Introduction to Foods	4
NUTR 101 - Introduction to Human Nutrition	5
NUTR 344 - Medical Nutrition Therapy I	3
NUTR 345 - Developmental Nutrition	3
NUTR 446 - Sports Nutrition and Weight Control	3
NUTR 447 - Nutrition and Society	3

Core Total Credits: 25-26

Select one of the following specializations:

Foods and Nutrition Specialization

The foods and nutrition specialization prepares students for a wide variety of careers in the food and nutrition industry including food processing companies (quality assurance and product development positions), food distributors, food brokerage companies, restaurant and institutional food service, pharmaceutical sales, and nutrition positions not requiring being a registered dietitian. It is highly recommended that students discuss possible minors with their academic advisor that would complement this specialization and enhance employment opportunities. Possible minors include food service management, exercise science, community health education, business, and administrative management. Students interested in applying to nursing programs following the completion of this degree are recommended to take BIOL 355 and BIOL 356, Human Anatomy and Physiology, instead of BIOL 201, Human Physiology and BIOL 220, Introductory Cell Biology, plus BIOL 322, Introductory Microbiology.

Required Courses

FSN Core Requirements	25-26
BIOL 201 - Human Physiology	5
CHEM 111 - Introduction to Chemistry	4
CHEM 111LAB - Introduction to Chemistry Laboratory	1
CHEM 112 - Introduction to Organic Chemistry	4
CHEM 112LAB - Introduction to Organic Chemistry Laboratory	1
CHEM 113 - Introduction to Biochemistry	4
CHEM 113LAB - Introduction to Biochemistry Laboratory	1
NUTR 340 - Management of Food Resources	2
NUTR 340LAB - Management of Food Resources Laboratory	1
NUTR 342 - Quantity Food Production and Service	4
NUTR 342LAB - Quantity Food Production and Service Laboratory	1
NUTR 343 - Foods and Nutrition Professionalism	1
NUTR 347 - Introduction to Nutrition Education	3
NUTR 348 - Nutrition Interview	1
NUTR 349 - Nutrition and Aging	3
NUTR 440 - Experimental Foods	2
NUTR 440LAB - Experimental Foods Laboratory	1

NUTR 433 - Macronutrients	3
NUTR 445 - Experimental Food Research...	1
NUTR 445LAB - Experimental Food Research Laboratory	1
NUTR 448 - Food Service Systems Management	4

Total Credits: 73-74

Dietetics Specialization

The dietetics specialization, plus three additional courses (PSY 101, ECON 101, and ANTH 130 or 357) fulfills the requirements of the American Dietetic Association for a Didactic Program in Dietetics (DPD). The DPD is currently accredited by the American Dietetic Association Commission on Accreditation for Dietetics Education (CADE, 120 South Riverside Plaza Ste. 2000, Chicago, IL 60606-6995, 312-899-0040, ext. 5400), a specialized accrediting body recognized by the Council on Postsecondary Accreditation and the United States Department of Education. Completion of this program qualifies the student to apply for admission to a CADE-accredited Supervised Practice Experience also known as a dietetic internship. Following this the student is eligible to sit for the registration examination. Passing the registration exam qualifies the graduate to become a registered dietitian (RD).

Required Courses

Prior to being admitted into the dietetics specialization, students shall apply to the BS in food science and nutrition major with a specialization in foods and nutrition and must then complete the following courses:

FSN Core Requirements	25-26
BIOL 201 - Human Physiology	5
CHEM 111 - Introduction to Chemistry	4
CHEM 111LAB - Introduction to Chemistry Laboratory	1
CHEM 112 - Introduction to Organic Chemistry	4
CHEM 112LAB - Introduction to Organic Chemistry Laboratory	1
CHEM 113 - Introduction to Biochemistry ..	4
CHEM 113LAB - Introduction to Biochemistry Laboratory	1
NUTR 343 - Foods and Nutrition Professionalism	1
NUTR 348 - Nutrition Interview	1

**Total pre-specialization
major requirements: 47-48**

In addition to successfully completing all of the pre-specialization courses, applicants to this specialization must have an overall GPA of at least 3.0 at the time of application and a GPA in all of the pre-major classes of 3.0. Students planning on entering the dietetics specialization are encouraged to declare their major in the BS food science and nutrition with a foods and nutrition specialization as early in their studies as possible so that they may be assigned a major advisor and receive proper advising in this field.

Pre-specialization major requirements (see above)	47-48
BIOL 220 - Introductory Cell Biology	5
BIOL 322 - Introductory Microbiology	5
OR BIOL 323 - Microbiology (5)	4
ENG 310 - Technical Writing	5
MGT 380 - Organizational Management	5
NUTR 340 - Management of Food Resources	2
NUTR 340LAB - Management of Food Resources Laboratory	1
NUTR 342 - Quantity Food Production and Service	4
NUTR 342LAB - Quantity Food Production and Service Laboratory	1
NUTR 347 - Introduction to Nutrition Education	3
NUTR 349 - Nutrition and Aging	3
NUTR 433 - Macronutrients	3
NUTR 440 - Experimental Foods	2
NUTR 440LAB - Experimental Foods Laboratory	1
NUTR 442 - Nutrition Assessment Laboratory	2
NUTR 443 - Metabolism and Micronutrients	5
NUTR 444 - Medical Nutrition Therapy II ...	3
NUTR 445 - Experimental Food Research...	1
NUTR 445LAB - Experimental Food Research Laboratory	1
NUTR 448 - Food Service Systems Management	4

Total Credits: 102-103

Additional Information

Students wishing to apply for admission into a CADE-accredited dietetic internship must complete the above major requirements plus the following three courses: ANTH 130, Introduction to Cultural Anthropology (5) OR ANTH 357, Medical Anthropology: Cross-Cultural Perspectives on Health and Healing (4), and ECON 101, Economic Issues (5), and PSY 101, General Psychology (5). These courses may also meet breadth requirements at Central Washington University.

The requirement for CHEM 111, 111LAB, Introduction to Chemistry and Laboratory, may be met by satisfactorily completing CHEM 181, 181LAB, 182, 182LAB, and 183, 183LAB General Chemistry and Laboratory. The requirement for CHEM 112, 112LAB, Introduction to Organic Chemistry and Laboratory, may be met by satisfactorily completing CHEM 361, 361LAB, 362, Organic Chemistry and Laboratory. The requirement for CHEM 113, 113LAB, Introduction to Biochemistry, may be met by satisfactorily completing CHEM 431, 431LAB and 432, Biochemistry and Laboratory. The requirement for BIOL 201, Human Physiology, may be met by satisfactorily completing BIOL 355, 356, Human Anatomy and Physiology. Students interested in applying to nursing programs following the completion of this degree are recommended to take BIOL 355 and BIOL 356 instead of BIOL 201.

Nutrition Science Specialization

The nutrition science specialization provides the training necessary to pursue advanced study in nutrition leading toward a career in nutrition research. This option also can be used for those students seeking admission to medical, dental, optometric, nursing, and other health-related programs and schools. In addition to the courses listed, a year of introductory physics is also required for admission to most medical schools. Pre-medical students should also maintain contact with the premedical advisor for current information. MATH 153, Pre-Calculus Mathematics I, or an equivalent course needs to be completed before a student is admitted to this specialization.

Required Courses

FSN Core Requirements	25-26
BIOL 181 - General Biology I	5
BIOL 182 - General Biology II	5
BIOL 183 - General Biology III	5
BIOL 355 - Human Anatomy and Physiology	5
BIOL 356 - Human Anatomy and Physiology	5
CHEM 181 - General Chemistry I	4
CHEM 181LAB - General Chemistry Laboratory I	1
CHEM 182 - General Chemistry II	4
CHEM 182LAB - General Chemistry Laboratory II	1
CHEM 183 - General Chemistry III	4
CHEM 183LAB - General Chemistry Laboratory III	1
CHEM 361 - Organic Chemistry I	3
CHEM 361LAB - Organic Chemistry Laboratory I	2
CHEM 362 - Organic Chemistry II	3
CHEM 431 - Biochemistry I	3
CHEM 431LAB - Biochemistry Laboratory I	2
CHEM 432 - Biochemistry II	3
NUTR 433 - Macronutrients	3
NUTR 440 - Experimental Foods	2
NUTR 440LAB - Experimental Foods Laboratory	1
NUTR 442 - Nutrition Assessment Laboratory	2
NUTR 443 - Metabolism and Micronutrients	5
NUTR 444 - Medical Nutrition Therapy II ...	3
NUTR 445 - Experimental Food Research...	1
NUTR 445LAB - Experimental Food Research Laboratory	1

Total Credits: 99-100

Bachelor of Applied Science Food Service Management

The BAS food service management degree is designed for those who are interested in obtaining the skills for managing a food service located in establishments such as a restaurant, hotel, university dining, hospital, public school district, or resort facilities.

Admission Requirements

Prior to being admitted, the student entering the BAS Food Service Management

Program will have:

- Taken at least 20 credits of general education basic skills courses, including IT 101 or equivalent course
- Taken course equivalencies to NUTR 101, NUTR 240, 240LAB, and ECON 201

Prior to graduation students must have completed a minimum of 1,000 hours of documented work experience in a food service setting which includes the approximately 500 hours completed in the NUTR 490 Cooperative Education experience. The documented work experience must be approved by the food service management advisor and the department chair.

Required Core Courses

HRM 381 - Management of Human Resources	5
MGT 380 - Organizational Management ...	5
ECON 201 - Principles of Economics Micro .	5
NUTR 101 - Introduction to Human Nutrition	5
NUTR 240 - Introduction to Foods	2
NUTR 240LAB - Introduction to Foods Laboratory	2
NUTR 342 - Quantity Food Production and Service	4
NUTR 342LAB - Quantity Food Production and Service Laboratory	1
NUTR 448 - Food Service Systems Management	4
MKT 360 - Principles of Marketing	5
ADMG 385 - Business Communications and Report Writing	5
NUTR 490 - Cooperative Education	12
Department-approved upper-division electives	6

Choose from the following:

NUTR 340 - Management of Food Resources (2)	
NUTR 340LAB - Management of Food Resources Laboratory (1)	
NUTR 345 - Developmental Nutrition (3)	
NUTR 349 - Nutrition and Aging (3)	
NUTR 405 - Hospitality Catering (3)	
NUTR 446 - Sports Nutrition and Weight Control (3)	
NUTR 447 - Nutrition and Society (3)	
RMT 330 - Principles of Retailing (4)	
RMT 340 - Principles of Selling (4)	
GWS 302 - Fundamentals of Viticulture and Enology (4)	
GWS 303 - Major Wine Regions of the World (4)	
GWS 304 - Wine Marketing and Branding (4)	
GWS 406 - Professional Wine Analysis (3)	
ADMG 310 - Business Professional Development (3)	
ADMG 372 - Leadership and Supervision (3)	

Total Credits: 61

Nutrition Minor

This program is designed primarily for those individuals in other majors who desire a more in-depth study of nutrition. This program is intended for students in majors such as exercise science, family studies, physical and health education, and public

health. This minor may also be of interest for students in pre-professional programs including pre-medicine, pre-dentistry, pre-veterinary, and pre-physical therapy. Courses in this minor may also be used to satisfy requirements in other major programs.

Students wishing to attain full admission to the minor must meet the following requirements: Successful completion of NUTR 101 - Introduction to Human Nutrition, NUTR 240 - Introduction to Foods, and NUTR 240LAB - Introduction to Foods Laboratory with a grade of B (3.0) or better. Students must receive a grade of C (2.0) or better in all other minor courses.

Required Courses

NUTR 240 - Introduction to Foods	2
NUTR 240LAB - Introduction to Foods Laboratory	2
NUTR 101 - Introduction to Human Nutrition	5
NUTR 340 - Management of Food Resources	2
NUTR 340LAB - Management of Food Resources Laboratory	1
NUTR 345 - Developmental Nutrition	3
NUTR 446 - Sports Nutrition and Weight Control	3
Department-approved electives	4
NUTR 348 - Nutrition Interview (1)	
NUTR 346 - Theory and Treatment of Eating Disorders (3)	
NUTR 349 - Nutrition and Aging (3)	
NUTR 447 - Nutrition and Society (3)	
OR	
NUTR 490 - Cooperative Education (5)	

Total Credits: 22-23

Food Service Management Minor

This minor is designed primarily for students earning degrees in business administration or in tourism management that will allow them better access to careers in food service management. Courses in this 26- to 27-credit minor may also be used to satisfy requirements in other major programs. This minor may not be used for students earning a BS degree in food science and nutrition or a BAS in food service management.

Required Courses

NUTR 101 - Introduction to Human Nutrition	5
NUTR 240 - Introduction to Foods	2
NUTR 340 - Management of Food Resources	2
NUTR 342 - Quantity Food Production and Service	4
NUTR 448 - Food Service Systems Management	4
NUTR 490 - Cooperative Education	5
Department-approved electives	4-5

Approved Electives

MGT 380 - Organizational Management (5)	
NUTR 240LAB - Introduction to Foods Laboratory (2)	
NUTR 340LAB - Management of Food Resources Laboratory (1)	

NUTR 342LAB - Quantity Food Production and Service Laboratory (1)
NUTR 490 - Cooperative Field Experience (5)

Total Credits: 26-27

Bachelor of Science Paramedicine Major

Program Director

Keith A. Monosky, PhD(c), MPM, EMT-P

Medical Program Director

Jackson Horsley, MD

Faculty

Robert Carlson, BS, EMT-P
Tamara Downs, BS, EMT-P
Keith A. Monosky, PhD(c), MPM, EMT-P
James Pierce, EMT-P

The paramedicine major is designed for students who plan to become a certified pre-hospital professional in emergency medical services. The paramedicine major provides the graduate with the requisite skill sets for entry-level competence in advanced life support emergency medical services, as well as superior skills in advanced life support and leadership abilities in emergency medical services.

The deliver format includes classroom lectures, group discussions, laboratory skills training, hospital clinical experience with observations and practice, field internships, educational internships, administrative internships, pre-hospital research, and simulated scenario-based exercises of complex patient condition which willfully prepare the student for occupations in advanced emergency medical services. This nationally-accredited program meets all of the national curriculum and Washington State standards.

In addition to general admissions, all applicants must meet specific entrance criteria (including a current EMT certification) and be approved by the paramedic selection committee before being admitted into the program. Admission to CWU does not assure entry into the paramedicine major.

Completion of the major listed below and other degree requirements leads to the bachelor of science in paramedicine and eligibility to take the National Registry EMTs examination for paramedic certification. For students not seeking a degree, a certification option is available.

Required Courses for Entry:

EXSC 250 - Anatomical Kinesiology	5
EXSC 351 - Scientific Foundations of Health and Fitness	5
EMS 440 - Medical Mathematics and Terminology	2

Required Courses in the Concentration:

EMS 335 - Paramedicine I	4
EMS 335LAB - Advanced Clinical Practice I	2

EMS 336 - Paramedicine II	4
EMS 336LAB - Advanced Clinical Practice II	2
EMS 337 - Paramedicine III	3
EMS 337LAB - Advanced Clinical Practice III	2
EMS 350 - Paramedicine Instructional Methodologies	2
EMS 430 - Problem-based Learning I	4
EMS 431 - Problem-based Learning II	4
EMS 441 - General Pharmacology for Paramedics	3
EMS 443 - Myocardial Disease and Basic Electrocardiography	4
EMS 444 - 12-Lead Electrocardiography	4
EMS 451 - Advanced Trauma Care	3
EMS 455 - Introduction to Pathophysiology	3
EMS 459 - Emergencies in Pediatric/ Geriatric Care	3
EMS 460 - Research in EMS I	3
EMS 461 - Research in EMS II	3
EMS 465 - Educational Methodologies in EMS	3
EMS 470 - Current Topics in Emergency Medicine	3
EMS 475 - EMS Response to Terrorism	3
EMS 480 - Financial Analysis of EMS Systems	3
EMS 481 - Quality Improvement and Administration of EMS	3
EMS 482 - System Analysis of EMS	4
EMS 485 - Strategic Planning for EMS	3
EMS 488 - Health Policy in EMS	3
EMS 489 - Leadership in EMS	3
EMS 493A - Paramedicine Internship I	3
EMS 493B - Paramedicine Internship II	4
EMS 493C - Paramedicine Internship III	5

Optional Course in the Concentration

EMS 450 - Human Anatomy-Cadaver	1
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Total Credits: 105-106

Paramedic Courses

- EMS 245. First Aid (3).** American Red Cross First Aid course for which standard certificate may be granted.
- EMS 319. Emergency Medical Technician (EMT) (8).** EMT-Basic is the first certification level for students pursuing careers in the EMS field. After completing the EMS 319 course, students are eligible to become state or nationally certified to care for the sick and injured in the pre-hospital setting. Prerequisite: EMS 245.
- EMS 335. Paramedicine I (4).** This course provides the foundational knowledge in paramedicine education in areas of preparatory elements of paramedicine, advanced airway management, history-taking, and physical examination, communications, documentation, ethics, and more. Corequisite: EMS 335LAB. Prerequisite: admission to the paramedical major or program.
- EMS 335LAB. Advanced Clinical Practice I (2).** This course provides practical lab instruction in paramedicine including advanced airway procedures, patient

assessment, history-taking, physical examination, medication administration, intravenous therapy, and other related emergency procedures. Grade will either be S or U. Corequisite: EMS 335. Prerequisite: admission to the paramedical major or program.

EMS 336. Paramedicine II (4). This course provides the foundational knowledge in paramedic education in areas of emergency obstetrics and gynecology, pulmonology, neurology, endocrinology, allergies, environmental, infectious diseases, psychiatric, toxicological, and more. Corequisite: EMS 336LAB. Prerequisites: EMS 335 and admission to the paramedical major or program.

EMS 336LAB. Advanced Clinical Practice II (2). Accompanying laboratory to Paramedicine II, providing intensive training in obstetrical emergencies, pulmonary assessment and treatment, management of cardiovascular emergencies, cardiac arrest team management, and leadership development. Grade will either be S or U. Corequisite: EMS 336. Prerequisite: admission to the paramedical major or program.

EMS 337. Paramedicine III (3). This course provides the foundational knowledge in paramedic education in areas of assessment-based management, neonatology, geriatrics, pediatrics, abuse and assault, rural EMS, and more. Prerequisites: EMS 336 and admission to the paramedical major or program.

EMS 337LAB. Advanced Clinical Practice III (2). Accompanies EMS 337 lecture providing practical skill education in a laboratory setting in the therapeutic paramedical interventions of pediatrics, geriatrics, and advanced medical emergencies. Grade will either be S or U. By permission. Corequisite: EMS 337.

EMS 345. Instructor's First Aid (3). American Red Cross First Aid course for instructor's certificate. Meets requirements for ski patrol. Prerequisite: EMS 245.

EMS 350. Paramedicine Instructional Methodologies (2). This course provides instruction and opportunities to learn and apply techniques and methods of instruction in principles of EMS. Students will provide practical skill instruction to EMT student under the supervision of the program faculty. Grade will be either S or U. Prerequisite: admission to the paramedical major or program.

EMS 398. Special Topics (1-6).

EMS 430. Problem-based Learning I (4). This course introduces case-based presentation of pathology, symptomatology, presentation, and treatment of clinical scenarios through life-span development, group discussion, and research. Prerequisites: EMS 455 and admission to the paramedical major or program.

EMS 431. Problem-based Learning II (4). This course continues case-based presentation of pathology, symptomatology, presentation,

and treatment of clinical scenarios through life-span development, group discussion, and research. Prerequisites: EMS 430 and admission to the paramedical major or program.

EMS 440. Medical Mathematics and Terminology (2). This course provides instruction in various methods of medical drug calculations and dosing of medications commonly utilized in emergency settings, as well as an introduction to medical terminology. Prerequisite: admission to the paramedical major or program.

EMS 441. General Pharmacology for Paramedics (3). Mechanism of action, indications, and contraindications of drugs, their side effects, and dosage of administration. Prerequisites: EMS 440 and admission to the paramedical major or program.

EMS 443. Myocardial Disease and Basic Electrocardiography (4). This course provides instruction in the basic elements of bipolar limb-lead electrocardiography, beginning with a review of cardiovascular A and P, a brief discussion of cardiac pathologies, and focuses on EKG interpretation and dysrhythmia recognition. Prerequisite: admission to the paramedical major or program.

EMS 444. Twelve-lead Electrocardiography (4). This provides instruction in the advanced elements of 12-lead EKG analysis. It begins with a review of the essentials of EKG interpretation and introduces ACLS concepts following with a comprehensive approach to 12-lead EKG analysis. Prerequisites: EMS 443 and admission to the paramedical major or program.

EMS 450. Human Anatomy-cadaver Lab (1). This course provides instruction in the human anatomy and physiology with practical lab examination, exploration, and limited dissection of the human body. Two hours laboratory per week. By permission.

EMS 451. Advanced Trauma Care (3). This course provides instruction in the advanced elements of trauma care, including trauma triage, fluid resuscitation, trauma arrest management, multi-system management, and trauma of the head, neck, thorax, abdomen, and extremity. Prerequisite: admission to the paramedical major or program.

EMS 455. Introduction to Pathology (3). This course introduces fundamental pathologies common to all age groups. It establishes concepts and foundational basis of disease from the cellular perspective to the fully developed organism. Prerequisite: admission to the paramedical major or program.

EMS 459. Emergencies in Pediatric/Geriatric Care (3). Emergency training in assessing, treating, and transporting pediatric/geriatric patients. Prerequisite: admission to the paramedical major or program.

EMS 460. Research in EMS I (3). This course introduces research design and methodologies common to medicine and

paramedicine. It establishes the foundation for EMS research projects and possible publication. Prerequisite: admission to the paramedical major or program.

EMS 461. Research in EMS II (3). This course continues education in research design and methodologies common to medicine and paramedicine. It provides the student the opportunity to complete EMS research projects and possible publication. Prerequisites: EMS 460 and admission to the paramedical major or program.

EMS 465. Educational Methodologies in EMS (3). This course introduces common educational methodologies applied in EMS education with focuses on didactic, psychomotor, and affective education domains. Additional content include curricula development, evaluation methods, test construction, and critical psychometric parameters. Prerequisite: admission to the paramedical major or program.

EMS 470. Current Topics in Emergency Medicine (3). This course instructs students how to conduct medical literature searches and to critically review peer-reviewed articles and surveys the contemporary literature for relevant concepts and issues germane to EMS. Prerequisite: admission to the paramedical major or program.

EMS 475. EMS Response to Terrorism (3). This course examines contemporary thought on the philosophical basis and motivation for terrorism and discusses currently prevalent issues, principles of mitigation for EMS providers, and strategies to prevent terroristic threats. Prerequisite: admission to the paramedical major or program.

EMS 480. Financial Analysis of EMS Systems (3). This course introduces basic financial analytical processes as they apply to EMS, with emphasis on interpreting financial statements, assessing financial burden, cost projection, cost-benefit analysis, and formulas for evaluating financial performance. Prerequisite: admission to the paramedical major or program.

EMS 481. Quality Improvement and Administration of EMS (3). This course introduces elemental concepts to continuous quality improvement with application to EMS systems. It also introduces how CQI data can be used to inform EMS administration. General principles of management will be reviewed. Prerequisite: admission to the paramedical major or program.

EMS 482. Systems Analysis of EMS (4). This course integrates previously learned concepts into a systematic approach of EMS system problem-identification, prioritization, and solutions proposals. It incorporates research design, financial analysis, and policy analysis into an integrated approach. Prerequisites: EMS 460, 480, 481, and admission to the paramedic major or program.

EMS 485. Strategic Planning for EMS

(3). This course introduces foundational concepts of strategic planning into EMS development. It enables the student to apply strategic principles of management to real-life EMS systems. Prerequisite: admission to the paramedical major or program.

EMS 488. Health Policy in EMS (3). This course introduces policy development and agenda-setting at the state and national levels. It provides basic instruction in policy analysis and surveys current health policies that may impact EMS. Prerequisite: admission to the paramedical major or program.

EMS 489. Leadership in EMS (3). This course examines various leadership styles, assesses student aptitude for leadership style, and develops a foundational structure to develop superior leadership abilities in EMS systems. Prerequisite: admission to the paramedical major or program.

EMS 493A. Paramedicine Internship I (3). This course provides clinical and field instruction in principles of paramedicine under the supervision of clinical and field preceptors. May be repeated for credit. Grade will either be S or U. Prerequisite: admission to the paramedical major or program.

EMS 493B. Paramedicine Internship II (4). This course provides clinical and field instruction in principles of paramedicine under the supervision of clinical and field preceptors. Grade will either be S or U. Prerequisite: EMS 493A.

EMS 493C. Paramedicine Internship III (5). This course provides clinical and field instruction in principles of paramedicine under the supervision of clinical and field preceptors. Grade will either be S or U. Prerequisite: EMS 493B.

Exercise Science Courses

EXSC 250. Anatomical Kinesiology (5). Study of skeletal and muscular systems, the fundamentals of biomechanics, and their applications to human movement, skill development, and skill performance.

EXSC 254. Foundations of Fitness (3). Overview of the fitness industry, components of fitness, and strategies to improve the health and well-being of the individual.

EXSC 318. Aerobic Fitness (3). This class provides the fitness and sports management major with an in-depth exploration of various cardiovascular exercise activities and equipment. Prerequisite: EXSC 250.

EXSC 348. Prevention and Treatment of Athletic Injuries (4). Prevention and treatment of injuries and rehabilitation of injured athletes. Three hours lecture and two hours laboratory per week. Prerequisite: EXSC 250.

EXSC 351. Scientific Foundations of Health and Fitness (5). Examination of the digestive, respiratory, urinary, circulatory, nervous, endocrine, and reproductive

systems of the human body. Four hours lecture and two hours laboratory per week.

EXSC 360. Scientific Principles of Strength Training (4). This course addresses the scientific and theoretical bases of program design in resistance training. Prerequisite: EXSC 250.

EXSC 438. Therapeutic Exercise (3). This course covers the understanding, design, and development of rehabilitation exercises for acute, chronic and post operative injuries. Prerequisites: EXSC 250 and 348.

EXSC 446. Sports Nutrition and Weight Control (3). Study of interrelationship of factors required for successful weight control; modification of diet, activity, and behavior. Role of dietary factors in health and body function. NUTR 446 and EXSC 446 are equivalent courses; students may not receive credit for both. Prerequisite: NUTR 101.

EXSC 450. Physiology of Exercise (5). Acute and chronic responses of the metabolic, muscular, cardiovascular, pulmonary, endocrine, and thermoregulatory systems to physical work. Four hours lecture, two hours laboratory per week. Prerequisite: EXSC 351.

EXSC 452. Advanced Athletic Training (3). A detailed examination of injuries, therapeutic modalities, and rehabilitation in athletic training. Prerequisite: EXSC 348.

EXSC 455. Fitness Assessment and Exercise Prescription (5). Concepts and principles of appraising level of fitness, evaluating the results and designing physical fitness/exercise programs. Three hours lecture and four hours laboratory. Prerequisite: EXSC 450.

EXSC 456. Administration of Programs for Special Populations (4). Philosophy, principles, policies, and procedures of fitness administration to special populations. Three hours lecture and one hour case study analysis lab per week. Prerequisite: EXSC 455.

EXSC 457. Exercise Adherence Strategies (3). Review of psychological factors involved in the exercise treatment of normal and special populations.

EXSC 461. Current Issues in Fitness and Exercise Science (2). This seminar course discusses current trends and issues in the fitness and exercise science world.

EXSC 463. Pediatric Issues in Exercise Science (5). Essential principles of growth, development, and exercise science and the application of these principles to children and youth. Four hours of lecture and two hours of laboratory per week. Prerequisites: EXSC 250 and 351.

EXSC 464. Management of Fitness Facilities and Programs (4). This course covers conventional business management principles and operational guidelines to the unconventional business of health and fitness facilities.

EXSC 490. Cooperative Education (1-12). An individualized, contracted field experience with business, industry, government,

medical, or social service agencies. This contractual arrangement involves a student learning plan, cooperating employer supervision, and faculty coordination. May be repeated for credit. Grade will either be S or U. Prerequisites: satisfactory completion of all courses in the major and a minimum major GPA of 2.7.

EXSC 495A. Practicum: Fitness Centers/ Clubs (2). Observation, monitoring, and supervised assistance of fitness assessment and exercise prescription in community fitness center/club setting. May be repeated for credit. Grade will either be S or U.

EXSC 495B. Practicum: Clinical (2). Observation, monitoring, and supervised activity in clinical rehabilitation and athletic training setting. May be repeated for credit. Grade will either be S or U.

EXSC 495C. Practicum: Management (2). Observation, monitoring, and supervised leadership activity in fitness, health, and sport management settings. May be repeated for credit. Grade will either be S or U.

EXSC 495D. Practicum: Laboratory Assessment (2). Laboratory techniques for assessment of body composition, cardiovascular, strength, and flexibility components of fitness. May be repeated for credit. Grade will either be S or U.

Nutrition Courses

NUTR 101. Introduction to Human Nutrition (5). Fundamental nutritional concepts as related to health. Four hours lecture and one hour discussion per week. This is a General Education writing course- Natural Sciences - Applications of Natural Science.

NUTR 240. Introduction to Foods (2). Examination of scientific principles of food preparation, function of ingredients, effects of preparation techniques, and nutritional considerations. Two hours lecture per week. Prerequisite: NUTR 101. Corequisite: NUTR 240LAB.

NUTR 240LAB. Introduction to Foods Laboratory (2). Additional material fees. Four hours per week. Corequisite: NUTR 240.

NUTR 298. Special Topics (1-6).

NUTR 340. Management of Food Resources (2). Food management principles involved in the planning, purchasing, preparing, and serving of meals in relation to nutritional needs, social needs, food preferences, and resources. Prerequisites: NUTR 101 and NUTR 240.

NUTR 340LAB. Management of Food Resources Laboratory (1). Demonstration of food management principles. Twenty dollars materials fee. Co- or prerequisite: NUTR 340.

NUTR 342. Quantity Food Production and Service (4). Principles and techniques of food production and food safety for restaurants, health care facilities, and other institutions. Corequisite: NUTR 342LAB. Prerequisite: NUTR 240.

NUTR 342LAB. Quantity Food Production and Service Laboratory (1). Corequisite: NUTR 342.

NUTR 343. Foods and Nutrition Professionalism (1). Professional ethics, career readiness, and career research in foods and nutrition. Prerequisite: junior standing or above.

NUTR 344. Medical Nutrition Therapy I (3). Introduction to medical nutrition therapy including nutrition care process, diabetes, heart disease, and cancer. Prerequisites: NUTR 101, BIOL 201, and either CHEM 111, CHEM 181, or BIOL 355.

NUTR 345. Developmental Nutrition (3). Effects of nutrition on development, growth, and health, from conception through aging. Prerequisites: either NUTR 101 or NUTR 433.

NUTR 346. Theory and Treatment of Eating Disorders (3). Introduction of the dangers of dieting and the socio-cultural influences toward eating disorders and identification of the history, theory, and treatment of eating disorders. Prerequisite: NUTR 101.

NUTR 347. Introduction to Nutrition Education (3). Introduction to educating individuals and groups about nutrition, from theory to application. Prerequisite: NUTR 101.

NUTR 348. Nutrition Interview (1). Techniques, procedures, and skills related to nutrition interviewing and counseling. Prerequisite: NUTR 101.

NUTR 349. Nutrition and Aging (3). This course will focus on how aging affects nutritional status and the unique needs of the older adult. Prerequisite: NUTR 101.

NUTR 398. Special Topics (1-6).

NUTR 405. Hospitality Catering (3). Basics of off-premise catering including menu planning, budgeting, logistics, and marketing. NUTR 405, RT 405, and RT 505 are equivalent courses; students may not receive credit for more than one.

NUTR 406. Peer Nutrition Education Practicum (1). Supervised experience as a nutrition educator at the Student Health Center and/or CWU Center for Sports Nutrition. May be repeated for credit. Prerequisites: NUTR 101, 348, and 446.

NUTR 433. Macronutrients (3). Nutritional aspects of carbohydrates, proteins, lipids, water, and energy. Prerequisites: NUTR CHEM 112 or CHEM 363.

NUTR 440. Experimental Foods (2). Physical and chemical bases of food preparation. Experiment testing result of variation in ingredients and manipulative practice. Prerequisites: NUTR 240, NUTR 240LAB, NUTR 340, CHEM 112, and PSY 362, or EDCS 312, and ENG 310. Corequisite: NUTR 440LAB.

NUTR 440LAB. Experimental Foods Laboratory (1). Additional material fees. Corequisite: NUTR 440.

NUTR 442. Nutrition Assessment Laboratory (2). Current tools for nutritional assessment with laboratory experience. One hour lecture and two hours laboratory per week. Prerequisite: NUTR 443.

NUTR 443. Metabolism and Micronutrients (5). Effect of nutritional and physiological state on the regulation of carbohydrate, lipid, and protein metabolism. Metabolic and physiological role of vitamins and minerals. Prerequisites: NUTR 433 and CHEM 113, or CHEM 432 and BIOL 201, or BIOL 356.

NUTR 444. Medical Nutrition Therapy II (3). The influence of nutrition on physiological problems; disease and medical nutritional therapy; nutrition and health management. Prerequisites: NUTR 344, 443, and either CHEM 113 or 432.

NUTR 445. Experimental Food Research (1). Principles of experimental food research. Propose, conduct, analyze, and present original food research project. Prerequisites: NUTR 440 and NUTR 440LAB.

NUTR 445LAB. Experimental Food Research Laboratory (1). Product production, sensory and objective testing of experimental food research project. Corequisite: NUTR 445

NUTR 446. Sports Nutrition and Weight Control (3). Study of interrelationship of factors required for successful weight control, modification of diet, activity and behavior. Role of dietary factors in health and body function. NUTR 446 and EXSC 446 are equivalent courses; students may not receive credit for both. Prerequisite: NUTR 101.

NUTR 447. Nutrition and Society (3). National and international nutritional problems and programs. Prerequisite: either NUTR 101 or NUTR 433.

NUTR 448. Food Service Systems Management (4). Application of organizational management and principles to food-service systems including organizing, staffing, controlling, planning, marketing, and leading. Prerequisites: NUTR 240, NUTR 342, and MGT 380.

NUTR 490. Cooperative Education (1-12). An individualized, contracted field experience with business, industry, government, or social service agencies. This contractual arrangement involves a student learning plan, cooperating employer supervisor and faculty coordination. May be repeated for credit. Grade will either be S or U. By permission.

NUTR 491. Workshop (1-6).

NUTR 492A. Dietetic Practicum (10-18). Dietetic internship experience. Credits may not be used to apply to the master's degree. May be repeated for credit. Grade will either be S or U. By permission.

NUTR 492B. Dietetic Practicum (10-18). Dietetic internship experience. Credits may not be used to apply to the master's degree. May be repeated for credit. Grade will either be S or U. Prerequisite: NUTR 492A.

NUTR 492C. Dietetic Practicum (10-18). Dietetic internship experience. Credits may not be used to apply to the master's degree. May be repeated for credit. Grade will either be S or U. Prerequisite: NUTR 492B.

NUTR 496. Individual Study (1-6).

NUTR 498. Special Topics (1-6).

NUTR 499. Seminar (1-5).

OCCUPATIONAL EDUCATION

Ellensburg
Michaelsen Hall, room 100

509-963-2766

www.cwu.edu/careertech

See website for how this certificate may be used for educational and career purposes.

Faculty and Staff

Director

Jan Bowers, PhD, family and consumer sciences

Faculty

Robert Perkins, EdD, business and marketing education

Scott Calahan, MEd, industrial education
Marla Wyatt, PhD, family and consumer sciences education

Non-tenure Faculty

Jay Leviton
John Linder
Kevin Plambeck
Paul Randall

Regional Coordinators

Jay Leviton
John Linder
Kevin Plambeck
Paul Randall

Career and Technical Education Teacher Preparation Certificate

This two-year competency block certificate program is intended for business or industry professionals who are interested in obtaining a career and technical teaching certificate. The program will provide the tools necessary for success in the classroom.

During the program participants will complete a mentored teaching experience or practicum each year. The program is offered through the office of Continuing Education in collaboration with Occupational Education.

Prerequisites:

1. Current Career and Technical Education Probationary Teaching Certificate
OR
2. 6,000 hours paid occupational experience in the area you wish to teach, and fingerprint clearance from both the Washington State Patrol and the FBI must be on file at the office of Superintendent of Public Instruction (OSPI).
3. Successful completion of all three sections in the Washington Educator Skills Test – Basic (WEST-B). Test scores must be submitted prior to completing the program in order to receive CWU's recommendation for career and technical education teacher certification
OR

4. Washington State Residency Permit or professional teacher certification.

Included in each year of the program is a 70-hour practicum. Passing grades in all courses grants the individual the competencies in general and specific safety requirement.

Required Courses

Block 1:

OCED 310A - Vocational-technical Teaching Methods	4
OCED 310B - Vocational-technical Occupational Analysis	3
OCED 310C - Vocational-technical Course Organization and Curriculum Design	5

Block 2:

OCED 311A - Vocational-technical Coordination Techniques of Cooperative Education	3
OCED 311B - Vocational-technical History and Philosophy of Vocational Education	3
OCED 311C - Vocational-technical Student and Professional Leadership Development	4
OCED 311D - Vocational-technical School Law and Issues related to Abuse	2

Total Credits: 24

Occupational Education Courses

OCED 310A. Vocational-Technical Teaching Methods (3-5). An introduction to teaching pedagogy and application of occupational skills, knowledge, and practice to a vocational classroom setting.

OCED 310B. Vocational-Technical Occupational Analysis (3-5). An introduction to teaching pedagogy and application of occupational skills, knowledge, and practice to a vocational classroom setting.

OCED 310C. Vocational-Technical Course Organization and Curriculum Design (3-5). An introduction to teaching pedagogy and application of occupational skills, knowledge, and practice to a vocational classroom setting.

OCED 311A. Vocational-Technical Coordination Techniques of Cooperative Education (3-5). Advanced teaching pedagogy, history, and philosophy of vocational education, school law and issues related to abuse, leadership, and work-based learning.

OCED 311B. Vocational-Technical History and Philosophy of Vocational Education (3-5). Advanced teaching pedagogy, history, and philosophy of vocational education, school law, and issues related to abuse, leadership, and work-based learning.

OCED 311C. Vocational-Technical Student and Professional Leadership Development (3-5). Advanced teaching pedagogy, history and philosophy of vocational education, school law and issues related to abuse, leadership, and work-based learning.

OCED 311D. Vocational-Technical School Law and Issues Related to Abuse (3-5).

Advanced teaching pedagogy, history, and philosophy of vocational education, school law and issues related to abuse, leadership, and work-based learning.

OCED 410. Career and Technical Education School to Work Programs (4). Work-based learning, student leadership, advisory committees, program promotion, and professional responsibilities in vocational education. Prerequisite: full admission to the Teacher Preparation Program.

OCED 432. Occupational Analysis (3). Analysis of jobs and trades to determine related technical information, skills, and advisory sources necessary to develop content materials for a course of study.

OCED 440. Total Quality Learning (3). Concepts of continuous improvement cycles, statistical process control tools, assessment strategies, and tools. Application strategies and learning and behavior concepts of Glasser, Maslow, Herzberg, and Bloom.

PHILOSOPHY AND RELIGIOUS STUDIES DEPARTMENT

College of Arts and Humanities
Ellensburg
Language and Literature Bldg., room 337

509-963-1818

Fax 509-963-1822

www.cwu.edu/~philo/index.html

See website for how these programs may be used for educational and career purposes.

Faculty and Staff

Chair

Heidi M. Szpek, PhD

Professor

Chenyang Li, PhD, (on leave) Asian philosophy, comparative philosophy, ethics, social and political philosophy

Associate Professors

Cynthia Coe, PhD, 20th century continental philosophy, feminist philosophy, director of women's studies

Jeffrey Dippmann, PhD, world religions, Chinese Buddhism, and Daoism

Heidi Szpek, PhD, Hebrew Bible, Western religious traditions, Judaism, Holocaust studies, World Religions

Assistant Professors

Matthew Altman, PhD, early modern philosophy (Kant), 19th century philosophy, ethics and applied ethics, social and political philosophy, philosophy of art, director William O. Douglas Honors College

Gary Bartlett, PhD, philosophy of mind, cognitive science, epistemology

Senior Lecturer

Karen Turcotte, MA, comparative religions,
religion of India, philosophies of India

Lecturers

Gayle Dohrman, MA, history of philosophy,
ancient philosophy (Plato), metaphysics,
ethics, mysticism

David Newcomer, MDiv, Christianity, ethics

Emeritus Professors

Peter M. Burkholder, PhD

Raeburne S. Heimbeck, PhD

Webster F. Hood, PhD

Chester Z. Keller, PhD

Staff

Jan Farrell, secretary senior

Department Information

The original meaning of the word philosophy is "the love of wisdom." Philosophy therefore represents an ongoing process of critical and speculative inquiry into questions representing people's deepest concerns, such as the meaning of existence, the nature of reality, and the grounds of human conduct. The religious studies specialization is a path of inquiry into the nature of religion, its pervasive role in human life, and its contribution to understanding human existence and destiny.

Bachelor of Arts**Philosophy Major**

Students may choose either a 50-credit major or a 60-credit major. In order to graduate, a student who completes the 50-credit major must also have a minor or second major in another discipline. A student who completes the 60-credit major is not required to have a minor or second major.

Core Courses

PHIL 302 - Ethics	5
PHIL 352 - Western Philosophy I: Ancient Greek Philosophy	5
PHIL 353 - Western Philosophy II: Rationalism and Empiricism	5
OR	
*PHIL 305 - Philosophy of Religion (5)	
PHIL 354 - Western Philosophy III: Kant and the 19th Century	5
OR	
*RELS 376 Contemporary Religious Thought (5)	
PHIL 494 - Undergraduate Thesis	2
OR	
*RELS 494 Undergraduate Thesis (2)	
PHIL 495 - Undergraduate Thesis	3
OR	
*RELS 495 Undergraduate Thesis (3)	

Total Core Credits: 25

*Per advisor's approval

Philosophy Major (50-60 Credits)**Required Courses**

Core Courses	25
PHIL 201 - Introduction to Logic	5
PHIL 302 - Ethics	5

Select one course from the following

contemporary-based courses	5
PHIL 304 - Business Ethics	
PHIL 308 - Medical Ethics	
PHIL 358 - Existentialism	
PHIL 361 - Theory of Knowledge	
PHIL 363 - Philosophy of Mind	
PHIL 380 - Philosophy of Science	
PHIL 459 - Phenomenology	

Select one course from the following

diversity courses	5
PHIL 325 - Women and Philosophy	
PHIL 345 - Chinese Philosophy	
PHIL 356 - American Philosophies	
PHIL 357 - Race, Class, and Gender: Philosophical Perspectives	

Electives	5-15
Any PHIL courses (at most 5 credits at the 100 or 200 level)	

Total Credits: 50-60

Religious Studies Specialization (50-59 Credits) (60 Credits)

The religious studies specialization is comparative in nature, but complemented by a philosophical component focused on religion and unique electives designed to accommodate student interests. Students may choose either a 50- or 60-credit specialization. A student who completes the 60-credit major is not required to have a minor or second major.

Required Courses

Core Courses	25
RELS 101 - World Religions	5
OR	
RELS 201 - Sacred Books of the World (5)	

Select one course from each of the history of religion categories

RELS 351 - Religions of China and Japan	5
OR	
RELS 352 - Religions of India (5)	
RELS 353 - Judaism and Islam	5
OR	
RELS 354 - Christianity (5)	

Electives	10-20
Any RELS upper division courses (And department-approved courses)	

Total Credits: 50-60

In order to graduate, a student who completes the 50-credit major or 50-credit specialization must also have a minor or second major in another discipline.

Ethics Minor

A minor in ethics enables students to develop a strong sense of moral responsibility and critical skills for moral reflection. It consists of required courses in ethical theory,

global ethics, current ethical issues, as well as electives in applied ethics, such as business ethics and communication ethics, which may relate to students' majors. It also includes an internship experience to help students develop their ethical ability and awareness through service learning. Such a minor can be combined with, and serve as enrichment to, any major program. As a result of completing the minor, students will be able to:

- Identify and implement major moral theories from diverse traditions
- Demonstrate an understanding of the cultural and historical embeddedness of ethical theories
- Evaluate moral issues from a plurality of perspectives
- Develop a capacity for critical moral reasoning
- Analyze and evaluate the effectiveness of given moral theories in dealing with contemporary ethical problems
- Learn to account for one's conduct within a larger community
- Develop a sensitivity to the central moral issues in a given discipline and the capacity to act in a morally responsible manner

Required Courses

PHIL 302 - Ethics	5
PHIL 490 - Cooperative Education	3
Select from the following	5
PHIL 202 - Introduction to Ethics (5)	
PHIL 210 - Current Ethical Issues (5)	
Upper-division electives	13-15
At least one course must be in Philosophy	

COM 333 - Communication Ethics (3)	
IT 301 - Information Technology Security, Privacy, and Ethics (3)	
LAJ 401 - Ethics, Diversity, and Conflict in Criminal Justice (4)	
For LAJ majors only.	

MSL 302 - Leadership and Ethics (3)	
For Military Science majors only	
PHIL 304 - Business Ethics (5)	
PHIL 306 - Environmental Ethics (5)	
PHIL 308 - Medical Ethics (5)	
PHIL 402 - Ethics and Film (5)	
PHIL 465 - Advanced Ethics (5)	
OR	
Other Ethics-related courses as approved by minor advisor.	

Total Credits: 26-28

Philosophy Minor**Required Courses**

PHIL 101 - Introduction to Philosophy	5
PHIL 201 - Introduction to Logic	5
*Philosophy electives	10-18

Total Credits: 20-28

*Select from PHIL courses; at least 10 credits at 300 level or above.

Religious Studies Minor

Required Courses

RELS 101 - World Religions 5

Select from the following: 5

PHIL 305 - Philosophy of Religion (5)

RELS 201 - Sacred Books of the World (5)

RELS 376 - Contemporary Religious Thought (5)

Select from the following 5

RELS 351 - Religions of China and Japan (5)

RELS 352 - Religions of India (5)

RELS 353 - Judaism and Islam (5)

RELS 354 - Christianity (5)

Select Either 5

*RELS Upper-division Electives

OR

PHIL 305 - Philosophy of Religion (5)

PHIL 310 - Philosophies of India (5)

PHIL 345 - Chinese Philosophy (5)

PHIL 351 - Medieval Philosophy (5)

PHIL 378 - Philosophy of Love (5)

RELS 376 - Contemporary Religious Thought (5)

Total Credits: 20

*PHIL courses cannot be used here if used to fulfill requirements for the major or minor in philosophy.

Philosophy Courses

Some advanced philosophy courses are seldom offered except by arrangement.

PHIL 101. Introduction to Philosophy (5).

Introduction to the basic themes, thinkers, and topics of philosophy. The mind-body problem, good versus evil, knowledge, truth, goodness, and beauty.

PHIL 115. The Meaning of Life (5). Original sources from diverse philosophical traditions explore various responses to the question of the meaning of life, considering the most significant human aspirations and values.

PHIL 201. Introduction to Logic (5). Formal principles, methods and techniques for analyzing, constructing, and evaluating arguments. Topics include validity, soundness, truth tables, Venn diagrams, syllogisms, and logical symbolism.

PHIL 202. Introduction to Ethics (5). Examine some main traditions of ethics, such as Christian ethics, Buddhist ethics, Confucian ethics, ethical absolutism and relativism, utilitarianism, deontology, and feminist ethics.

PHIL 209. Introduction to Asian Philosophy (5). Examination of important problems and classical texts in Indian, Chinese, and Japanese philosophy.

PHIL 210. Current Ethical Issues (5). Contemporary ethical theories from diverse traditions applied to current ethical problems. Recent ethical approaches to euthanasia, abortion, capital punishment, affirmative action, and environmental concerns.

PHIL 298. Special Topics (1-6).

PHIL 299. Seminar (1-5).

PHIL 302. Ethics (5). Man as moral agent; nature of moral decision; ethical theories; their relevance to moral practice.

PHIL 303. Aesthetics (5). Aesthetic object and its qualities, the aesthetic experience, and evaluation of works of art.

PHIL 304. Business Ethics (5). Ethical problems that arise in contemporary business practices and the relevance of recent ethical theory to these problems.

PHIL 305. Philosophy of Religion (5). Fundamental assumptions and issues in religious activity and thought; types of religious philosophy.

PHIL 306. Environmental Ethics (5). An examination of various positions on the human relationship with the natural environment, from ancient and contemporary, western and non-western, as well as interdisciplinary perspectives. Prerequisite: sophomore standing or above.

PHIL 308. Medical Ethics (5). Explores ethical issues arising in a medical context, such as the allocation of scarce medical resources and health care, patient confidentiality, advance directives, human experimentation, and physician-assisted suicide.

PHIL 320. American Indian Philosophy (5). The course examines philosophy indigenous to North America through native and non-native historical and contemporary sources; explores the interplay of native and nonnative philosophical concepts and the influence of indigenous American roots on contemporary American philosophy. AIS 320 and PHIL 320 are equivalent courses; students may not receive credit for both.

PHIL 324. Philosophy and Science Fiction (5). Covers issues in analytic philosophy via examination of science fiction works. Topics may include skepticism, free will, personal identity, artificial intelligence, machine ethics, transhumanism, genetic engineering and time travel.

PHIL 325. Women and Philosophy (5). An examination of what the history of philosophy has claimed about the significance of gender with particular attention to the characterization of women in those texts and the impact of this history on contemporary thought.

PHIL 345. Chinese Philosophy (5). Selected philosophical topics in Chinese literature.

PHIL 348. Social and Political Philosophy (5). An examination of the philosophical foundations of major modern social and political systems such as classical conservatism, liberalism, socialism, fascism, and anarchism.

PHIL 351. Medieval Philosophy (5). Latin, Arabic, and Jewish traditions.

PHIL 352. Western Philosophy I: Ancient Greek Philosophy (5). Offers an overview of ancient Greek philosophy from the pre-Socratic period up to and including the Hellenistic period.

PHIL 353. Western Philosophy II: Rationalism and Empiricism (5). A study of

some of the influential philosophies of the 17th and 18th centuries; Descartes, Spinoza, Leibniz, Locke, Berkeley, Hume, and Kant.

PHIL 354. Western Philosophy III: Kant and the 19th Century (5). A study of European philosophers from the late 18th and 19th centuries. The course focuses on primary texts from such philosophers as Kant, Hegel, Marx, Kierkegaard, and Nietzsche.

PHIL 355. Contemporary Thought (5). 20th century; James, Russell, Whitehead, Dewey, Ayer, Sartre, and Jaspers.

PHIL 356. American Philosophies (5). Examines the development of American philosophies from the Colonial period to the present, including African American, Native American, Latin American philosophies, American pragmatism, transcendentalism, American feminism, and others.

PHIL 357. Race, Class, and Gender: Philosophical Perspectives (5). An examination of historical and contemporary writings that address issues of race, ethnicity, class, gender, and sexual orientation from philosophical perspectives.

PHIL 358. Existentialism (5). Kierkegaard, Nietzsche, Marcel, Heidegger, Jaspers, and Sartre.

PHIL 359. Mysticism (5). An analysis of the strange and the uncanny in human experience, and of the attendant claims regarding the transcendent implications of these phenomena.

PHIL 361. Theory of Knowledge (5). A critical study of contemporary analytic epistemology. Topics may include belief, evidence, and perception; skepticism and justification; a priori knowledge; induction; knowledge of other minds; the ethics of belief; truth and relativism.

PHIL 364. Philosophy of Mind (5). A critical study of contemporary analytic philosophy of mind. Topics may include dualism, materialism, functionalism, consciousness, intentionality and representation, the computational theory of mind, artificial intelligence, and animal minds.

PHIL 376. Contemporary Religious Thought (5). An examination of recent and contemporary writings which reflect the "religious condition" in contemporary western culture. Readings will be chosen from such writers as Nietzsche, Kierkegaard, Freud, Marx, Sartre, Marcel, Buber, Bonhoeffer, Maritain, Dewey, the Niebuhrs, Tillich, Whitehead, and Teilhard de Chardin.

PHIL 378. Philosophy of Love (5). A study of various concepts of love as they occur in philosophy, literature, and other cultural expressions. The nature of romantic love, eros, agape, friendship, and fellow feeling will be discussed. Prerequisite: sophomore standing or above.

PHIL 379. Philosophy of Music (3). Great music as a source of insights into human beings and the world. PHIL 379 and MUS 379 are equivalent courses; students may not receive credit for both.

PHIL 380. Philosophy of Science (5). A critical study of the aims, structure, and methodology of the sciences. Topics covered may include explanation, prediction, induction, theories, scientific realism, empiricism, laws, and confirmation.

PHIL 402. Ethics and Film (5). An examination of ethical theories and themes in film, including the ethics of filmmaking. Films will be selected from a wide range of possibilities, including foreign productions.

PHIL 459. Phenomenology (5). A historical and critical study of phenomenology as a philosophic method. Leading phenomenologists such as Husserl, Scheler, and Merleau-Ponty.

PHIL 465. Advanced Ethics (5). Contemporary ethical theory. Ethical disagreement, moral truth, value concepts, moral reasoning, normative sentences.

PHIL 488. Junior Seminar (5). Intensive study of selected philosophical theories, movements, or figures. May be repeated up to 10 credits under a different title. Prerequisite: student must be a philosophy major with junior or senior standing.

PHIL 490. Cooperative Education (1-12). An individualized, contracted field experience with business, industry, government, or social service agencies. This contractual arrangement involves a student learning plan, cooperating employer supervision, and faculty coordination. May be repeated for credit. Grade will either be S or U. By permission.

PHIL 494. Undergraduate Thesis Preparation (2). Preparation for writing undergraduate thesis. By permission. Prerequisite: advanced standing

PHIL 495. Undergraduate Thesis (3). Produce an original substantive thesis-driven paper based on independent research. By permission. Prerequisites: PHIL 494 and advanced standing.

PHIL 496. Individual Study (1-6).

PHIL 498. Special Topics (1-6).

PHIL 499. Seminar (5).

Religious Studies Courses

RELS 101. World Religions (5). Survey of the major world religions (Judaism, Christianity, Islam, Hinduism, Buddhism, Confucianism, Daoism), including their tenets, practices, and evaluation of the human condition. This is a General Education writing course-Arts and Humanities-Philosophies and Cultures of World.

RELS 201. Sacred Books of the World (5). Comparative study of religious thought and literature from eastern and western classics: Upanishads, Bhagavad-Gita, Dhammapada, Tao Te Ching, Hebrew Bible, New Testament, Koran.

RELS 301. Man in Religious Thought (5). Human existence as perceived by religious thinkers, both classical and contemporary, in the Judaic, Christian, Hindu, Buddhist, Taoist, and Confucian traditions.

RELS 320. American Indian Spirituality (5). Introduction to American Indian spirituality

with emphasis on myths, rituals, and beliefs and including historical, economic, political and legal issues that influence the ways of American Indian spiritual practice; Ghost Dance, Native American Church, etc. AIS 321 and RELS 320 are equivalent courses; students may not receive credit for both.

RELS 351. Religions of China and Japan (5). Historical development of Daoism, Confucianism, Shinto, and East Asian Buddhism within China and Japan, from their origins to the present. Analysis of beliefs, practices, symbols, and institutions.

RELS 352. Religions of India (5). Historical development of Hinduism, Buddhism, Sikhism, and Jainism within India, from their origins to the present. Analysis of beliefs, practices, symbols, and institutions.

RELS 353. Judaism and Islam (5). Historical development of Judaism and Islam, from their origins to the present. Analysis of their beliefs, practices, symbols, institutions, and interaction with one another.

RELS 354. Christianity (5). Historical development of Christianity, from its origins to the present. Analysis of beliefs, practices, symbols, and institutions.

RELS 363. Yoga (5). History, philosophy, and psychology of yoga in India, China, and America. Postures, breathing, meditation, and parallel western techniques.

RELS 376. Contemporary Religious Thought (5). Explores the nature of post-modern and/or contemporary philosophic, as well as religious thought, west and east, related to such topics as the nature of religion, the idea of God, the problem of evil, inter-religious dialogue, and religious pluralism.

RELS 398. Special Topics (1-6).

RELS 401. The Daoist Tradition (5). An examination of the textual and cultural tradition associated with Daoism, China's indigenous high religion.

RELS 402. Religion and Film (5). An examination of religious themes in film, including the portrayal of specific religious traditions and sacred narratives. Films will be selected from a wide range of possibilities, including foreign productions.

RELS 410. The Legacy of the Hebrew Bible (5). A multi-disciplinary exploration of the Hebrew Bible, seeking to understand both the Bible's influence on and perception in a variety of disciplines (e.g. art, literature, music, film).

RELS 411. Lost Books of the Bible (5). An examination of the origin, content, and ideology of Jewish Hellenistic and Intertestamental literature excluded in the canons of the Hebrew Bible/Old Testament or New Testament. Prerequisites: RELS 201 or RELS 353 or RELS 410.

RELS 453. The Holocaust - A Quest for Meaning (5). Explores the historical, religious, and philosophical dimensions of the Holocaust experience, drawing on Holocaust and post-Holocaust expression (survivor memoirs, literature, art, music).

RELS 490. Cooperative Education (1-12). An individualized, contracted field experience with business, industry, government, or

social service agencies. This contractual arrangement involves a student learning plan, cooperating employer supervision, and faculty coordination. May be repeated. Grade will either be S or U. By permission.

RELS 491. Workshop (1-6).

RELS 494. Undergraduate Thesis (2). Preparation for writing undergraduate thesis. By permission. Prerequisite: advanced standing.

RELS 495. Undergraduate Thesis (3). Produce an original substantive thesis-driven paper based on independent research. By permission. Prerequisite: RELS 494 and advanced standing.

RELS 496. Individual Study (1-6).

RELS 498. Special Topics (1-6).

RELS 499. Seminar (3-5).

PHYSICAL EDUCATION, SCHOOL AND PUBLIC HEALTH DEPARTMENT

College of Education and Professional Studies
Ellensburg
Dorothy Purser Hall, room 101

509-963-1911

Fax: 509-963-1848

www.cwu.edu/~pesph/

See website for how these programs may be used for educational and career purposes.

Faculty and Staff

Chair

Kenneth Briggs, EdD

Professors

Kenneth Briggs, EdD, health education, pedagogy

Stephen C. Jefferies, PhD, physical education, pedagogy

Melody Madlem, PhD, public health, health education

Kirk Mathias, EdD, physical education, pedagogy

Robert McGowan, PhD, sport and exercise psychology

Associate Professor

Heidi Henschel Pellett, EdD, physical education, pedagogy

Assistant Professors

Jennifer Lehmbeck, MPH, PhD, public health, health education

Rebecca Pearson, MPH, PhD, public health, health education

Mark Perez, PhD, school health, pedagogy

Richard Unruh, EdD, athletic administration

P. Stefan Ward, PhD, physical education, pedagogy

Therese Young, MA, physical education, dance

Vanessa Harbor, PhD, public health

Lecturers

Kristine Espinoza, MS, health education, pedagogy

Emeritus Professor

Gary Frederick, EdD, physical education
 Andrew P. Jenkins, PhD, health education
 Robert McGowan, PhD, sport and psychology

Staff

Rhonda Busch-Gehlen, assistant to the chair
 Joy Chrismer, NPAV building coordinator, equipment manager
 Debra D'Acquisto, activity program coordinator
 Edie Fowler, PESPH department manager
 Debbie Nethery, pool manager

Department Information

The mission of the Department of Physical Education, School and Public Health (PESPH) is to promote health and active lifestyles. The vision of the Department is to create highly recognized and respected academic programs in which students gain the knowledge, skills, and dispositions to be successful in their profession. This mission and vision and the following core values help to guide program decisions within the department:

- Professional environment based on ethical behavior, respect, and integrity
- Quality of life through health promotion, healthy communities, and active lifestyles
- Student focused learning environment based on respect, relevance, and rigor
- Social justice and diversity

Proudly, graduates of each major program in the department are highly qualified to enter careers in physical education and school health or public health.

Departmental Programs

Physical Education and School Health (PESH) Major
 Physical Education – Coaching Minor
 Physical Education – Dance Minor
 Physical Education – Dance: Teaching Minor
 Physical Education – Activity Program
 Public Health Major – Community Health Specialization
 Public Health Major – Pre-nursing in Public Health Specialization
 Public Health – Community Health Education Minor

Bachelor of Science

Physical Education and School Health (PESH)

Program Director

Hedi Henschel Pellett, EdD

Program Advisors

Kenneth Briggs, EdD, health education, pedagogy
 Stephen C. Jefferies, PhD, physical education, pedagogy

Heidi Henschel Pellett, EdD, physical education, pedagogy
 Kirk Mathias, EdD, physical education, pedagogy
 Mark Perez, EdD, health education, pedagogy
 P. Stefan Ward, PhD, physical education, pedagogy

This major satisfies the Washington State endorsement for K-12 health/fitness.

Admission Description and Requirements

Students may enter the physical education and school major in either the fall or winter quarters. Students planning to enter this dynamic and innovative pedagogically oriented program need to meet with the program director prior to admission. This program coupled with teacher education requirements is designed to satisfy the Washington State Teaching Endorsement requirements to teach K-12 health and fitness. The following additional requirements also apply:

1. Classes in this major are organized over six consecutive quarters and must be taken in sequence.
 2. Students who receive less than a C grade in any class that is a prerequisite for others will not be permitted to continue in the major.
 3. Students taking this major who plan to teach in Washington State public schools are required to complete the Professional Education Program requirements offered through the Teacher Preparation program in the College of Education and Professional Studies.
 4. Students may also graduate with a nonteaching BS degree in physical education and school health.
 5. All students must complete a professional portfolio prior to beginning student teaching. Non-teaching majors must complete the portfolio prior to graduation.
 6. Professional dress requirements apply to many classes in this major. Students must comply with these requirements to participate in the program.
- See the physical education, school and public health website for more information: www.cwu.edu/~pesph.

For the major application procedure, contact the physical education and school health program director.

Required Courses

EMS 245 - First Aid	3
EXSC 250 - Anatomical Kinesiology	5
EXSC 463 - Pediatric Issues in Exercise Science	5
HED 101 - Health Essentials	4
HED 210 - Drugs and Health	3
HED 326 - Human Diseases	5
HED 345 - School Health Curriculum Materials	3
HED 387 - Principles of Stress Management	3
HED 422 - Methods for Health Promotion	4
HED 444 - Professionalism in the Schools	2

NUTR 101 - Introduction to Human Nutrition	5
PESH 280 - Foundations of School Health and Fitness	4
PESH 335 - PE Teaching Practicum I	1
PESH 336 - PE Teaching Practicum II	2
PESH 341 - Characteristics of Effective Physical Education Teaching	3
PESH 342 - Developmental Movement	4
PESH 343 - Pedagogical Application of Teaching Styles and Systematic Reflection	3
PESH 344 - Applications of Technology in Teaching Fitness and Physical Activity	3
PESH 348 - Applications of the Fundamental Movement of Striking	3
PESH 350 - Propulsive and Receptive Skills and Sports	4
PESH 356 - Techniques of Progressive and Lifelong Physical Activities	3
PESH 385 - Health and Physiological Fitness Concepts for Teachers	3
PESH 437 - PE Teaching Practicum III	2
PESH 438 - PE Teaching Practicum IV	3
PESH 445 - Curriculum Development and Assessment in Physical Education	3
PESH 456 - Facilitating and Leading Adventure Activities	2

Total Credits: 85

Physical Education Dance Minor

Program Coordinator

Therese Young, MA

The dance minor is designed for students who wish to broaden their academic background and receive a well-rounded dance education, thus preparing them to teach dance and/or dance activities in a wide variety of settings.

Students will be required to complete both coursework and technique classes in those areas of dance frequently taught in a K-12 setting. Additionally, students will develop competencies in choreography, rhythmic concepts, dance production, and teaching.

Requirement: minimum of one-year active membership in Orchestis Dance Company.

Required Courses

PED 101 - Modern Dance I	2
PED 102 - Modern Dance II	2
PED 103 - Modern Dance III	2
PED 104 - Ballet I (Level 1)	2
PED 105 - Ballet I (Level 2)	2
PED 106 - Ballet I (Level 3)	2
PED 116 - Beginning Folk Dance	1
PED 135 - Ballroom Dance I	1
PED 161 - Cultural History of Dance	4
PED 211 - Music for Dance - Rhythms and Resources	2
PED 302 - Dance Production	3
PED 309 - Teaching Methods: Recreational Dance	3
PED 314 - Dance for Children	3

Total Credits: 29

Physical Education Dance: Teaching Minor

Program Coordinator
Therese Young, MA

Requirement: minimum of one-year active membership in Orchesis Dance Company. This minor satisfies the endorsement for dance.

Required Courses

EXSC 250 - Anatomical Kinesiology	5
PED 101 - Modern Dance I	2
PED 102 - Modern Dance II	2
PED 103 - Modern Dance III	2
PED 104 - Ballet I (Level 1)	2
PED 105 - Ballet I (Level 2)	2
PED 106 - Ballet I (Level 3)	2
PED 116 - Beginning Folk Dance	1
PED 135 - Ballroom Dance I	1
PED 161 - Cultural History of Dance	4
PED 211 - Music for Dance - Rhythms and Resources	2
PED 301 - Choreography	3
PED 302 - Dance Production	3
PED 309 - Teaching Methods: Recreational Dance	3
PED 314 - Dance for Children	3
PED 315 - Teaching Methods: Modern and Ballet Dance	3

Total Endorsement Credits: 40

Physical Education Coaching Minor

Program Coordinator
Heidi Henschel Pellett, EdD

It is recommended for students to obtain state teaching certification for permanent employment coaching opportunities.

The coaching minor meets the standards of the Washington Interscholastic Athletic Association (WIAA) regarding recommended standards for employment at the Preferred Coach Level. Requirements (Item 23.4.1, WIAA Handbook) for all levels listed below.

These levels are:

- Beginning Coach
- Experienced Coach
- Preferred Coach

Required Courses

EMS 245 - First Aid	3
EXSC 250 - Anatomical Kinesiology	5
EXSC 348 - Prevention and Treatment of Athletic Injuries	4
EXSC 351 - Scientific Foundations of Health and Fitness	5
HED 205 - Drugs and Sport	2
PE 346 - Administration of Athletics	3
PE 365 - Foundations of Coaching	3
PE 448 - Ethics in Sports	3
PE 453 - Psychological and Sociological Foundations of Coaching	3

Electives 6
Select a minimum of 6 credits from the following:

- PE 321 - Football Coaching (3)

- PE 322 - Wrestling Coach (3)
- PE 323 - Basketball Coaching (3)
- PE 324 - Track Coaching (3)
- PE 325 - Baseball Coaching (3)
- PE 326 - Theory of Coaching Soccer (3)
- PE 329 - Tennis Coaching (3)
- PE 330 - Volleyball Coaching (3)
- PE 442 - Field Work in Physical Education (3)
- PE 521 - Advanced Football Coaching (3)
- PE 523 - Advanced Basketball Coaching (3)
- PE 524 - Advanced Track Coaching (3)
- PE 525 - Advanced Baseball Coaching (3)

Total Credits: 37

Public Health Education Program

Program Director
Melody Madlem, PhD

Advisors

Vanessa Harbour, PhD
Jennifer Lehmbeck, MPH, PhD
Melody Madlem, PhD
Rebecca Pearson, MPH, PhD

Program Information

The mission of the Public Health Education Program at Central Washington University is to create an atmosphere of mutual respect, resulting in a positive impact on the health of individuals, groups, communities, and the world at large.

The program student-centered and evidence-based prepares professionals to plan, implement, and evaluate innovative strategies that promote social justice, health and well-being for individuals, groups, communities, and the world at large.

Faculty members of the Public Health Education Program share an essential passion, embodied in our roles as teachers and life-long learners, to serve the needs of our students. We are committed to the following values:

- Healthy people in healthy communities
- Professionalism: ethics, honesty, respect, and integrity
- Commitment to learning: relevance, rigor, collaboration, and collective wisdom
- Diversity of ideas, people, and cultures

Students in this program major in public health and must specialize in either community health education or pre-nursing in public health. Please contact the program director for an application.

Bachelor of Science Public Health Major

Students who major in public health are trained to be at the leading edge of prevention and health promotion. Specializing in either community health education or pre-nursing in public health, students are prepared to

work with individuals, groups, or entire communities on a myriad of population-based health issues.

Special requirements other than departmental: HED 230 must be taken prior to HED 422, HED 230 and HED 310 must be taken prior to HED 475.

Public Health Core Requirements

HED 210 - Drugs and Health	3
HED 230 - Foundations of Health Education	3
HED 310 - Community Health	3
HED 317 - International Health	3
HED 320 - Environmental Health Education	3
HED 330 - Health Assessment	4
HED 370 - Current Trends in Health and Health Education	3
HED 387 - Principles of Fitness and Stress Management	3
HED 422 - Methods for Health Promotion	4
HED 445 - Health Education Professionalism	1
HED 450 - Community Organization and Coalition Development	3
HED 471 - Program Planning I	5
HED 472 - Program Planning II	5
HED 473 - Health Education Program Evaluation	3
HED 475 - Community Health Administration	3
HED 490 - Cooperative Education	10
NUTR 101 - Introduction to Human Nutrition	5

Total Core Credits: 64

Community Health Education Specialization

The community health education specialization (CHED) will prepare students to assess, plan, implement, and evaluate health programs that are designed to improve quality of life for all. Emphasis is placed on population health and the myriad of influencing factors as they relate to community. Students are encouraged to complete the Comprehensive Health Education Specialist (CHES) exam upon completion of the program.

Required Courses

Public Health Core Requirements	64
FS 337 - Human Sexuality	4
HED 209 - Consumer Health	3
HED 323 - Infectious Disease	3
HED 324 - Noninfectious Disease	4
HED 340 - Technological Applications in Health Education	3
HED 380 - Epidemiology	3
HED 440 - Social Marketing of Health Education Programs	3
HED 460 - Controversial Issues in Health Education	3
Department-approved electives	9

Total Credits: 99

Pre-nursing in Public Health Specialization

The pre-nursing in public health specialization within the public health major prepares students to meet entrance requirements to bachelor of science in nursing (BSN) programs throughout Washington. Armed with leading-edge scientific knowledge and liberal arts content, combined with an extensive public health internship, the pre-public health nursing specialization allows future professionals to enter nursing school with a solid background in public health theory and practice. CWU does not offer a degree program in nursing, but offers all prerequisite courses necessary for successful admission to professional nursing programs available across Washington.

Most pre-nursing students will complete the BS degree in public health with a specialization in pre-nursing in public health. The specialization also prepares students to assume key roles within public health agencies as health promotion specialists/prevention specialists. With a comprehensive background in population-based health, graduating students can make immediate contributions to the health of the public.

Prerequisites for admission to nursing school that meet General Education Requirements for pre-nursing specialization: SOC 101 or 107 or 205, PSY 101; CHEM 111 and CHEM 111LAB, BIOL 201.

Required Courses

Public Health Core Requirements	64
BIOL 220 - Introductory Cell Biology	5
BIOL 322 - Introductory Microbiology	5
BIOL 355 - Human Anatomy and Physiology	5
BIOL 356 - Human Anatomy and Physiology	5
CHEM 112 - Introduction to Organic Chemistry	4
CHEM 112LAB - Introduction to Organic Chemistry Laboratory	1
CHEM 113 - Introduction to Biochemistry ..	4
CHEM 113LAB - Introduction to Biochemistry Laboratory	1
MATH 311 - Statistical Concepts and Methods	5
PSY 313 - Developmental Psychology	4

Total Credits: 103

Community Health Education Minor

The minor in community health education is an excellent supporting option for individuals interested in the health and human services fields. Students will gain insight into public health processes and settings, skills in needs assessment, program planning, and program evaluation.

Required Courses

HED 230 - Foundations of Health Education	3
HED 310 - Community Health	3
HED 323 - Infectious Disease	3
HED 324 - Noninfectious Disease	4
HED 422 - Methods for Health Promotion ..	4
HED 460 - Controversial Issues in Health Education	3
HED 471 - Program Planning I	5
HED 472 - Program Planning II	5

Total Credits: 30

Dance Performance Minor

Program Director

Therese Young

The dance performance minor is an interdisciplinary minor administered jointly by the dance and theatre arts faculty designed for students who wish to broaden their academic background and receive a well-rounded dance education, thus preparing them in the area of dance performance in a wide variety of settings. Students will develop competencies in choreography, rhythmic concepts, and dance production.

Requirement: Minimum of one year active membership in *Orchesis Dance Company* and PED 112.

Required Courses

PED 102 - Modern Dance II	2
PED 103 - Modern Dance III	2
PED 112 - Dance Rehearsal and Performance (1)	3
Repeated for 3 credits	
PED 142 - Jazz Dance II	1
PED 143 - Jazz Dance III	1
PED 161 - Cultural History of Dance	4
PED 204 - Ballet II (Level 1)	2
PED 205 - Ballet II (Level 2)	2
PED 206 - Ballet II (Level 3)	2
PED 211 - Music for Dance - Rhythms and Resources	2
PED 301 - Choreography	3
PED 302 - Dance Production	3
OR	
TH 301 - Production Application (3)	

Choose any of the following for a minimum of 10 credits 10

PED 116 - Beginning Folk Dance (1)
PED 121 - Tap I (1)
PED 122 - Tap II (1)
PED 135 - Ballroom Dance I (1)
PED 136 - Ballroom Dance II (1)
PED 138 - Swing Dance I (1)
PED 139 - Swing Dance II (1)
TH 252 - Stage Dance (2)
TH 353 - Stage Dance II (3)

Total Credits: 37

Physical Education Courses

- PE 298. **Special Topics** (1-6).
 PE 321. **Football Coaching** (3).
 PE 323. **Basketball Coaching** (3).
 PE 324. **Track Coaching** (3).
 PE 325. **Baseball Coaching** (3).

PE 326. **Theory of Coaching Soccer** (3). This course provides an in-depth examination of the coaching of soccer at all school age levels. May be repeated up to 6 credits.

PE 330. **Volleyball Coach** (3).

PE 334. **Physical Education Activities for the Elementary School** (3). Selection, organization, and presentation of physical education activities in the elementary school. Prerequisite: conditional or full admission to the Teacher Preparation Program.

PE 346. **Administration of Athletics** (3).

PE 365. **Foundations of Coaching** (3).

Introduction to principles and methods of coaching sports with children and youth.

PE 398. **Special Topics** (1-6).

PE 442. **Field Work in Physical Education**

(1-6). Class to be arranged by college supervisor. May be repeated for credit. Grade will either be S or U.

PE 448. **Ethics in Sports** (3). Ethical considerations involved in coaching, playing, and administering sports.

PE 453. **Psychological and Sociological Foundations of Coaching** (3). Investigation of factors affecting individual and group behavior in the coaching of interscholastic sports.

PE 484. **Legal Liability and Risk**

Management (3). Aspects of personnel law and premises liability in public, private, and not-for-profit education, human, and social services organizations. Procedures for managing risks. PE 484 and RT 484 are equivalent courses; students may not receive credit for both. Prerequisites: student must either be an HHPR graduate, or be admitted to either the recreation and tourism management or physical education major.

PE 491. **Workshop Clinic** (1-6). Letter grades or S or U grades may be given at the option of the Department of Physical Education. May be repeated for credit.

PE 496. **Individual Study** (1-6).

PE 498. **Special Topics** (1-6).

PE 499. **Seminar** (1-5).

Physical Education Health Courses

PESH 280. **Foundations of Physical**

Education and School Health (4).

Fundamental issues, theories, paradigms, constructs, history, and experiences necessary for an understanding of teaching health and physical education as a profession and lifestyle.

PESH 335. **Practicum 1** (1). Students will observe and assist in PE classes at elementary and secondary levels in a local school for four hours a week throughout the quarter. Prerequisites: PESH 280 and admission to the physical education major.

PESH 336. **Practicum 2** (2). Physical education teaching practicum. Prerequisites: PESH 280 and PESH 335 and admission to the physical education major.

PESH 341. Characteristics of Effective

Physical Education Teaching (3). Examination of selected pedagogical principles and their impact on the teaching of human movement. Prerequisite: PESH 280.

PESH 342. Developmental Movement (4).

Instruction in the analysis and teaching of movement concepts, locomotor, and non-locomotor skills. Prerequisite: PESH 280.

PESH 343. Pedagogical Application of Teaching Styles and Systematic Reflection

(3). The purpose of this course is to expand your already-developed effective teaching skills and knowledge to include styles of teaching and systematic analysis. Prerequisites: PESH 341 and 342.

PESH 344. Applications of Technology in Teaching Fitness and Physical Activity

(3). Introduces students to the plethora of technological advances being used to teach children about their health. Corequisite: PESH 341. Prerequisite: PESH 280.

PESH 348. Applications of the Fundamental Movements of Striking (3).

Identify critical components of striking skills and applicable sports. Prerequisites: PESH 280, 341, 342, 343, and 344.

PESH 350. Propulsive and Receptive Skills and Sports (4).

Identify critical components of selected manipulative movements and related sports. Prerequisites: PESH 280, 341, 342, and 343.

PESH 356. Teaching Lifelong Physical

Activity Pursuits (3). Introduces students to methodology related to teaching nontraditional activities in traditional and nontraditional settings. Prerequisites: PESH 280, 341, and 342.

PESH 385. Health and Physiological

Fitness Concepts for Teachers (3). This class is designed to provide health and physical education to pre-service teachers; physiological information with an emphasis on application, and its direct implications on teaching K-12 students.

PESH 437. Practicum III (2).

Physical education teaching practicum. Prerequisites: PESH 280, 335, and 336.

PESH 438. Practicum IV (3).

Physical education teaching practicum. Prerequisites: PESH 280, 335, and 336.

PESH 445. Curriculum Development and Assessment in Physical Education (3).

Examination of specific pedagogical principles and their impact on the teaching of human movement. Prerequisites: PESH 341, 342, and 343.

PESH 456. Facilitating and Leading

Adventure Activities in the Schools (2). Identify critical components of selected outdoor pursuits and circus arts activities. Prerequisites: PESH 280, 341, 342, 343, 356, and 350.

Aquatics Courses**PEAQ 110. Springboard Diving (1).****PEAQ 111. Beginning Swimming (1).****PEAQ 112. Intermediate Swimming (1).**

Prerequisite: must be able to swim 50 yards.

PEAQ 113. Advanced Swimming (1).

Refinement of standard strokes and dives. Refinement of standard strokes and dives. Prerequisite: ability to swim 200 yards continuously, employing at least three strokes.

PEAQ 114. Swim Conditioning (1).

Prerequisite: must be an intermediate swimmer.

PEAQ 116. Water Polo (1).

Prerequisite: must be an intermediate swimmer.

PEAQ 118. Aquacises (1).

Designed to increase the physical fitness of individuals through water exercises and jogging. Open to both swimmers and non-swimmers. May be repeated for credit.

PEAQ 120. Advanced Springboard Diving

(1). Advanced diving is designed to further the students' knowledge and skill in springboard diving. Students will perform dives of varying degrees of difficulty. Prerequisite: PEAQ 110.

PEAQ 198. Special Topics (1).**PEAQ 221. Lifeguard Training (3).**

American Red Cross-approved course for which certification may be granted. The course will include rescue technique, preventative lifeguarding, and conditioning. Two hours lecture and one hour laboratory per week.

PEAQ 222. Lifeguard Training Instructor (4).

Certify students to teach the American Red Cross Basic Water Safety course, Emergency Water Safety course, lifeguard training and lifeguard training review. One hour lecture; two hours laboratory per week.

Dance Courses**PED 101. Modern Dance I (2).**

Basic modern dance techniques and beginning composition. One hour lecture; two hours laboratory per week.

PED 102. Modern Dance II (2).

Four hours of intermediate modern dance theory and technique. Experience in solo and group compositions. Prerequisite: PED 101.

PED 103. Modern Dance III (2).

Four hours of advanced modern dance theory and techniques. Emphasis on performance and solo composition. Experience in organizing and presenting programs. Prerequisite: PED 102.

PED 104. Ballet I (Level 1) (2).

Beginning technique in classical ballet, including barre, center work, and enchainments (center combinations).

PED 105. Ballet I (Level 2) (2).

Intermediate technique in classical ballet including barre, center work, and enchainments (center combinations). Prerequisite: PED 104.

PED 106. Ballet I (Level 3) (2).

Advanced technique in classical ballet including barre, center work, and enchainments (center combinations). Prerequisite: PED 105.

PED 112. Dance Rehearsal and Performance

(1). Open to individuals participating in performances of Orchestis Dance Company. May be repeated for credit.

PED 116. Beginning Folk Dance (1).

Traditional recreational dances of various countries.

PED 121. Tap Dance I (1).**PED 130. Beginning Yoga (1).**

PED 131. Yoga Level II (1). This class will review and refine techniques learned in the beginning yoga class, as well as further discussion and practice of yoga postures and other topics related to yoga. Prerequisite: PED 130.

PED 135. Ballroom Dance I (1).

Emphasis on the ballroom styling of the foxtrot and waltz. Repeatable to a maximum of 3 credits.

PED 136. Ballroom Dance II (1).

Emphasis on the tango and cha cha. Prerequisite: PED 135.

PED 138. Swing Dance I (1).

Emphasis on ballroom dances of East Coast swing, charleston, and lindy hop. May be repeated for credit.

PED 139. Swing Dance II (1).

Emphasis on West Coast swing, continued work on charleston and lindy hop. May be repeated up to 3 credits. Prerequisite: PED 138.

PED 141. Jazz Dance I (1).

PED 142. Jazz Dance II (1). Prerequisite: PED 141.

PED 143. Jazz Dance III (1).

Advanced level jazz dance technique.

PED 161. Cultural History of Dance (4).

A survey course in the evolution of dance through the ages with emphasis on the major forces that have influenced dance in the 20th century.

PED 198. Special Topics (1-6).

PED 204. Ballet II (Level 1) (2). Continued training in classical ballet techniques (Level II) including barre and center work. Increased emphasis on beats, multiple turns, and jumps. May be repeated for credit. By permission. Prerequisite: PED 106.

PED 205. Ballet II (Level 2) (2). Continued training in classical ballet technique (Level II) including barre and center work. Increased emphasis on beats, multiple turns, and jumps. May be repeated for credit. By permission. Prerequisite: PED 204.

PED 206. Ballet II (Level 3) (2). Continued training in classical ballet techniques (Level II) including barre and center work. Increased emphasis on beats, multiple turns, and jumps. May be repeated for credit. By permission. Prerequisite: PED 205.

PED 211. Music for Dance - Rhythms and Resources (2). A study of rhythmic concepts as related to dance movements and composition; an introduction to music resources emphasizing composer/choreographer collaborations. Prerequisite: PED 101.

PED 212. Choreography and Production (2). Choreography and production work for Orchestis Dance Company. May be repeated for credit. By permission.

PED 301. Choreography (3). The study and practice of choreographic techniques and tools utilizing creative problem solving.

Students will meet for two hours laboratory work each week plus two hours lecture. Prerequisite: PED 101.

PED 302. Dance Production (3). Aspects of organizing and mounting a dance production, including scheduling, programming, publicity, costuming, lighting, and sound design.

PED 309. Teaching Methods: Recreational Dance (3). Knowledge of skills necessary in the teaching of various forms of recreational dance styles. Two hours lecture and two hours laboratory per week. Prerequisite: PED 116.

PED 314. Dance for Children (3). Strategies for teaching dance in elementary education, including creative dance, rhythmic exploration, use of props, unit plan development, and methods of assessment.

PED 315. Teaching Methods: Modern and Ballet Dance (3). Teaching methods for modern and ballet technique classes which emphasizes the development of critical and creative thinking skills, observation skills, and assessment skills. Prerequisites: PED 201A and 201B.

Fitness Activities Courses

One credit (1), meets twice weekly.

PEF 110. Conditioning Exercises (1).

PEF 111. Intermediate Conditioning Exercises (1). Prerequisite: PEF 110.

PEF 112. Ski Conditioning (1).

PEF 113. Weight Training (1).

PEF 114. Intermediate Weight Training (1). Prerequisite: PEF 113.

PEF 115. Jogging (1).

PEF 118. Military Conditioning I (1). Physical conditioning activities designed to prepare the Army ROTC student for Leader Development Assessment course and active military duty. Course is work-out oriented with emphasis on physical fitness goals. Open to all CWU students. Meets three times weekly. May be repeated up to 4 credits.

PEF 119. Military Conditioning II (1). Physical conditioning activities designed to prepare the Army ROTC student for Leader Development Assessment course and active military duty. Course is work-out oriented with emphasis on physical fitness goals. Open to all CWU students. Meets three times weekly. May be repeated up to 4 credits.

PEF 120. Military Conditioning III (1). Physical conditioning activities designed to prepare the Army ROTC student for Leader Development Assessment course and active military duty. Course is work out oriented with emphasis on physical fitness. Open to all CWU students. Meets three times weekly. May be repeated for credit.

PEF 121. Step Aerobics (1).

PEF 122. Dance Fusion (1). Course combines elements of traditional high- and low-impact dance aerobics with zumba, jazz, power yoga, and sport movements into basic combinations.

PEF 123. Aerobic Walking (1). Assessment of present level of cardio respiratory fitness and prescription of an individualized aerobic walking exercise program for increasing and maintaining fitness.

PEF 126. Kick/Box Aerobics (1). Safe, effective aerobic work-out mimicking basic self-defense, and boxing movements.

PEF 128. Glute/Abdominal Conditioning (1). Course emphasizes abdominal conditioning, gluteal toning, and core muscle strengthening in a low impact format. Background music and various equipment is used for an effective workout.

PEF 129. Abdominal Strength Conditioning (1). Course emphasizes strengthening and conditioning the abdominals and core muscles for appearance and for performance. Use of equipment for fun and effectiveness.

PEF 130. Triathlon Training (1).

PEF 131. Frisbee (1). This course encourages positive social interaction, develops eye-hand coordination skills, is recreational, and may be an avenue to encourage students to become more active in a gentle way.

PEF 132. Women's Self Defense (1). A program of realistic self-defense tactics and techniques for women, including education about awareness, prevention, risk reduction, and risk avoidance of violence. May be repeated up to 4 credits.

PEF 140. Stretch and Strengthen with Fit Balls (1). This course combines balance, stretch, and strength training using a variety of soft fitness balls. Dynamic balancing skills will be taught using the BOSU and physioball. Strength and core drills will be taught using medicine balls and sport balls. Prerequisite: FS 234

PEF 198. Special Topics (1).

Individual and Dual Sports Courses

One credit (1), meets twice weekly.

PEID 110. Beginning Badminton (1).

PEID 113. Beginning Bowling (1).

PEID 114. Intermediate Bowling (1). Prerequisite: PEID 113.

PEID 115. Beginning Golf (1).

PEID 116. Intermediate Golf (1). Prerequisite: PEID 115.

PEID 120. Beginning Fencing (1).

PEID 121. Intermediate Fencing (1).

PEID 123. Beginning Tennis (1).

PEID 124. Intermediate Tennis (1).

Prerequisite: PEID 123.

PEID 125. Advanced Tennis (1). Prerequisite: PEID 124.

PEID 128. Beginning Skiing and Snowboarding (1). Beginning skiing and snowboarding is designed to introduce the student to the basic knowledge of skiing and snowboarding techniques with the development of the physical skills necessary to participate safely.

PEID 129. Intermediate Skiing (1). Prerequisite: PEID 128.

PEID 130. Cross Country Skiing (1).

PEID 134. Bicycling (1).

PEID 136. Pickleball (1). Class is designed to introduce student to basic skills, fundamentals, safety procedures and knowledge to participate in pickleball as a life long activity.

PEID 137. Hiking and Orienteering (1).

PEID 138. Karate (1).

PEID 140. Fly Fishing (1).

PEID 145. Beginning Circus Arts (1). Introduction to juggling, unicycling and similar skills involving balance and coordination.

PEID 147. Conceptual Martial Arts (1). This course is designed to introduce students to the techniques and motions of self-defense.

PEID 148. Advanced Martial Arts (1). Course is designed to further challenge students to techniques and motions of self-defense. Develops self-discipline, hand, eye, and foot coordination, and personal awareness. May be repeated up to 12 credits. Prerequisite: PEID 147.

PEID 198. Special Topics (1).

Team Sports Courses

One credit (1), meets twice weekly.

PETS 110. Basketball (1).

PETS 113. Soccer (1).

PETS 114. Softball (Slow Pitch) (1).

PETS 116. Volleyball (1).

PETS 117. Advanced Volleyball (1). Prerequisite: PETS 116.

PETS 120. Table Tennis (1). Table tennis will teach skills used during pair and partner play that will increase the players ability to play faster with more accuracy.

PETS 198. Special Topics (1).

Varsity Sports for Men Courses

One credit (1), two or three hours activity per day plus all regularly scheduled meetings and game sessions. May be repeated for credit.

PEVM 110. Baseball (1)

PEVM 111. Basketball (1)

PEVM 112. Cross Country (1)

PEVM 113. Football (1)

PEVM 117. Track and Field (1)

Varsity Sports for Women Courses

One credit (1), two or three hours activity per day plus all regularly scheduled meetings and game sessions. May be repeated for credit.

PEVW 110. Basketball (1)

PEVW 111. Cross Country (1)

PEVW 116. Track and Field (1)

PEVW 117. Volleyball (1)

PEVW 118. Soccer (1)

PEVW 119. Softball (1)

PEVW 120. Cheerleading (1)

Health Education Courses

HED 101. Health Essentials (4). Fundamental patterns and understanding of human interaction with natural and man made environments intended to help students make informed judgments.

HED 205. Drugs and Sport (2). Survey of the potential hazards of recreational, ergogenic, and restorative drugs commonly used by athletes.

HED 209. Consumer Health (3). Analysis of health aids, cosmetics, non-prescription drugs, health fads, and fallacies. Critical evaluation of advertising and promotional schemes; quackery.

HED 210. Drugs and Health (3). Uses and abuses of drugs. Special emphasis will be on psycho-physiological effects upon human health and responsible drug use.

HED 230. Foundations of Health Education (3). Fundamental theories, paradigms, constructs, history, and experiences necessary for comprehensive understanding of health education as a profession and lifestyle.

HED 296. Individual Study (1-6).

HED 298. Special Topics (1-6).

HED 299. Seminar (1-5).

HED 310. Community Health (3). An overview of contemporary community health programs; problems in community health at the local, national, and international levels.

HED 317. International Health (3). Explores the health status of people within the global community. Explores specific health issues endemic to certain parts of the world and related programs.

HED 320. Environmental Health Education (3). Explores basic environmental health topics that public health educators will use in community settings, including models and theories that encourage community involvement.

HED 322. Pedagogical Foundations of Public Health (3). This course is designed to help students create and deliver dynamic health presentations in a community or public health setting. Students will learn the pedagogy behind presenting a health topic keeping in mind audience inclinations and learning styles.

HED 323. Infectious Disease (3). This course introduces students to the various principles related to the identification, treatment, and prevention of various infectious diseases. Additionally, the

physical, social, psychological, and monetary implications of these infectious diseases in society are addressed.

HED 324. Non-infectious Disease (4). This course introduces students to the various principles related to the identification, treatment, and prevention of various chronic diseases. Additionally, the physical, social, psychological, and monetary effects of these illnesses/ diseases in society are explored.

HED 326. Human Diseases (5). Introduces students to fundamental principles relating to identification, prevention, and control of non-infectious and infectious diseases in contemporary society; emphasis on physical, social, psychological, and environmental issues surrounding these diseases. Prerequisites: PESH 280 and HED 101.

HED 330. Health Assessment (4). Theory and practice of evaluating the health or condition of individuals and groups. Prerequisite: HED 230.

HED 340. Technological Applications in Health Education (3). Assist students in utilizing computerized sources of information, methods of instruction, understand technology applied to training, and a better use of computers for health information resources.

HED 345. School Health Curriculum/ Materials (3). Examination of existing curricula and teaching materials. Design and development of school health curricula. Prerequisites: HED 210 and HED 230.

HED 370. Current Trends in Health and Health Education (3). Contemporary health education topics and issues are explored through classroom and community contacts, visual, web-based, and interactive media. May be repeated up to 6 credits.

HED 380. Epidemiology (3). Prerequisites: HED 323 and HED 324.

HED 387. Principles of Fitness and Stress Management (3). The theory and practice of health enhancement through fitness and stress management.

HED 398. Special Topics (1-6).

HED 412. Health Aspects of Aging (3). Examination of total health as it relates to the aged and the aging process. Prerequisite: HED 101.

HED 422. Methods for Health Promotion (4). Prerequisites: HED 101 and HED 230.

HED 431. Principles of Sexuality Education (3). Principles and content for sex education in school and community settings. HED 431 and FS 431 are equivalent courses; students may not receive credit for both. Prerequisite: FS 337.

HED 440. Social Marketing of Health Education Programs (3). Social marketing theory and practice, health communication strategies, and basic qualitative research methods applied to social marketing theory. Prerequisite: HED 230.

HED 442. Field Work and Experience in Health Education (1-15). Observation and participation in health programs, and/or

HED 101. May be repeated to a maximum of 15 credits.

HED 444. Professionalism in the Schools (2). This course provides an opportunity for the learner to assess and to fine-tune student teaching and job readiness as excellent educators. By permission. Prerequisite: admission to either the physical education or school health education major.

HED 445. Health Education Professionalism (1). Professional ethics, job readiness, and job search in health education. To be taken last two quarters before internship placement senior year. By permission.

HED 446. Health Education Curriculum for Elementary Teachers (3). Examination of available curricula and teaching materials in health education for elementary school teachers. Students must develop an elementary health education curriculum. By permission. Prerequisite: full admission to the teacher education program.

HED 450. Community Organization and Coalition Development (3). Introduction to history, issues, and skills surrounding community organizing and development activities. Prerequisites: HED 230 and senior standing.

HED 460. Controversial Issues in Health Education (3). Current and controversial issues confronting school and community health education. Co- or prerequisite: HED 422. Prerequisite: HED 230.

HED 471. Program Planning I (5). Health program planning; needs assessment, and goal setting. Prerequisite: HED 230.

HED 472. Program Planning II (5). Health program planning; implementation and evaluation. Prerequisite: HED 471.

HED 473. Health Education Program Evaluation (3). Covers basic survey research design and basic quantitative and qualitative research methods. Students will understand the basic skills of program evaluation planning. Prerequisites: HED 471 and 472.

HED 475. Community Health Administration (3). Understanding and application of knowledge to various administrative tasks in community health. Grants, management, and personnel issues will be covered. Prerequisite: HED 472.

HED 490. Cooperative Education (1-12). An individualized, contracted field experience with business, industry, government, or social service agencies. This contractual arrangement involves a student learning plan, cooperating employer supervision, and faculty coordination. May be repeated for credit. Grade will either be S or U. By permission.

HED 491. Workshop (1-6).

HED 492. Practicum (4). Practical experience and application of responsibilities and competencies necessary for practicing health education. Prerequisites: HED 345 or 472.

HED 496. Individual Study (1-6).

HED 498. Special Topics (1-6).

HED 499. Seminar (1-5).



PHYSICS DEPARTMENT

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See website for how these programs may be used for educational and career purposes.

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Bruce Palmquist, PhD, science education

Associate Professor

Michael Braunstein, PhD, nuclear physics,
astronomy

Assistant Professors

Andrew A. Piacsek, PhD, acoustics
Sharon L. Rosell, MS, nuclear physics

Staff

Erin Sargent, secretary
Greg Lyman, instructional and classroom
technician

Department Information Overview

Physics is the study of the universe and its elements—from the interaction of subatomic particles and investigations in nanoscale science, to the motion of everyday objects, to the evolution of galaxies. Physics involves discovering the fundamental rules that describe matter and energy on every scale, hence it is the basic science that underlies all the natural sciences.

Most businesses want people who can analyze complex situations and solve problems. CWU physics majors learn these skills along with computational and electronics skills. The physics curriculum includes theoretical courses as well as laboratory classes and hands-on research that provide the practical training relevant to both graduate school or professional work in science and engineering. Recent acquisitions of state-of-the-art instrumentation in astronomy, acoustical physics, and lasers enrich students' experience in the laboratory and research setting. Students also have the opportunity to participate in programs outside the formal courses offered by participating in the department's award-winning Physics Club and Astronomy Club. The CWU physics program offers a BS degree, a BA degree (which doubles as our teaching degree), and engineering opportunities through our dual-degree physics/engineering program.

Department Standards

All students must meet with the physics chair to map out a four-year plan. The student can then select a faculty advisor. All faculty members are physics major advisors. Most upper-level physics courses are offered every other year. Thus, students who wait too long to meet with an advisor may have their graduation delayed. All physics majors must complete a physics major portfolio.

Honors Designation

The honors designation in physics recognizes the academic excellence of its majors. Students in the department's BA and BS programs are eligible for this designation and all physics majors are urged to consider applying. The honors designation in physics is offered in collaboration with Sigma Pi Sigma, the National Physics Honors Society. Please contact the physics department chair for more information.

Bachelor of Arts Physics Major

(NOTE: Students seeking a BA degree must complete one year college/university study or two years high school study of a single foreign language.)

The BA program is for students wanting a broad liberal arts education with an emphasis in physics. It may be a suitable foundation for students who are planning a career not usually regarded as physics, such as business education, law, medicine, writing, environmental concerns, public safety, or computer programming.

Teaching Endorsement Requirements:

This major satisfies the criteria for an endorsement in physics and qualifies students to teach physics at the high school, middle, or junior high levels. Students taking this major for endorsement are required to complete the Professional Education Program requirements offered through the Department of Educational Foundations and Curriculum. Students completing this program are required to demonstrate proficiency of student learning outcomes through a program portfolio prior to student teaching. In addition to the above requirements, students must pass the WEST-E exam for physics to receive a physics endorsement. Students seeking an endorsement in physics must take SCED 324, SCED 325, SCED 401, and SCED 487 to meet Science Teaching Program competencies. Students should seriously consider working toward endorsement in a second area, such as biology, chemistry, Earth science, middle-level science, middle-level mathematics, mathematics or science.

Required Courses

General Physics 15
PHYS 181, 181LAB, 182, 182LAB,
183, 183LAB

General Chemistry I, II. 10
CHEM 181, 181LAB, 182, 182LAB
Calculus 20
MATH 172, 173, 272, 273
MATH 265 - Linear Algebra I 4
Modern Physics I and II. 8
PHYS 317, 318
PHYS 331 - Laboratory Practices and
Techniques 3
PHYS 333 - Experimental Physics I 3
PHYS 361 - Computational Physics 4
PHYS 363 - Optics 4
PHYS 489 - Senior Assessment 1
PHYS 495 - Undergraduate Research 2
Department-approved electives 9
Must include a department-approved course
sequence (such as PHYS 351/352, PHYS
381/382, PHYS 334/463, SCED324/325/487,
PHYS 474/475 - see your physics major advisor
for details).

Total Credits: 83

Bachelor of Science Physics Major

Those interested in receiving an advanced degree in physics or engineering may choose the BS in physics. The BS degree is designed for individuals planning careers in physics and related technical fields or in areas where knowledge of basic scientific principles is necessary. Depending on math preparation, these students should be able to complete the BS in four years at CWU.

Required Courses

General Physics 15
PHYS 181, 181LAB, 182, 182LAB,
183, 183LAB
General Chemistry I, II. 10
CHEM 181, 181LAB, 182, 182LAB
Calculus 20
MATH 172, 173, 272, 273
MATH 265 - Linear Algebra I 4
MATH 376 - Elementary Differential
Equations I 3
PHYS 317, 318, Modern Physics I, II 8
PHYS 331 - Laboratory Practices and
Techniques 3
PHYS 333 - Experimental Physics I 3
PHYS 342 - Thermodynamics 4
PHYS 351 - Analytical Mechanics I 3
PHYS 352 - Analytical Mechanics II 3
PHYS 361 - Computational Physics 4
PHYS 363 - Optics 4
PHYS 381, 382, 383 - Electromagnetic
Theory I, II, III 12
PHYS 474 - Quantum Mechanics I 4
PHYS 489 - Senior Assessment 1
PHYS 495 - Undergraduate Research 4
Department-approved electives 5

Total Credits: 110

Dual-degree Physics/Engineering Program

This dual-degree program enables a student to receive a baccalaureate degree in physics from CWU and a bachelor of science from an appropriate engineering institution in a respective engineering discipline. The total

length of time for both degrees is expected to be about five years, with approximately three years at CWU (dating from enrollment in MATH 172) and approximately two years at the engineering institution. At CWU, students must complete a minimum of 135 credits, including all general education requirements. Additional courses may be required depending on the specific engineering discipline. Be sure to consult the appropriate dual-degree engineering advisor for details.

In order to receive the baccalaureate degree from CWU, dual-degree students must also complete the remaining credits (to total a minimum of 180 credits) in engineering at the Engineering Institution and transfer these credits to CWU. The remaining credits must include the appropriate number of 300-level or above from the Engineering Institution to satisfy CWU graduation requirements. This transfer of credits and awarding of the baccalaureate degree by CWU can take place as soon as the student earns the necessary credits.

Special Requirements:

Early consultation with the physics department chair is mandatory to ensure that specific additional requirements of particular engineering curricula are also satisfied. It is solely the student's responsibility to apply and gain admission to the Engineering Institution. It is also the individual student's responsibility to submit an official transcript of the work completed after leaving CWU and to request awarding of the baccalaureate degree in physics.

Physics Minor

The physics minor is an excellent complement to a variety of other science majors. It is also ideal for students who want to reinforce a liberal arts major with a technical background.

Special Requirements:

Students taking this minor to obtain a teaching endorsement can receive a teaching endorsement in physics only if the following requirements are met:

- The student is working on an endorsement in biology, chemistry, Earth science, general science (if not the chosen designated science area), or mathematics.
- The student passes the WEST-E exam for physics to receive a physics endorsement.
- The student successfully completes SCED 324 and PHYS 492. SCED 324 requires admission to the Teacher Preparation Program.
- The student demonstrates proficiency of student learning outcomes through a program portfolio prior to student teaching.

Required Courses

General Physics 15
 PHYS 181, 181LAB, 182, 182LAB,
 183, 183LAB

Modern Physics I, II 8
 PHYS 317, 318
 PHYS 333 - Experimental Physics I 3
 MATH 172, 173 - Calculus I, II 10
 Select one of the following: 3-7
 CHEM 381 - Physical Chemistry
 (Thermodynamics) (5) OR
 EET 312 - Basic Electronics (5) OR
 PHYS 331 - Laboratory Practices and
 Techniques (3) OR
 PHYS 342 - Thermodynamics (4) OR
 PHYS 363 - Optics (4) OR
 PHYS 492 - Laboratory Experience in
 Teaching Physics (2)
 AND
 SCED 324 - Science Education in
 Secondary Schools I (3)

Total Credits: 39-43

Astronomy Minor

The astronomy minor is an excellent complement to a variety of other science majors. It is also ideal for students who want to reinforce a liberal arts major with a science background. Astronomy minors may not use any courses in this minor as physics major electives.

Required Courses

Introductory Astronomy of the
 Solar System 9
 PHYS 101, 102
 Introductory or General Physics 15
 PHYS 111, 111LAB, 112, 112LAB,
 113, 113LAB
 OR
 PHYS 181, 181LAB, 182, 182LAB,
 183, 183LAB
 PHYS 301 - Stellar Astrophysics 4
 PHYS 317 - Modern Physics I 4
 MATH 172, 173 - Calculus I, II 10
Select Either 2
 PHYS 492 - Laboratory Experience in
 Teaching Physics (2)
 OR
 PHYS 495 - Undergraduate Research (2)

Total Credits: 44

Physics Courses

PHYS 101. Introductory Astronomy I (5).

An inquiry-based introduction to celestial motions, celestial objects, observational astronomy and the physics associated with each. Emphasis on stars and planets. This is an activity-based lecture/lab course.

PHYS 102. Introductory Astronomy II (4).

An inquiry-based introduction to celestial motions, celestial objects, observational astronomy and the physics associated with each. Emphasis on stars and planets. This is a single activity-based course combined with lecture and lab.

PHYS 103. Physics of Musical Sound

(4). Basic physical principles of sound and vibration; how and why musical instruments produce their sounds. Topics include sound analysis techniques, room acoustics, musical scales, and the perception of sound. Corequisite: PHYS 103LAB.

PHYS 103LAB. Physics of Musical Sound Laboratory (1). Corequisite: PHYS 103.

PHYS 106. Physics Inquiry (5). An introduction to fundamental physics topics in matter, motion, electricity, and magnetism.

PHYS 108. Light and Color (4). An introduction to topics in light and color with applications to technology in the arts.

PHYS 111. Introductory Physics (4). Topics in physics including kinematics and dynamics. Analyzing physical systems using algebra and trigonometry. Not open to students with credit in PHYS 181. Corequisite: PHYS 111LAB. Prerequisites: either eligibility for MATH 154 based on the Math Placement Test, or MATH 153 with a grade of C or better.

PHYS 111LAB. Introductory Physics

Laboratory (1). Investigation of topics in physics including kinematics and dynamics. Corequisite: PHYS 111.

PHYS 112. Introductory Physics II (4).

Topics in physics including rotational dynamics, wave mechanics, and conservation principles. Analyzing physical systems using algebra and trigonometry. Prerequisite: PHYS 111. Corequisite: PHYS 112LAB.

PHYS 112LAB. Introductory Physics

Laboratory II (1). Investigation of topics in physics including rotational dynamics, wave mechanics, and conservation principles. Corequisite: PHYS 112.

PHYS 113. Introductory Physics III (4).

Topics in physics including electromagnetic fields and optics. Analyzing physical systems using algebra and trigonometry. Corequisite: PHYS 113LAB. Prerequisite: PHYS 111.

PHYS 113LAB. Introductory Physics

Laboratory III (1). Investigation of topics in physics including electromagnetic fields and optics. Corequisite: PHYS 113.

PHYS 181. General Physics (4). Topics in physics including kinematics and dynamics. Analyzing physical systems using algebra, trigonometry, and calculus. Corequisite: PHYS 181LAB. Co- or prerequisite: MATH 172.

PHYS 181LAB. General Physics Laboratory

(1). Investigation of topics in physics including kinematics and dynamics. Corequisite: PHYS 181.

PHYS 182. General Physics II (4). Topics in physics including rotational dynamics, wave mechanics, and conservation principles. Analyzing physical systems using algebra, trigonometry, and calculus. Corequisite: PHYS 182LAB. Co- or prerequisite: MATH 173. Prerequisite: PHYS 181.

PHYS 182LAB. General Physics Laboratory

II (1). Investigation of topics in physics including rotational dynamics, wave mechanics, and conservation principles. Corequisite: PHYS 182.

PHYS 183. General Physics III (4). Topics in physics including electromagnetic fields and optics. Analyzing physical

systems using algebra, trigonometry, and calculus. Corequisite: PHYS 183LAB. Co- or prerequisite: MATH 173. Prerequisite: PHYS 181.

PHYS 183LAB. General Physics Laboratory III (1). Investigation of topics in physics including electromagnetic fields and optics. Corequisite: PHYS 183.

PHYS 296. Individual Study (1-6).

PHYS 298. Special Topics (1-6).

PHYS 301. Stellar Astrophysics (4).

Application of physical principles to understanding processes and phenomena associated with stars. Prerequisites: PHYS 101, 317, and MATH 173.

PHYS 317. Modern Physics I (4). Topics in physics including relativity, particle physics, and history of modern physics. Analyzing physical systems using calculus, algebra, and trigonometry. Prerequisites: MATH 173 and either PHYS 113 and 113LAB, or PHYS 183 and 183LAB.

PHYS 318. Modern Physics II (4). Topics in physics including quantum physics and atomic structure. Analyzing physical systems using calculus, algebra, and trigonometry. Prerequisite: PHYS 317.

PHYS 331. Laboratory Practices and Techniques (3). Topics in experimental techniques with emphasis in electronic systems. One class meeting and six hours laboratory per week. Prerequisites: PHYS 183 and 183LAB.

PHYS 333. Experimental Physics I (3). Topics in experimental techniques used in physics. One class meeting and six hours laboratory per week. Prerequisite: PHYS 331.

PHYS 334. Experimental Physics II (3). Topics in experimental techniques used in physics. One class meeting and six hours laboratory per week. Prerequisite: PHYS 331.

PHYS 342. Thermodynamics (4). The laws of thermodynamics and its application to macroscopic systems. Co- or prerequisite: PHYS 318.

PHYS 351. Analytical Mechanics I (3). Introduction to advanced physical concepts and mathematical techniques associated with dynamic systems including conservation laws, mpm-conservative forces, oscillating systems, non-inertial reference frames, and central-force motion. Co- or prerequisites: MATH 273 and 376. Prerequisites: PHYS 183 and 183LAB.

PHYS 352. Analytical Mechanics II (3). Further study of dynamic systems. Introduction to coordinate transformations, variational principles, Lagrangian and Hamiltonian methods, and nonlinear systems. Prerequisite: PHYS 351.

PHYS 361. Computational Physics

(4). Numerical methods of studying physical properties of realistic systems. FORTRAN, IMSL/MATH Library, and MATHEMATICA will be introduced. Corequisite: MATH 265. Prerequisites: PHYS 183 and 183LAB.

PHYS 363. Optics (4). The mathematics of wave motion, electromagnetic theory, propagation of light, geometrical optics, and physical optics. Includes the experimental

investigation of optical phenomena. Three class meetings and two hours laboratory per week. Prerequisites: MATH 173, and either PHYS 113 and 113LAB, or PHYS 183 and 183LAB.

PHYS 381. Electromagnetic Theory I

(4). Topics in electrostatics including electric fields, electric potential, Gauss' law, electrostatic energy, and multipole expansions. Prerequisites: PHYS 183, 183LAB, MATH 265, and MATH 273.

PHYS 382. Electromagnetic Theory II (4).

Topics in electrostatics and magnetostatics including the electrostatics of polarizable media, vacuum magnetostatics, magnetostatics in matter, and introduction to the Maxwell equations. Prerequisite: PHYS 381.

PHYS 383. Electromagnetic Theory III

(4). Topics in the Maxwell equations, electrodynamics, and electromagnetic waves. Prerequisite: PHYS 382.

PHYS 396. Individual Study (1-6).

PHYS 398. Special Topics (1-6).

PHYS 461. Advanced Computational Physics (4). Applications of standard numerical modeling techniques to physics problems involving nonlinear and/or differential equations, including wave propagation, fluid flow, thermodynamics, electrodynamics, and particle physics. PHYS 461 and PHYS 561 are equivalent courses; students may not receive credit for both. Prerequisite: MATH 376 and PHYS 361.

PHYS 463. Fundamentals of Lasers (4). Overview of laser technology with emphasis on laser characteristics, safety, and applications. Prerequisite: PHYS 363.

PHYS 474. Quantum Mechanics I (4). Methods of quantum mechanics and applications to physical systems. Examples from nuclear, atomic, and molecular physics. Prerequisites: PHYS 318 and MATH 376.

PHYS 475. Quantum Mechanics II (4). Methods of quantum mechanics and applications to physical systems. Examples from nuclear, atomic, and molecular physics. Prerequisites: PHYS 474.

PHYS 489. Senior Assessment (1). An end-of-major course consisting of curriculum review and program assessment activities. By permission. Prerequisites: senior standing and admission to the physics major.

PHYS 490. Cooperative Education (1-12). An individualized, contracted field experience with business, industry, government, or social service agencies. This contractual arrangement involves a student learning plan, cooperating employer supervision, and faculty coordination. May be repeated for credit. Grade will either be S or U. By permission.

PHYS 491. Workshop (1-6).

PHYS 492. Laboratory Experience in Teaching Physics (2). May be repeated for a total of 6 credits. By permission.

PHYS 495. Undergraduate Research (2). May be repeated for a total of 12 credits. By permission.

PHYS 496. Individual Study (1-6).

PHYS 498. Special Topics (1-6).

PHYS 499. Seminar (1).

POLITICAL SCIENCE DEPARTMENT

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See the website for how these programs may be used for educational and career purposes.

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Todd M. Schaefer, PhD, American politics, public opinion, congress, campaigns and elections, African politics, American presidency
Rex Wirth, PhD, public administration and public policy, international politics, Western Europe
Bang-Soon Yoon, PhD, comparative politics, public policy, women and politics, Korean politics, political development

Associate Professor

Matthew Manweller, PhD, constitutional law, American political thought, American political economy, direct democracy
Barb Rieffer-Flanagan, PhD, political theory, comparative politics, politics of the Middle East, international human rights, religion and politics

Assistant Professors

Gilberto Garcia, PhD, Latino politics and studies, Latin American politics, comparative politics, and U.S.-Mexico border relations

Visiting Assistant Professor

Cameron Otopalik, PhD, international politics, comparative politics, international political economy, politics of development

Emeritus Professor

Robert C. Jacobs, PhD, American law and politics

Staff

Cyndie Strawder, secretary senior

Department Information

The department provides an opportunity for students to become knowledgeable about the general subject matter of political science, while also offering a variety of courses that

can provide depth in an area of the student's interest. Flexibility in the selection of courses is stressed.

The department requires all political science majors to participate in the end-of-major assessment exercise at the conclusion of their senior year. Information on the assessment requirement may be obtained from the department's main office.

Students must earn a grade of C- or better in order for that course to count in their political science major.

Political Science Honors

Political science majors will qualify for honors at graduation with an overall GPA of 3.00 and a GPA of 3.50 in all political science courses.

Students may choose either a 47-credit major or a 62-credit major. Those who have a second major or who have a minor in another discipline may opt for the 47-credit major.

Political Science Core Requirements

POSC 101 - Introduction to Politics	5
POSC 210 - American Politics	5
POSC 260 - Comparative Politics	5
POSC 270 - International Politics	5

Political Science Core Total Credits: 20

Bachelor of Arts

Political Science Major

(47 Credits)

(62 Credits)

(NOTE: Students seeking a BA degree must complete one year college/university study or two years high school study of a single foreign language.)

Required Courses

Political Science Core	20
POSC 489 - Senior Assessment	2

Select from the following

POSC 481 - Early Political Thought (5)	
POSC 482 - Early Modern Political Thought (5)	
POSC 483 - Recent Political Thought (5)	
POSC 485 - American Political Thought and Culture (5)	
Electives	20-35
Select from any other courses in this department. (Any transfer political science electives must be approved by the department.)	
47-credit major (20)	
62-credit major (35)	

Total Credits: 47-62

Political Science Minor

Required Courses

Political Science Core	20
Electives	10

Select from any other courses in this department. (Any transfer political science electives must be approved by the department.)

Total Credits: 30

Political Science Courses

POSC 101. Introduction to Politics (5).

The basic ideas around which political debate revolves and from which political institutions evolve.

POSC 210. American Politics (5). Origin and development of the United States government; structure, political behavior, organizations, and processes; rights and duties of citizens. For general education (breadth) credit, a student must be enrolled in or have completed ENG 101.

POSC 230. State and Local Government (5).

POSC 260. Comparative Politics (5). Comparative political analysis, utilizing a variety of methods and theoretical approaches; application to selected western and non-western systems. Recommended to precede other courses in comparative politics.

POSC 270. International Politics (5).

Conditions and principles governing the contemporary nation-state system.

POSC 298. Special Topics (1-6).

POSC 311. Women and Politics (5). The politics of human sexuality: men's and women's rights, sex roles, sexual discrimination, laws governing sexuality, and related issues.

POSC 312. Public Opinion and Political Communication (5). The formation, measurement, and political impact of public opinion. The relationship of mass media to American political attitudes and opinions.

POSC 313. The Legislative Process (5). The Congress of the United States, drafting of bills, legislative leadership, the committee system, relation to executive and judicial branches, pressure groups.

POSC 314. American Presidency (5). The office of the chief executive: its constitutional, political, and administrative processes.

POSC 315. Political Campaigns and Elections (5). Evaluations of campaign techniques and practices; campaign financing and expenditures; voting behavior; election theory; elections and public policy.

POSC 316. Latinos and the U.S. Political System (5). This course examines the political reality of Latinos in the United States: a diverse population made up largely of Mexican, Puerto Rican, Cuban American, and other Latinos of Central and South American origins.

POSC 318. Political Parties and Interest Groups (5). Theories of party systems; elitism and pluralism; party organization, functions, and activities; status, functions, and activities of interest groups in the public policy-making process.

POSC 320. Public Administration (5). Setting, purpose, functions, and performance of public bureaucracy in the United States.

POSC 325. Introduction to Public Policy (3). Institutional context, politics and processes of agenda setting and policy formulation, implementation, evaluation, change and termination in the United States.

POSC 340. Politics and American Capitalism

(5). A survey of the interrelationship of the worlds of politics and business enterprise in American history; analysis of relevant philosophical and ideological arguments; case studies in such areas as industrial and trade policy.

POSC 341. Politics and Religion (5). The impact of religion upon American political thought and behavior.

POSC 342. U.S. Foreign Policy (5).

Factors, processes, and techniques in the formulation and execution of the foreign policy of the United States.

POSC 343. The Politics of the U.S. Mexico Border (5). This course examines the politics of the United States and Mexico border region focusing on the important role of the state in the development of policies affecting one of the longest border regions in the world. Topics covered in the course include the politics of border regions and the national state, and the diverse policy concerns of the region from economic development and immigration, to ecological degradation, and health concerns.

POSC 350. Introduction to Public Law (5).

Legal bases and structure of governmental organization; fundamental doctrines and principles of constitutional, international, and administrative law.

POSC 361. Latin American Politics (5). A comparative introduction to the political systems, cultures, and histories of Latin America and to prominent theories on democracy and political and economic development.

POSC 362. Western European Politics (5).

Comparative analysis of politics and government of selected European countries.

POSC 363. Russian and Soviet Politics

(5). Evolution, patterns, and comparative analyses.

POSC 365. African Politics (5). Comparative analysis of the political systems of the African continent, including historical, social, economic, and international contexts.

POSC 366. Government and Politics of East Asia (5). An introduction to the politics and governments of selected East Asian countries. Focus will center on China, Japan, and Korea.

POSC 367. Politics of Japan (5). Investigation and analysis of politics and government in contemporary Japan.

POSC 369. Korean Politics (5). Political systems, institutions, and processes of contemporary North and South Korea.

POSC 372. Politics of Globalization (5).

Inquiry in the nature and trends of globalization from the economical, political, and cultural perspectives, and their impacts on our way of life. Roles of government, non-government organizations, and global institutions will be examined.

POSC 373. International Politics of the Pacific Rim (5). Political and economic relations of the contemporary Pacific Rim. Special focus on North America, Russia, and East Asia.

- POSC 375. The Middle East and International Politics** (5).
- POSC 376. International Organization** (3). Background, concepts, structure, and functions of international organization.
- POSC 378. International Political Economy** (5). Political problems of management and development in the global economy and the prospects for creating improved mechanisms at the international level and for less-developed countries.
- POSC 398. Special Topics** (1-6).
- POSC 411. American Indian Politics and Sovereignty** (4). Examines American Indians as sovereign nations and as participants in U.S. politics. Some comparison with native peoples in other western polities. Provides historical and contemporary overview of legal and political experiences of American Indians.
- POSC 429. Research Seminar in Public Policy** (3). Review of theory and methods, proposal for policy analysis, preparation, and presentation of policy analysis. Prerequisites: POSC 320 and 325.
- POSC 441. Politics and Film** (5). Since its inception, film has been used to convey political ideas and ideologies, as well as offer social and political criticism. This class will examine the techniques film directors and writers use to "manipulate" the viewing audience.
- POSC 451. Introduction to Constitutional Law** (5). Role of the United States Supreme Court in shaping governmental structure of the United States.
- POSC 452. The Constitution and Human Rights** (5). Role of the United States Supreme Court in the development of political and social rights.
- POSC 460. Contemporary Issues in Comparative Politics** (3). Focus on a specific contemporary issue in the field of comparative politics, with an emphasis on in-depth analysis and utilization of available research tools. Subject matter will vary with the instructor and with the changing nature of world politics. May be repeated for up to 6 credits.
- POSC 470. Contemporary Issues in International Relations** (3). Focus on specific contemporary issues in the field of international politics, with an emphasis on in-depth analysis and utilization of available research tools. Subject matter will vary with the instructor and with the changing nature of world politics. May be repeated for up to 6 credits.
- POSC 475. International Human Rights** (5). A survey of internationally recognized human rights, analysis of relevant international laws, case studies in women's rights, minority rights, and humanitarian policies.
- POSC 481. Early Political Thought** (5). Plato to Machiavelli.
- POSC 482. Early Modern Political Thought** (5). Political thought in the 16th, 17th, and 18th centuries.
- POSC 483. Recent Political Thought** (5). Political thought in the 19th and 20th centuries.

- POSC 485. American Political Thought and Culture** (5). The ideas and circumstances that have shaped the political culture of the U.S., as reflected in the works of selected political theorists, politicians, and literary figures.
- POSC 488. Introduction to Political Science Methods and Research** (5). Class will introduce students to the research methods of political scientists. Taught in a seminar format, the class will engage in an original research project culminating in a peer-reviewed article submission to an academic journal. Students will learn to write literature reviews, collect data, analyze data using SPSS, and write academic research papers. By permission.
- POSC 489. Senior Assessment** (2). A "capstone" course designed to assess students' mastery of fundamental knowledge of politics and of writing and analytical skills. Co- or prerequisites: POSC 101, 210, 260, 270, and either POSC 481, 482, 483, or 485. Prerequisite: senior standing.
- POSC 490. Cooperative Education** (1-12). An individualized, contracted field experience with business, industry, government, or social service agencies. This contractual arrangement involves a student learning plan, cooperating employer supervision, and faculty coordination. May be repeated for credit. Grade will either be S or U. By permission.
- POSC 496. Individual Study** (1-6).
- POSC 498. Special Topics** (1-6).
- POSC 499. Seminar** (1-5).

PRIMATE BEHAVIOR AND ECOLOGY PROGRAM

College of the Sciences
Ellensburg
Dean Hall, room 357A

509-963-3201
Fax: 509-963-3215
www.cwu.edu/~primate
See website for how this program may be used for educational and career purposes.

Program Director

Lori K. Sheeran, PhD, anthropology, Dean Hall, room 335

Professors

John Alsoszatai-Petheo, PhD, biological anthropology
Daniel Beck, PhD, biology, habitat selection, physiological ecology, foraging behavior, rattlesnake ecology, biology of helodermatid lizards
Lixing Sun, PhD, Biology, ecology and evolution of animal behavior (especially communication systems), chemical ecology

Associate Professors

Megan D. Matheson, PhD, psychology, general experimental and comparative psychology, nonhuman primate social behavior, stress and coping, post-conflict behavior
Lori K. Sheeran, PhD, anthropology, primate behavior, primate conservation, gibbon behavior and ecology, biological anthropology
Steve Wagner, PhD, biology, conservation population genetics, herpetology, molecular evolution

Assistant Professors

Matthew Altman, PhD, early modern philosophy (Kant), 19th century philosophy, ethics and applied ethics, social and political philosophy, philosophy of art
Mary Lee Jensvold, PhD, anthropology, chimpanzee sign language studies, ape behavior, communication and culture, chimpanzee care and enrichment, non-verbal behavior
Joseph G. Lorenz, PhD, anthropology, intraspecific genetic variation, molecular phylogenetics, ancient DNA, genotype-phenotype associations, evolutionary anthropology

Chimpanzee and Human Communication Institute (CHCI)

Mary Lee Jensvold, PhD, Director, CHCI Bldg., room 118

Staff

Penelope Anderson, secretary senior, anthropology
Lynn Whitacre, program coordinator, CHCI

Program Information

This program provides majors with interdisciplinary perspectives on the behavior and ecology of nonhuman primates in both captive and free-living settings. It serves as background for graduate study in the behavior, ecology, or phylogeny of primates, as well as for care-giving careers with primates living in laboratories, zoos, or other captive facilities. Lab fees required for PRIM 220, PRIM 320, and ANTH 416.

A double major is REQUIRED with the PBE degree. Students must complete the requirements for the PBE major as well as the requirements for a 45-plus-credit major in anthropology, biology, or psychology. Students interested in the major should contact the program office as soon as possible for further information, application forms, and assignment of an advisor. PBE majors are expected to meet with their advisor at least once a quarter.

Special Programs

The program sponsors and is affiliated with a wide range of on- and off-campus activities that provide students with opportunities to conduct faculty-mentored scientific projects or internships.

The PBE library in room 204 Dean Hall houses several hundred books, articles, and DVDs/ videotapes related to primatology. The room includes a TV, DVD player, and four computer work stations.

The PBE program has available for student use one video camera, two digital cameras, two DVD players, one television, observational software (The Observer), and two PDAs for using this software at remote locations. The Observer software can also be used on two desktop computers.

Students and faculty who have been approved to conduct research at CHCI may have access to resources housed there. These include an extensive library of articles, books, videos, and DVDs, and more than 20 years of archived video footage collected from the chimpanzees living there. CHCI also houses several VCRs, TVs, DVD players, video cameras, and computers that students can use in research projects conducted at CHCI. Access is considered on a case-by-case basis in consultation with the director and associate director of CHCI.

The Anthropological Genetics Laboratory in room 232A Dean Hall is equipped for performing DNA extractions, PCR (Polymerase Chain Reaction) amplification, genotyping, and DNA sequencing. Software for analyzing genetic data and performing phylogenetic analysis is also available.

The anthropology department owns casts of fossil and living nonhuman primates. These span a variety of taxa including prosimians, monkeys, and apes. Access is considered on a case-by-case basis in consultation with the anthropology faculty.

The PBE program is affiliated with the Conservation and Biodiversity Field School in China, which is coordinated through the CWU Office of International Study and Programs.

Students can develop faculty-mentored internship experiences based at CHCI, the Woodland Park Zoo, and other sites.

Bachelor of Science Primate Behavior and Ecology Major

Required Courses

Introductory Level

ANTH 110 - Introduction to Biological Anthropology	5
*BIOL 181 - General Biology I	5
OR BIOL 101 - Fundamentals of Biology(5)	
*BIOL 182 - General Biology II	5
OR BIOL 200 - Plants In the Modern World (5)	
BIOL 183 - General Biology III	5
OR BIOL 201 - Human Physiology (5)	
PSY 101 - General Psychology	5

Core Requirements

ANTH 309L - Skeletal Analysis and Comparison	2
ANTH 313 - Primate Social Behavior	4

*BIOL 213 - Quantitative Methods in Biology	4-5
OR PSY 362 - Introductory Statistics (5)	
*BIOL 302 - Human Ecology	5
OR BIOL 360 - General Ecology (5)	
*BIOL 465 - Biology of Animal Behavior (4)	4-5
OR PSY 301 - Learning (5)	
PHIL 306 - Environmental Ethics	5
PRIM 220 - Introduction to Primate Laboratory Procedures	2
PRIM 450 - Primate Behavior and Ecology Capstone	1
PSY 300 - Research Methods in Psychology	5
Select one from the following	3-5
ANTH 493 - Anthropological Field Experience (1-8)	
BIOL 493 - Biological Field Practicum (1-15)	
PRIM 320 - Laboratory Research in Primatology (3)	
PRIM 490 - Cooperative Education (3)	
PRIM 495A - Directed Research in Primatology (1-5)	
PRIM 495C - CHCI Directed Research (3)	
PSY 493 - Field Research (3)	
OR other research	
ANTH/BIOL/PSY 499 - Seminar (2-4)	4
OR	
PSY 442 - Evolutionary Psychology (4)	
OR	
ANTH 410 - Biological Anthropology: Theoretical and Research Issues (4)	
OR	
ANTH 411 - Primate Conservation (4)	
Select two from the following	8
ANTH 412 - Long-term Primate Studies (4)	
ANTH 416 - Pongid Behavior (4)	
ANTH 418 - Primate Evolution (4)	

Total Credits: 72-76

* Course selection by advisement depending upon second major.

Primate Studies Courses

PRIM 220. Introduction to Primate

Laboratory Procedures (2). Laboratory procedures to ensure physical, social, and psychological well-being of captive nonhuman primates: sanitation, safety, medical care, diet, USDA requirements, and socio-psychological factors. Requires one-hour meeting and four hours of lab per week plus an organizational meeting and up to eight hours of weekend lab over the quarter.

PRIM 320. Laboratory Research in

Primatology (1-3). Laboratory research under the supervision of a program professor. May be taken concurrently with and as a supplement to other 300- 400-level ANTH/BIOL/PSY/PRIM courses. May be repeated up to 6 credits. Grade will either be S or U. Prerequisite: PRIM 220.

PRIM 450. Primate Behavior and Ecology

Capstone (1). A capstone course designed to assess students' mastery of fundamental knowledge of primatology through submission of a portfolio of work collected

throughout the program. Includes exit interview with program director. Prerequisite: senior standing.

PRIM 490. Cooperative Education (1-12). An individualized, contracted field experience with business, industry, government, or social service agencies. This contractual arrangement involves a student learning plan, cooperating employer supervision, and faculty coordination. May be repeated for credit. Grade will either be S or U. By permission.

PRIM 495A. Directed Research in

Primatology (1-5). Grade will be S or U. May be repeated for credit. Grade will either be S or U. By permission.

PRIM 495C. CHCI Directed Research (1-10).

Directed primatological research at the Chimpanzee and Human Communication Institute. May be repeated for credit. Grade will either be S or U. By permission. Prerequisite: PRIM 220.

PSYCHOLOGY DEPARTMENT

College of the Sciences
Ellensburg
Psychology Bldg., room 421

509-963-2381

Fax: 509-963-2307

www.cwu.edu/~psych

See website for how this major may be used for educational and career purposes.

Faculty and Staff

Chair

Stephanie Stein, PhD

Assistant Chair

Stephen B. Schepman, PhD

Professors

Terry L. DeVietti, PhD, physiological psychology, experimental
Roger S. Fouts, PhD, Interim dean of Graduate Studies and Research, general experimental, language acquisition, primate behavior, comparative psychology
Eugene R. Johnson, EdD, school psychology, psychological and educational evaluation, exceptional children
Susan D. Lonborg, PhD, psychotherapy research, psychology of women, clinical and research ethics, career development, health psychology
Stephen B. Schepman, PhD, personality theories, social psychology, statistics
Anthony J. Stahelski, PhD, organization development, social psychology, small group interaction
Stephanie Stein, PhD, school psychology, behavior disorders in children, lifespan development, school-based assessment
Elizabeth M. Street, EdD, educational psychology, learning theory, exceptional children, applied behavior analysis
Philip Tolin, PhD, sensation and perception, human factors, experimental

Associate Professors

Robyn Brammer, PhD, multicultural counseling, counseling supervision, adolescent interventions, psychology of religion

W. Owen Dugmore, PhD, counseling, psychology of adjustment

Marte Fallshore, PhD, human learning and memory, development of expertise, statistics, cognition, environmental decision-making, crime severity

Megan D. Matheson, PhD, general experimental, primate behavior, comparative psychology, evolutionary psychology

Jeffrey M. Penick, PhD, counseling psychology, health psychology, adult development

Terrence J. Schwartz, PhD, educational psychology, counseling psychology, statistical analysis

Wendy A. Williams, PhD, general experimental, single-subject design, experimental analysis of human and nonhuman behavior, animal welfare

Assistant Professors

Kara I. Gabriel, PhD, general experimental, biopsychology, psychopharmacology, behavioral genetics, spatial learning, memory

Ralf Greenwald, PhD, cognitive neuroscience, cognitive psychology, brain dynamics, electro-physiology

Breyan Haizlip, PhD, multicultural counseling, social justice advocacy, counselor education and supervision, counseling theories, qualitative research

Suzanne Little, PhD, school psychology, psychological/educational assessment, diverse learners, gifted, autism

Heath Marrs, EdD, educational and school psychology, developmental psychology, assessment

Danielle Polage, PhD, cognitive psychology, psychology and law, memory, lying, eyewitness testimony, jury decision making, and repression

Senior Lecturer

Mark Soelling, PhD, clinical psychology

Lecturers

Elizabeth Haviland, PhD, counseling psychology, counseling supervision, multicultural counseling

Augustus Little, PhD, school counseling, educational psychology

Mary Radeke, MS, child language development, experimental psychology

Staff

Estelle Mathews, secretary lead

Loretta Ney, secretary lead

Chris Buchanan, engineering technician III

Department Information

The psychology department offers an important behavioral science component of the university's liberal arts curriculum. As part of the General Education program, courses in psychology broaden the student's knowledge about the causes of behavior, cognition, and emotion. Through our major and minor programs, students can develop an understanding of the perspectives, content, and methods of the science and practice of psychology and prepare for graduate study.

Admission Requirements

Students wishing to apply for admission to the psychology major or minor are required to register with the department and be advised by a member of the department faculty. The department reserves the right to change requirements as circumstances warrant. Application forms may be obtained from the department office. Only students who are fully admitted to the major or minor are eligible to enroll in PSY 301 and PSY 461.

Exit Requirements

Students are required to have a 2.25 GPA within the major area to receive the degree.

Senior psychology majors are required to complete the department's end-of-major assessment examination in the quarter before graduating. Students should register for the examination in the department office. The purpose of this requirement is to enable us to assess whether the department has fulfilled its instructional objectives and to provide us with information that will enable us continuously to improve our programs and courses.

Departmental Honors

The eligibility requirements for admission to the Department of Psychology honors program include the following:

- 1. Admission to the program:** The student must be a psychology major, at least a junior but not more than a first quarter senior, and have completed all core courses with a GPA of at least 3.25 in those courses and have an overall cumulative GPA of 3.0. The student must apply in writing to the department chair, with a supporting letter of recommendation from a member of the faculty who agrees to supervise the student's work to completion.
- 2. Requirements and Procedures:** The student will register for 4-6 credits in PSY 497, Undergraduate Honors Thesis. In consultation with the supervising faculty member, the student chooses a three-person faculty committee. Plans for the honors project, generally an empirical research study, must be approved by the entire committee. The project will culminate in a written research report and a formal defense of the thesis.

**Bachelor of Arts
Psychology Major
(60 Credits)**

Students seeking a BA degree must complete one year of college/university study or two years of high school study of a single foreign language.

The 60-credit major is intended to provide a foundation for professional careers and/or graduate training in psychology. It requires substantial coursework in the methodological, statistical, and content areas of psychology, while still allowing for individualized student interests and choice. Students enrolled in the 60-credit major also have the opportunity to receive credit toward their degree for participation in professional development and research experiences.

Required Courses for the 60-credit major

PSY 101 - General Psychology	5
PSY 200 - Introduction to the Major	1
PSY 300 - Research Methods in Psychology	5
PSY 362 - Introductory Statistics	5
PSY 363 - Intermediate Statistics and Research Methods	5
PSY 489 - Senior Assessment	1

Select at least one course from each of the following groups:

Group I	4-5
PSY 301 - Learning (5)	
PSY 303 - Analysis of Everyday Behavior (4)	
Group II	4
PSY 310 - Multicultural Issues in Psychology (4)	
PSY 313 - Developmental Psychology (4)	
PSY 346 - Social Psychology (4)	
Group III	4-5
PSY 453 - Theories of Personality (5)	
PSY 445 - Clinical, Counseling, and Community Psychology (5)	
PSY 449 - Abnormal Psychology (4)	
Group IV	4-5
PSY 460 - Cognitive Psychology (5)	
PSY 473 - Psychology of Language (4)	
Group V	4
PSY 450 - Sensation and Perception (4)	
PSY 478 - Physiological Psychology (4)	

Electives15-18
May include a maximum of five lower-division credits.

In addition to the classes listed above, other 300- and 400-level psychology classes may also qualify for elective credits.

Total Credits: 60

**Not more than 10 hours of PSY 295 and PSY 495 combined may be applied to a psychology major.



Bachelor of Arts Psychology Major (45 Credits)

The 45-credit major is intended for students who are interested in careers that would combine a background in psychology with work in fields such as social work, family studies, business, forensics, primate behavior, and other fields for which training in behavioral science would be useful. Students in the 45-credit major are required to complete either a minor or a double major. This major would also be useful for students who intend to go directly into the work force following graduation. If a student decided later to pursue graduate school, the core courses in the 45-credit major may transfer into the 60-credit major.

Required Courses

PSY 101 - General Psychology	5
PSY 200 - Introduction to the Major	1
PSY 300 - Research Methods in Psychology	5
PSY 362 - Introductory Statistics	5
PSY 489 - Senior Assessment	1

Select at least one course from each of the following groups:

Group I	4-5
PSY 301 - Learning (5)	
PSY 303 - Analysis of Everyday Behavior (4)	
Group II	4
PSY 310 - Multicultural Issues in Psychology (4)	
PSY 313 - Developmental Psychology (4)	
PSY 346 - Social Psychology (4)	
Group III	4-5
PSY 453 - Theories of Personality (5)	
PSY 445 - Clinical, Counseling, and Community Psychology (5)	
PSY 449 - Abnormal Psychology (4)	
Group IV	4-5
PSY 460 - Cognitive Psychology (5)	
PSY 473 - Psychology of Language (4)	
Group V	4
PSY 450 - Sensation and Perception (4)	
PSY 478 - Physiological Psychology (4)	
Electives	5-8
May include a maximum of five lower-division credits.	
In addition to the classes listed above, other 300- and 400-level psychology classes may also qualify for elective credits.	

Total Credits: 45

Psychology Minor

Required Courses

I. Core Courses

PSY 101 - General Psychology	5
*PSY 300 - Research Methods in Psychology	5
*Students who have taken the research methods course required for their major in law and justice, sociology, or social service can substitute any upper-division psychology course for PSY 300.	

- II. Choose two courses from the following list8-10
- | | |
|--|--|
| PSY 303 - Analysis of Everyday Behavior (5) | |
| OR | |
| PSY 301 - Learning (5) | |
| PSY 313 - Developmental Psychology (4) | |
| OR | |
| PSY 314 - Human Development and the Learner (4) | |
| PSY 346 - Social Psychology (4) | |
| PSY 445 - Clinical, Counseling, and Community Psychology (5) | |
| PSY 449 - Abnormal Psychology (4) | |
| PSY 450 - Sensation and Perception (4) | |
| PSY 453 - Theories of Personality (5) | |
| PSY 456 - Industrial and Organizational Psychology (4) | |
| PSY 460 - Cognitive Psychology (5) | |
| PSY 473 - Psychology of Language (4) | |
| PSY 478 - Physiological Psychology (4) | |
- III. Any upper-division psychology course can be used as an elective. May include additional courses from the list in II above.10-12

Total Credits: 30

Psychology Courses

- PSY 101. General Psychology (5).** An introduction to the science of behavior.
- PSY 200. Introduction to the Major (1).** Orientation to the psychology major. Grade will either be S or U. Prerequisite: admission to psychology major.
- PSY 205. Psychology of Adjustment (5).** The nature of the adaptive process and the means by which people adjust to their environment.
- PSY 235. Relationships and Personal Development (3).** Development of interpersonal relationships from initial encounters to stable commitments. Major focus on interaction patterns in intimate relationships. PSY 235 and FSCF 235 are equivalent courses; students may not receive credit for both.
- PSY 275. Community Development in Residence Halls (3).** Components of successful student development in residential settings. Educational philosophy of residence halls, community development, and problem solving. Credits do not apply toward psychology degree major or minor. Grade will either be S or U. By permission.
- PSY 295. Laboratory Experience in Psychology (1-5).** Not more than 5 credits of PSY 295, PSY 295C, PSY 495, and PSY 495C combined may be applied to a 45-credit psychology major and not more than 10 credits, combined, may be applied to a 60-credit major. May be repeated up to 10 credits. Grade will either be S or U.
- PSY 295C. CHCI Laboratory Experience (1-5).** Laboratory experience at the Chimpanzee and Human Communication Institute. Course fee will be assessed. May be repeated. Not more than 5 credits of PSY 295, PSY 295C, PSY 495, and PSY 495C combined may be applied to a 45-credit psychology major and not more than 10 credits, combined, may be applied to a 60-credit major. Grade will either be S or U. By permission. Prerequisite: PSY 101.
- PSY 298. Special Topics (1-6).**
- PSY 299. Seminar in Psychology (3).**
- PSY 300. Research Methods in Psychology (5).** Addresses basic experimental and non-experimental research designs and strategies, as well as the APA-approved professional writing style. Includes both lecture and laboratory experiences. Corequisite: PSY 362.
- PSY 301. Learning (5).** Addresses basic theory and research related to classical and operant conditioning, stimulus control, and memory. Prerequisite: PSY 300.
- PSY 303. Analysis of Everyday Behavior (4).** Environmental, cognitive, and biological influences on behavior in daily life. Prerequisite: PSY 101.
- PSY 310. Multicultural Psychology and Social Advocacy (4).** An examination of human behavior in cultural context. Emphasizing the role and influence of culture on thought, behavior, relationships, and society, and the influence of race, ethnicity, social class, gender, age, religion/spirituality, and sexual orientation. Cross-cultural research, theory, and methodology is also examined. By permission. Prerequisite: PSY 101.
- PSY 312. Queer Theory and Sexuality (4).** This interdisciplinary course introduces students to the academic field of lesbian and gay studies through examination of the history, politics, theories, culture, and community of those who identify as lesbian, bisexual, gay, transgender, and queer.
- PSY 313. Developmental Psychology (4).** Cognitive, social-emotional, and physical development through the lifespan. Prerequisite: PSY 101.
- PSY 314. Human Development and the Learner (4).** Development through the life cycle.
- PSY 315. Educational Psychology (4).** Learning theories, instructional principles, evaluation processes, and classroom management. Prerequisites: either PSY 313 or 314, either EFC 310 or EDF 301A, and full admission to the Teacher Preparation Program.
- PSY 340. Teaching of Psychology (3).** May be repeated up to 6 credits. Grade will either be S or U. By permission. Prerequisites: completion of course in which teaching or assisting is to be done.
- PSY 346. Social Psychology (4).** Social influences on individual behavior.
- PSY 350. Sleep and Dreaming (4).** Research and theory concerning the functions and dysfunctions of sleep and dreaming. Prerequisite: PSY 101.
- PSY 352. Application of Adult Development Theories (2).** This course is designed to provide students with a broad understanding and application of theories on adult development and aging. Service-

learning is integral and students will be involved with older adults though cooperating local agencies. May be repeated up to 4 credits.

PSY 355. Environmental Psychology (4). Behavioral responses to everyday natural and artificial environments.

PSY 362. Introductory Statistics (5). Descriptive statistics and introduction to inferential statistics through one-way analysis of variance. Prerequisites: MATH 130 or higher or acceptance to graduate school.

PSY 363. Intermediate Statistics and Research Methods (5). Experience with the design, execution, analysis, interpretation, and communication of psychological experiments in addition to data management and statistical software skills. Four hours lecture and two hours lab each week. Prerequisites: PSY 300 and PSY 362.

PSY 396. Individual Study (1-6).

PSY 398. Special Topics (1-6).

PSY 401. Psychology of Sport (4). Current theory and research on sports psychology; application of psychological interventions in sports and fitness. Prerequisite: PSY 101.

PSY 421. Human Neuroanatomy (4). An introduction to the anatomical organization and basic functional/clinical principles of the major systems of the human brain and their relations to disease and behavior. PSY 421 and PSY 521 are equivalent courses; students may not receive credit for both.

PSY 438. Chemical Dependency and the Family (3). An overview of theory and research regarding chemical dependency in the family with a conceptual understanding of models and methods that shape treatment.

PSY 441. Self-injurious Behavior (4). A course covering the occurrence, prevalence, etiology, and treatment of self-injurious behavior in human and nonhuman primates, including human developmental disorders. Prerequisites: any biology or psychology course and junior standing or above.

PSY 442. Evolutionary Psychology (4). Application of principles of evolution to understanding of human and non-human behavior and cognition. PSY 442 and PSY 542 are equivalent courses; students may not receive credit for both.

PSY 444. Tests and Measurements (4). Psychological and educational tests, theory, and practice. PSY 444 and PSY 544 are equivalent course; students may not receive credit for both. Prerequisites: either PSY 315 or 362.

PSY 445. Clinical, Counseling, and Community Psychology (5). History, current trends, fields of employment, professional ethics, methods of psychological diagnosis, and treatment. Prerequisite: PSY 101.

PSY 447. Psychology of Adolescence (4). Physiological, cognitive, and social aspects of maturation; problems of vocational choice and of increasing autonomy. Prerequisite: PSY 101.

PSY 448. Sexual Behavior (4). The scientific study of the learned and innate bases of sexual behavior in humans and lower animals. Prerequisite: PSY 101.

PSY 449. Abnormal Psychology (4). Symptoms, etiology, and treatment of psychopathology and behavior problems. Prerequisite: PSY 101.

PSY 450. Sensation and Perception (4). Research, theoretical models of sensory and perceptual processes. Prerequisites: PSY 300 and either BIOL 101, or 201.

PSY 452. Adult Development and Aging (4). Principles of adult psychological development and the aging process. Examination of adult behavior, life-styles, crises in adult development, and cognitive, personality, and intellectual changes with aging.

PSY 453. Theories of Personality (5). Focus on the scientific study of how and why people differ from each other. Personality psychology addresses questions regarding shared human nature, dimensions of individual differences, and unique patterns of individual behavior. Prerequisite: PSY 101.

PSY 454. The Helping Interview (3). Theory and practice of supportive interviewing skills.

PSY 455. Behavioral Medicine and Health Psychology (4). The application of psychology to the understanding of illness and to its prevention and treatment with special emphasis on current health topics (e.g., stress, HIV/AIDS). Prerequisite: PSY 101.

PSY 456. Industrial and Organizational Psychology (4). Application of psychological principles to personnel and organizational problems in labor, industry, government, education, and the military. Prerequisite: PSY 101.

PSY 460. Cognitive Psychology (5). Methods and theories of human cognition and information processing. Prerequisite: PSY 300.

PSY 461. History and Systems of Psychology (5). Historical development and persistent theoretical problems of contemporary psychology. Prerequisite: PSY 101.

PSY 465. Psychology and the Law (4). How the discipline of psychology contributes to our understanding of matters related to the law.

PSY 467. Child Psychopathology (3). Discovery and treatment of the severely maladjusted child; the home, school, and community in relation to the child's mental health; relevant resources and research. Prerequisites: either PSY 313 or 314.

PSY 472. International Counseling and Psychology (3). This course immerses students within a cultural group and examines how psychological and counseling services are provided within that society. The location for the course varies by year. Students will learn about a society's available services, health care provision, relationship/child-rearing traditions, common prejudices, and

economic values. PSY 472 and 572 are equivalent courses. May be repeated up to 6 credits. Prerequisite: PSY 101.

PSY 473. Psychology of Language (4). Basic principles of language, cognition of language, language development, theories of linguistic structure and brain function as it relates to language processing. Prerequisite: PSY 101.

PSY 476. Psychopharmacology (4). Common drugs, psychotherapeutic agents and hallucinogens. Behavioral effects and physiological mechanisms.

PSY 478. Physiological Psychology (4). Problems, methods, and techniques of neurophysiology and the physiology of human and infrahuman behavior patterns. Prerequisites: PSY 300 and either BIOL 101 or 201.

PSY 479. Comparative Psychology (4). Seminar in the study of behavior and cognition across species. This course is listed under the graduate version of PSY 576; students may not receive credit for both.

PSY 483. Psychology of Women (3). The psychology of women from a social psychological perspective, which examines gender and situation and male/female interaction. Prerequisite: PSY 101.

PSY 484. Violence and Aggression (4). Violence and aggression directed toward self, others, and society. Problems of prevention and treatment, related ethical and legal issues. Prerequisite: PSY 101.

PSY 489. Senior Assessment (1). An end-of-major course. Portfolio review, career planning, and program evaluation activities. Grade will either be S or U. Prerequisites: student must be a psychology major in their senior year. It is recommended that this class is taken in the last academic quarter.

PSY 490. Cooperative Education (1-12). An individualized, contracted field experience with business, industry, government, or social service agencies. This contractual arrangement involves a student learning plan, cooperating employer supervision, and faculty coordination. May be repeated for credit. Grade will either be S or U. By permission.

PSY 491. Workshop (1-6).

PSY 493. Field Research (1-12). Individual or group off-campus experience in the field study of psychological phenomena. May be repeated for credit.

PSY 495. Directed Research (1-5). Course fee will be assessed. Not more than 5 credits of PSY 295, PSY 295C, PSY 495, and PSY 495C combined may be applied to a 45-credit psychology major and not more than 10 credits, combined, may be applied to a 60-credit major. May be repeated for credit. Grade will either be S or U. By permission. Prerequisite: PSY 101.

PSY 495C. CHCI-directed Research (1-5). Directed research at the Chimpanzee and Human Communication Institute. Course fee will be assessed. Not more than 5 credits of PSY 295, PSY 295C, PSY 495, and

PSY 495C combined may be applied to a 45-credit psychology major, and not more than 10 hours combined may be applied to a 60-credit major. May be repeated up to 10 credits. Grade will either be S or U.

PSY 496. Individual Study (1-6).

PSY 497. Undergraduate Honors Thesis (2-6).

By invitation of department chair. Research supervised by three-member committee of the department of psychology. May be repeated up to 6 credits. Prerequisite: admission to the Departmental Honors Program.

PSY 498. Special Topic (1-5).

PSY 499. Seminar (1-5).

PUBLIC POLICY PROGRAM

College of the Sciences
Ellensburg
Psychology Bldg., room 482

Phone: 509-963-2353
FAX: 509-963-1134

Director
Rex Wirth, PhD

Bachelor of Science Public Policy Major

Public policy is not a free-standing major. It is normally taken in conjunction with a major in economics (general economics or managerial economics options), geography, or political science. Students who combine majors in public policy and either geography or political science will receive a bachelor of science degree in public policy and a bachelor of arts degree in geography or political science. As some public policy requirements and electives count toward both degrees or majors, the actual amount of additional coursework needed to fulfill the requirements of the second degree or major may be as low as 17 credits.

Public Policy Core

ECON 201 - Principles of Economics Micro	5
ECON 202 - Principles of Economics Macro	5
ECON 332 - Public Finance	5
GEOG 303 - Introductory GIS	5
GEOG 346 - Political Geography	4
POSC 320 - Public Administration	5
POSC 325 - Introduction to Public Policy	3
POSC 429 - Research Seminar in Public Policy	3

Subtotal Credits: 35

Research Tool Elective	4-5
BUS 221 - Introductory Business Statistics (5)	
MATH 311 - Statistical Concepts and Methods (5)	
PSY 362 - Introductory Statistics (4)	
SOC 364 - Data Analysis in Sociology (5)	
Department-approved electives in Economics, Geography, or Political Science	12-15

Total Credits: 51-55

SCIENCE EDUCATION DEPARTMENT

College of the Sciences
Ellensburg
Science Bldg., room 107

509-963-2929

Fax 509-963-1222

www.cwu.edu/~scied

See the website for how these programs may be used for educational and career purposes.

Faculty Chair

Martha J. Kurtz, PhD

Professors

Martha J. Kurtz, PhD, chemistry and science education

Bruce Palmquist, PhD, physics and science education

Associate Professor

Ian J. Quitadamo, PhD, biological sciences and science education

Assistant Professors

Jennifer Dechaine, PhD, biological sciences and science education

Vanessa Hunt, PhD, science education

Beth Pratt-Sitaula, PhD, geological sciences and science education

Tim Sorey, PhD, chemistry and science education

Staff

Lucinda Lunstrum, secretary senior

Department Information

The primary function of the science education department is preparing people to teach science. Coursework in science pedagogy is offered for students in the teacher preparation programs as well as for teachers in the schools. The science education department works with science departments in the design and operation of degree programs for students who are preparing to teach in the secondary schools. We believe that students learn via the active construction of knowledge. To facilitate that process, all of our instruction follows the learning cycle model.

Our program seeks to help students become facilitators of learning in a diverse world. To that end, the science education department has the following goals for an effective science teacher:

- Demonstrate an ability to individually and collaboratively engage in inquiry and integrate the nature of science
- Explain and apply fundamental science content concepts, principles, and methods
- Demonstrate an ability to effectively facilitate learning for all students

- Create safe, effective learning environments that support inquiry, collaboration, intellectual risk-taking, ethical decision-making, and student construction of knowledge
- Demonstrate an ability to assess teaching and learning outcomes using multiple methods, effectively evaluate teaching and learning effectiveness, and improve practice based on reflection and data
- Demonstrate an ability to make science personally and socially relevant to individual and community by incorporating current events within collaborative and social networks

Students seeking endorsement for certification to teach a specialized science at the high school level must satisfactorily complete the teaching major within the specific science department. Students desiring to become middle or junior high school specialized teachers of science are encouraged to obtain a teaching major in one or more of the following areas: biology, chemistry, Earth sciences, general science, or physics. All students are advised to work toward a second major or minor endorsement.

All students enrolled in science majors leading to certification are required to have an approved schedule on file with a science education advisor as early as possible and before endorsement for student teaching.

Bachelor of Science General Science Teaching

The general science teaching major prepares students to teach science at the high school, middle, or junior high levels. It is particularly appropriate for students who want to teach integrated science. It meets the Washington State endorsement competencies for science and one designated science of the student's choosing: biology, chemistry, Earth science, or physics. Students wishing to apply for this major must demonstrate mathematical competency equivalent to MATH 153. Students must pass the WEST-E in science and their designated science emphasis area to receive endorsements in both. Students taking this major are required to apply to the Teacher Preparation Program and complete the Professional Education Program requirements offered through the Department of Educational Foundations and Curriculum with the exception of EFC 416 and EFC 350 (44 total credits required). Students completing this program are required to demonstrate knowledge, skill, and disposition proficiency through a program portfolio prior to student teaching.

Science Core

BIOL 181, 182, 183 - General Biology I, II, III	15
CHEM 181, 181LAB, 182, 182LAB, 183, 183LAB - General Chemistry I, II, III	15

GEOL 101 - Physical Geology	4
OR	
GEOL 103 - Geology of Washington (4)	
GEOL 101LAB - Physical Geology Laboratory	1
GEOL 350 - Teaching Northwest Geology . .	4
PHYS 101 - Introductory Astronomy I	5
PHYS 111, 111LAB, 112, 112LAB, 113, 113LAB - Introductory Physics	15
OR	
PHYS 181, 181LAB, 182, 182LAB, 183, 183LAB - General Physics (15)	
SCED 324 - Science Education in the Secondary Schools I	3
SCED 325 - Science Education in Secondary Schools II	3
SCED 354 - Science, Society, and the Teaching Community	3
SCED 401 - Interdisciplinary Science Inquiry in the Secondary Schools	5
SCED 487 - Teaching Secondary Science Seminar	2
Total Core Credits: 75	

Designated Science Endorsement Area (pick one)

Biology

BIOL 213 - Quantitative Methods in Biology	4
BIOL 321 - Genetics	5
BIOL 360 - General Ecology	5
BIOL 470 - Mechanisms of Evolution	3
Total Credits: 17	

OR

Chemistry

CHEM 345 - Environmental Chemistry	5
OR	
CHEM 332, 332LAB - Quantitative Analysis (5)	
CHEM 361 - Organic Chemistry	3
CHEM 361LAB - Organic Chemistry Lab . .	2
CHEM 362 - Organic Chemistry	3
CHEM 431, 431LAB - Biochemistry	5
Total Credits: 18	

OR

Earth Science

GEOL 200 - Earth Evolution and Global Change	5
GEOL 320 - Rocks and Minerals	5
GEOL 302 - Oceans and Atmosphere	4
GEOL 380 - Environmental Geology and Natural Hazards	4
Total Credits: 18	

OR

Physics

PHYS 317 - Modern Physics I	4
PHYS 318 - Modern Physics II	4
PHYS 363 - Optics	4
MATH 172 - Calculus I	5
MATH 173 - Calculus II	5
Total Credits: 22	
Total Credits: 92-97	

Science Education - Broad Area Science Teaching Minor

This minor is restricted to students working on a major in biology, chemistry, Earth science, or physics. Science teaching majors must complete the appropriate courses in the three disciplines shown below that are outside their major. For example, a biology major would need to fulfill the chemistry, Earth science and physics requirements. Students interested in this minor need to see a science education advisor as soon as possible. This program may result in students taking more than four years to complete their degree. Students completing this minor are required to demonstrate knowledge, skill, and disposition proficiency of student learning outcomes through a program portfolio prior to student teaching. Students must pass the WEST-E exam for science to receive the science endorsement.

Required Courses

(Complete all three areas not covered in major program)

Biology

BIOL 181 - General Biology I	5
BIOL 182 - General Biology II	5
BIOL 183 - General Biology III	5
Subtotal Credits: 15	

Chemistry

CHEM 181, 181LAB - General Chemistry I .	5
CHEM 182, 182LAB - General Chemistry II .	5
CHEM 183, 183LAB - General Chemistry III	5
Subtotal Credits: 15	

Earth Science

GEOL 101 - Physical Geology	4
OR	
GEOL 103 - Geology of Washington (4)	
GEOL 101LAB - Physical Geology Laboratory	1
GEOL 350 - Teaching Northwest Geology . .	4
GEOL 210 - Introduction to Geologic Field Methods (4)	4-5
OR	
PHYS 101 - Introductory Astronomy I (5)	
Subtotal Credits: 13-14	

Physics

PHYS 111, 111LAB, 112, 112LAB, 113, 113LAB - Introductory Physics	15
OR	
PHYS 181, 181LAB, 182, 182LAB, 183, 183LAB - General Physics (15)	
Subtotal Credits: 15	
Total Credits: 43-45	

Middle Level Mathematics and Science Teaching Major

This major is designed for students who wish to teach mathematics and science at the middle level (grades 4-9). The coursework provides experiences in math and science content and pedagogy including field experience and addresses the

Washington State competencies for middle level math teachers and the Washington State competencies for middle level science teachers. Students taking this major are required to apply to the Teacher Preparation Program and complete the Professional Education Program requirements offered through the Department of Educational Foundations and Curriculum (50 total credits required). Students must successfully demonstrate competency equivalent to the completion of MATH 154 prior to acceptance into this major. Students with strong high school mathematics preparation should take the math placement exam. According to the results of the exam students may satisfy the MATH 153 and MATH 154 requirement. Students completing this program are required to demonstrate knowledge, skill, and disposition proficiency through a program portfolio prior to student teaching. Students who complete this major and receive a passing score on the WEST-E exams for middle-level mathematics and science are eligible to receive both the middle-level math and science endorsements.

Required Courses

Science

BIOL 101 - Fundamentals of Biology	5
CHEM 101 - Contemporary Chemistry and Contemporary Chemistry Lab	5
OR	
CHEM 111 / CHEM 111LAB - Introduction to Chemistry and Laboratory (5)	
PHYS 106 - Physics by Inquiry	5
OR	
PHYS 111 / PHYS 111LAB - Introductory Physics and Laboratory (5)	
GEOL 101 / 101LAB - Physical Geology and Physical Geology Lab	5
OR	
GEOL 103 / 101LAB - Geology of Washington and Physical Geology Lab (5)	
PHYS 101 - Introductory Astronomy I	4-5
OR	
PHYS 102 - Introductory Astronomy II (4)	
SCED 301 - Interdisciplinary K-8 Science Inquiry	5
SCED 354 - Science, Society, and the Teaching Community	3

Mathematics

MATH 130 - Finite Mathematics	5
MATH 164 - Foundations of Arithmetic . . .	5
MATH 250 - Intuitive Geometry for Elementary Teachers	4
MATH 170 - Intuitive Calculus	5
MATH 232 - Discrete Modeling for Middle Level Teachers	4
MATH 486 - Mathematics, Problem Solving, and Teaching	4

Integrated Math and Science

MATH / SCED 323 - Teaching Middle School Mathematics and Science	3
Education	
EDEL 477 - Middle School Students and Their Environment	4

EDEL 478 - Developmentally Responsive Curriculum in Middle Grades. 3
 Advisor-approved course (EDEL 323, SCED 322, MATH 324, or SCED 324). 3-4

Total Credits: 72-74

Science Education - Elementary Education Minor

Admission to this minor is limited to students majoring in elementary education, early childhood education or special education. This minor does not lead to endorsement as a specialized science teacher.

Students who complete this minor will have enhanced science content knowledge and teaching skills.

Required Courses

Three lower-division science courses with labs (select a course from three of the following five areas: biology, chemistry, physics, Earth science, and astronomy). 13-15
 SCED 301 - Interdisciplinary K-8 Science Inquiry 5
 SCED 322 - Science Education in the Elementary School 4
 SCED 354 - Science, Society and the Teaching Community 3
 SCED 422 - Advanced Teaching Strategies in Elementary Science 5

Total Credits: 30-32

Middle Level Science Teaching Minor

This minor is designed for students who wish to teach science at the middle level (grades 4-9). The coursework provides experiences in science content and pedagogy including field experience and addresses the Washington State competencies for middle-level science teachers. This minor is open only to students working on or currently holding teaching endorsements in elementary education or secondary science (biology, chemistry, Earth science, general science, or physics). Students taking this minor are required to apply to the Teacher Preparation Program. Students must have completed MATH 153 prior to acceptance into this minor. Students with strong high school mathematics preparation should take the Math Placement Exam. According to the results of the exam, students may satisfy the MATH 153 requirement. Students completing this minor are required to demonstrate knowledge, skill, and disposition proficiency through a program portfolio prior to student teaching. Students must pass the West-E exam for middle-level science to receive the middle-level science endorsement.

Required Courses

BIOL 101 - Fundamentals of Biology 5
 CHEM 101 - Contemporary Chemistry and Contemporary Chemistry Lab. 5
 OR

CHEM 111 / CHEM 111LAB - Introduction to Chemistry and Laboratory (5)
 PHYS 106 - Physics by Inquiry 5
 OR
 PHYS 111 / 111LAB - Introductory Physics and Laboratory (5)
 GEOL 101 / 101LAB - Physical Geology and Laboratory
 OR
 GEOL 103 / 101 LAB - Geology of Washington and Physical Geology Laboratory 5
 PHYS 101 - Introductory Astronomy I (5) . . 4-5
 OR
 PHYS 102 - Introductory Astronomy II (4)
 SCED 301 - Interdisciplinary K-8 Science Inquiry 5
 SCED 323 - Teaching Middle School Mathematics and Science. 3
 EDEL 477 - Middle School Students and Their Environment 4
 EDEL 478 - Developmentally Responsive Curriculum in the Middle Grades 3
 SCED 354 - Science, Society, and the Teaching Community 3

Total Credits: 42-43

Science Education Courses

SCED 301. Interdisciplinary K-8 Science Inquiry (5). Interdisciplinary investigation of applied life, physical, and Earth science concepts applicable to K-8 classrooms using integrated contexts. Applied inquiry processes are used to increase student knowledge, skills, and dispositions. Six lecture/lab hours per week.

SCED 311. Science Concepts for Teachers (5). An in-depth examination for the science concepts applicable to K-12 classrooms using an individualized and inquiry-based approach. Online and community recourses are utilized to enhance existing science content knowledge and understanding.

SCED 322. Science Education in the Elementary School (4). Techniques, selection of materials, and appropriate subject matter for the various grade levels. Demonstrations and student investigative activities for use in classroom science teaching. Prerequisite: conditional or full admission to the Teacher Preparation Program.

SCED 323. Teaching Middle School Mathematics and Science (3). Prospective teachers will learn and use the methods and materials needed to teach middle school students mathematics and science with emphasis on the use of experiments, manipulatives, problems solving, cooperative learning, and communication of understanding. SCED 323 and MATH 323 are equivalent courses; students may not receive credit for both. By permission. Prerequisites: MATH 324 or EDEL 323 or SCED 324 or SCED 322, and application to the Teacher Preparation Program.

SCED 324. Science Education in Secondary Schools I (3). Methods, techniques, and materials appropriate for teaching science in secondary schools. Curriculum, planning, and experiments for use in teaching. Prerequisites: EFC 330 and SCED 401, and admission to the Teacher Preparation Program.

SCED 325. Science Education in Secondary Schools II (3). Applied field experience for teaching science in secondary schools. Planning, instruction, and management for teaching science. Enrollment is subject to full admission to the Professional Education Program. Prerequisites: SCED 324 and admission to the Teacher Preparation Program.

SCED 354. Science, Society, and the Teaching Community (3). Teacher candidates will learn the nature and context of science, compare science with other ways of knowing, describe the relationship between science and the community, and gain skills in integrating community resources with the classroom. Prerequisites: admission to the Teacher Preparation Program.

SCED 398. Special Topics (1-6).

SCED 401. Interdisciplinary Secondary Science Inquiry (5). Interdisciplinary investigation of applied life, physical, and earth science concepts applicable to secondary school classrooms using integrated contexts. Applied inquiry processes are used to increase student knowledge, skills, and dispositions. Prerequisite: one laboratory course from two of the following areas: biology, chemistry, geology, or physics.

SCED 422. Advanced Teaching Strategies in Elementary Science (5). Further develop knowledge and skills of elementary science teaching with a particular emphasis on the science inquiry process, assessment of student knowledge and cross-curricular integration. Includes teaching practica. Prerequisite: SCED 322.

SCED 487. Teaching Secondary Science Seminar (2). Students compile knowledge, skills, and dispositions evidence and reflect on performance relative to professional standards. Students discuss current secondary science education issues, participate in program assessment, prepare for endorsement exam, and complete an electronic portfolio. Prerequisite: students must plan to student teach within a year of enrolling in this course.

SCED 491. Workshop (1-6).

SCED 495. Science Education Research (1-3). This course introduces pre-service science teachers to qualitative and quantitative methods of action research. Course requires completion of a research project of the student's design. May be repeated for credit. Prerequisite: admission to the Teacher Preparation Program.

SCED 496. Individual Study (1-6).

SCIENCE HONORS RESEARCH

College of the Sciences
Ellensburg
Lind Hall, room 118A

509-963-2718

www.cwu.edu/~cots/scihonors

See the website for how this program may be used for educational and career purposes.

Program Director

Audrey Huerta, PhD
huerta@geology.cwu.edu

Program Information

The two-year Science Honors Research Program is centered on a faculty-mentored student research project that culminates in an honors thesis. Applications to the program consist of a research proposal developed under the guidance of a faculty mentor. All proposals are reviewed by a faculty committee. Application deadline is in winter quarter.

Students are normally admitted to the program during their junior year and are employed for nine weeks during the summer, when they are expected to perform the bulk of their research activities. Required coursework consists of SHP 301 (2 credits), SHP 401 (2 credits), and SHP 497 (1 credit). Research continues during the senior year, concluding with a written honors thesis and an oral presentation at the CWU Symposium on University Research and Creative Expression (SOURCE).

Admission Requirements

Admission to the program is competitive, based on the quality of the research proposal submitted by the applicant and faculty mentor. Approximately 10 students are admitted each year. Application forms, criteria, and deadline are posted on the Science Honors website, www.cwu.edu/~cots/scihonors.

Exit Requirements

Satisfactory completion of SHP 497, which requires the submission of an honors thesis that is approved by faculty mentor and program director, is required for participation in honors convocation and to receive an honors designation on the transcript.

Required Extracurricular Activity

Students are expected to work full time on their proposed research project for nine weeks during the summer and to participate in group activities and weekly meetings. Students should not be working more than 15 hours per week at another job, nor be enrolled in other classes during the summer. Exceptions may be made for certain required summer courses, such as GEOL 489.

Science Honors Courses

SHP 301. Science Honors Junior Seminar: Elements of Scientific Research (2). The process of science from a multi-disciplinary perspective, including the historical development of scientific methods and reasoning, effective experimental design, and the interpretation of measurements.

SHP 401. Science Honors Capstone Seminar (2). Skills and techniques for communicating the results of scientific research. Students prepare the final draft of their Science Honors thesis as part of the coursework.

SHP 497. Science Honors Thesis (1). Completion of Science Honors thesis. Strategies for effective oral presentation of scientific work will also be covered. Students must present results of Science Honors project at SOURCE. Grade will either be S or U. Prerequisites: SHP 401 and admission to the Science Honors Program.

SCIENCE TALENT EXPANSION PROGRAM

College of the Sciences
Ellensburg
Lind Hall, room 119B

509-963-3002

www.cwu.edu/~step/

Contact

STEP Coordinator
STEP@cwu.edu

The Science Talent Expansion Program (STEP) is an innovative program designed to prepare and retain students in majors and careers in science, technology, engineering, and mathematics (STEM) fields. STEP consists of an integrated sequence of classes, enrichment activities, and student research opportunities through which students gain hands-on experience in modern scientific research methods, explore theme-based interdisciplinary scientific issues, and develop mentoring relationships with CWU STEM faculty.

Application to STEP is open to new freshman and transfer students with an interest in and aptitude for STEM fields.

STEP freshman participate in a three-quarter-long series of courses known as the STEP Freshman Science Seminar (STEP 101, STEP 102, and STEP 103). Completion of these three courses satisfies one of the Natural Sciences General Education Program requirements. Students who successfully complete the STEP Freshman Science Seminar series will be eligible to apply for and participate in the STEP Sophomore Bridging Program. The STEP Sophomore Bridging Program provides the opportunity for students in their sophomore year to have a paid position doing undergraduate research,

recruiting for STEP, or as a Teaching Assistant in various STEM courses. Those students who have already had some college-level experience are invited to apply directly to the STEP Transfer Bridging Program and will take two STEP courses, STEP 301 in the fall and STEP 302 in the winter. Upon completion of these courses, transfer students will have the opportunity to apply for a paid position in the STEP Transfer Bridging Program.

The Science Talent Expansion Program at CWU involves faculty members from several academic departments: Biological Sciences, Chemistry, Computer Science, Geological Science, Industrial & Engineering Technology, Mathematics, and Physics. More information about the program and participating faculty members is available on the STEP website.

STEP Courses

STEP 101. Science Seminar I: Research Experience (2). First course in three-quarter freshman science series. Students gain practical introduction to the scientific process through designing and conducting experimental, laboratory and field investigations. Students must take STEP 101, 102, and 103 to receive credit for Applications of Natural Science breadth area. Prerequisite: enrollment in STEP Program.

STEP 102. Science Seminar II: Interdisciplinary Research Theme (3). Second course in three-quarter freshman science series. Students will take an interdisciplinary approach toward a class research project centered on a single theme. Students must take STEP 101, 102, and 103 to receive credit for Applications of Natural Science breadth area. By permission. Prerequisites: STEP 101 and enrollment in STEP Program.

STEP 103. Science Seminar III: Current Topics (1). Third course in three-quarter freshman science series. Topical survey of active research efforts by faculty and students in science, technology and mathematics fields at CWU. Students must take STEP 101, 102, and 103 to receive credit for Applications of Natural Science breadth area. Prerequisites: STEP 102 and enrollment in STEP Program.

STEP 301. Bridge Seminar I: Survey of Research Opportunities (1). First course in two-quarter sequence for incoming transfer students. Students are introduced to undergraduate research opportunities at CWU and learn to write an effective research proposal. By permission. Prerequisite: must be an incoming transfer student enrolled in STEP Program.

STEP 302. Bridge Seminar II (2). Second course in a two-quarter sequence for incoming transfer students. Students develop research and critical thinking skills through careful reading of scientific publications and hands-on experiments. By permission. Prerequisites: STEP 301 and must be an incoming transfer student enrolled in STEP Program.

SOCIOLOGY DEPARTMENT

College of the Sciences
Ellensburg
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www.cwu.edu/~sociolo

See website for how sociology may be used
for educational and career purposes.

Faculty and Staff

Chair

Delores (Kandee) Cleary, PhD

Professors

Laura L. Appleton, PhD, sex and gender,
death and dying, sociology of religion
Delores Cleary, PhD, criminology, the life-
course, American society, minorities, ethnic
studies, American Indian issues
Kirk A. Johnson, PhD, criminology,
delinquency, victimization, organizations,
methods
Hong Xiao, PhD, social stratification, social
theory, comparative sociology, social
ecology, China studies

Associate Professors

Nelson Pichardo, PhD, ethnic studies, social
movements

Assistant Professors

Eric Cheney, PhD, deviance and social control,
economic sociology, organizations, statistics
and urban sociology
Judith Hennessy, PhD, social welfare and
poverty, gender, sociology of work,
sociology of family
Michael Harrod, PhD, social psychology,
criminology theory, intimate partner
violence, statistics, research methods
Pamela McMullin-Messier, PhD, demography,
aging, collective action, social justice,
environmental studies, family, gender, and
sexuality
Michael Mulcahy, PhD, political sociology,
political economy, organizations, theory

Staff

Noella Wyatt, department secretary



Department Information

The Department of Sociology provides opportunities for students to understand the conceptual and methodological tools used by sociologists to understand society. Students will be encouraged to: 1) see society as concrete day-to-day behavior of human beings; 2) grasp the relationship between history, society, and the individual's life; 3) realize that social patterns are tools for the accomplishment of human ends and not necessarily unalterable facts of life; and 4) develop the ability to critically analyze social phenomena.

Department Standards

Students who major in sociology and social services are required to register with the department, at which time an advisor will be selected. In order to develop a program of study, students are required to meet once a quarter with their advisor. Further information on specific courses, the faculty, and career opportunities are available in the department office.

Exit Requirements

Students are required to have a 2.3 cumulative grade point average for all majors.

Honors in Sociology and Social Services

1. The sociology department's honors program is designed for students who wish to explore a particular research problem in depth.

2. Admission to the program

The student must:

- Have a 3.50 or higher cumulative GPA in sociology courses
- Be at least a junior
- Have a faculty member sponsorship; the faculty member would submit student's name to the department for admission

3. Requirements

The student is required to:

- Maintain a 3.5 or higher GPA in sociology coursework (including any approved outside electives) applied to the sociology degree
- Enroll in SOC 495 beginning fall quarter of the senior year (minimum of 10 credits over the course of that year)
- Complete a research project under the supervision of a faculty
- Participate in a public presentation of the research project (such as SOURCE, a professional conference, or other departmental-approved venues)

4. Those who fail to maintain a 3.5 GPA in the major, or who fail to participate in a public presentation will not receive honors.

Sociology Core Requirements

Required Courses

SOC 107 - Principles of Sociology 5
SOC 350 - Social Theory I 5
SOC 363 - Methods of Social Research 5
SOC 364 - Data Analysis in Sociology 5
SOC 489 - Senior Seminar 1

Sociology Core Total Credits: 21

Bachelor of Arts Sociology Major (45- or 60-Credit Major)

Students may choose either a 45-credit major or a 60-credit major. In order to graduate, a student who completes the 45-credit major must also have a minor or second major in another discipline.

(NOTE: Students seeking a BA degree must complete one year college/university study or two years high school study of a single foreign language.)

(NOTE: Students admitted to the sociology major cannot also have a sociology minor; however, they may have a social services minor. Likewise, students admitted to the social services major cannot also have a social services minor, but they may have a sociology minor.)

Sociology Core 21

Select one course from each of the following categories 14-15

Deviance, Law, and Social Control

SOC 343 - Child Abuse (5)
SOC 344 - Juvenile Delinquency (5)
SOC 345 - Deviance (5)
SOC 346 - Criminology (5)
SOC 348 - Women and Crime (4)
SOC 349 - Law and Society (5)
SOC 352 - Punishment and
Corrections (5)

Inequality and Social Change

SOC 325 - Aging (5)
SOC 326 - Demography of Contemporary
World Populations (5)
SOC/ETS 354 - Minority Experience (5)
SOC 356 - Sociology of Gender (5)
SOC 362 - Social Movements (5)
SOC 365 - Minority Groups (5)
SOC 366 - Sociology of American
Indians (5)
SOC 370 - Social Change (5)
SOC 375 - Sociology of Conflict (5)
SOC 382 - Sociology of the Future (5)
SOC 385 - Comparative Sociology (5)
SOC 386 - Seminar on Racism (5)
SOC 415 - Urban Sociology (5)
SOC 442 - Social Welfare Policy (5)
SOC 445 - Social Inequality (5)

Social Structure and Institutions

- SOC 307 - Individual and Society (5)
- SOC 320 - Death and Dying (5)
- SOC 327 - Sociology of Health (5)
- SOC 331 - Sociology of Sport (5)
- SOC 338 - Political Sociology (5)
- SOC 351 - Sociology of Work (5)
- SOC 357 - Sociology of Families (5)
- SOC 367 - Sociology of Religion (5)
- SOC 373 - Social Groups (5)
- SOC 380 - Social Ecology (5)
- SOC 425 - Sociology of Education (5)
- SOC 459 - Organizations (5)

Total Credits from above categories: 35-36

***Approved Electives in Sociology: 9-11**
OR

****Approved Electives in Sociology: 24-26**

***Total Credits: 45**

****Total Credits: 60**

(Note: A maximum of 5 credits of 100-level electives and up to five credits of 200-level electives may be counted toward the major. PSY 363, Intermediate Statistics and Research Methods are an approved elective.)

Bachelor of Science in Social Services Major

The social service major is designed for students interested in working in the human services delivery systems. Students are required to have a strong grounding in sociology as well as the applied field of social services. The coursework introduces students to critical issues in the field and offers students the opportunity to work within agencies in the community.

The major requirements are such that students are encouraged to organize their program of study to include a minor in an area of interest or specialization outside of sociology. Some areas that fit well with this major include psychology, ethnic studies, family studies, gerontology, women's studies, community health, and the like.

Required Courses

Core Area

- SOC 107 - Principles of Sociology..... 5
- **SOC 350 - Social Theory I 5
- SOC 363 - Methods of Social Research 5
- SOC 364 - Data Analysis in Sociology 5
- SOC 489 - Senior Seminar 1

Practice Area

- SOC 301 - Introduction and History of Social Service Agencies 5
- SOC 310 - Social Service Methods and Casework 5
- **SOC 490 - Cooperative Education 4-12

Macro Considerations in Social Services

- SOC 442 - Social Welfare Policy 5
- **SOC 445 - Social Inequality 5

Social Organization Area 5

Choose one course:

- SOC 415 - Urban Sociology (5)
- SOC 460 - Community Structure and Organization (5)

Contemporary Society Area 5

Choose one course:

- SOC 356 - Sociology of Gender (5)
- SOC 365 - Minority Groups (5)
- SOC 386 - Seminar on Racism (5)

*Approved upper-division electives in sociology..... 5

Total Credits: 60

*PSY 363, Intermediate Statistics and Research Methods is an approved elective.

**SOC 107 is prerequisite for SOC 350 and 445.

***Additional credits in SOC 490 may count toward graduation.

Sociology Minor

Required Courses

SOC 107 - Principles of Sociology 5

*Upper-division electives in Sociology 20

Total Credits: 25

*SOC 490, Cooperative Education, and SOC 496, Individual Study, do not count toward the minor. With advisor approval, a maximum of 5 credits of elective lower-division coursework may be counted toward the minor.

Social Services Minor

Required Courses

SOC 301 - Introduction and History of Social Service Agencies 5

SOC 310 - Social Service Methods and Casework 5

SOC 442 - Social Welfare Policy 5

OR

SOC 460 - Community Structure and Organization (5)

*Electives in Sociology 15

Total Credits: 30

*SOC 490, Cooperative Education, and SOC 496, Individual Study, do not count toward the minor. A maximum of 5 credits of elective lower-division coursework may be counted toward the minor.

(NOTE: Students admitted to the sociology major cannot also have a sociology minor, however, they may have a social services minor. Likewise, students admitted to the social services major cannot also have a social services minor, but they may have a sociology minor.)

Sociology Courses

SOC 101. Social Problems (5). An

introduction to the study of contemporary issues such as poverty, military policies, families, crime, aging, racial, ethnic conflict, and the environment.

SOC 107. Principles of Sociology (5). An introduction to the basic concepts and theories of sociology with an emphasis on the group aspects of human behavior.

SOC 291. Workshop (1-6).

SOC 296. Individual Study (1-6).

SOC 299. Seminar (1-5).

SOC 301. Introduction and History of Social Service Agencies (5). Introduction to the

fields of social welfare, health services and corrections; organization and function of agencies.

SOC 305. American Society (5). Introduction to the social structure and processes of American society; emphasis on institutions such as government, family, schools, and religion, and processes such as conflict, change, stratification, mobility, and communication. Prerequisite: sophomore standing or above.

SOC 307. Individual and Society (5). An analysis of the relationship between social structure and the individual.

SOC 310. Social Service Methods and Casework (5). Casework interviewing techniques and skills, traditional and contemporary methods, emphasis upon developing a personal casework style. Prerequisite: SOC 301.

SOC 320. Death and Dying (5). An analysis of social attitudes, practices, and institutions associated with death and dying in American society.

SOC 325. Aging (5). Problems and advantages of growing old in society; post-parental families, retirement, the economics of pensions, importance of interaction in old age, residential facilities, geriatric medicine, and dying.

SOC 326. Demography of Contemporary World Populations (5). Demographic analysis, fertility and the birth control movement, mortality and life expectancy, and migration. Involves use of computers.

SOC 327. Sociology of Health (5). The social causes of disease and illness behavior, organization of medical care and comparative health systems.

SOC 331. Sociology of Sport (5). Sports and games as social phenomena.

SOC 333. Genealogy (1). Kin names, pedigrees, family trees, and ancestral histories. Research with records, family documents, and interviews.

SOC 338. Political Sociology (5). Major theories of power in society. Analysis of the political/economic structure of society as it determines the differential access to social power by different social groups.

SOC 340. Social Interaction (5). Face-to-face contact, communication and social psychological features of groups.

SOC 343. Child Abuse (5). An analysis of the causes, consequences of and prospects for dealing with the phenomena of child abuse and neglect in American society.

SOC 344. Juvenile Delinquency (5). A study of social factors causing delinquency in youth; major theories, analysis of treatment and control.

SOC 345. Deviance (5). A survey of approaches to the field of deviance with emphasis on contemporary work and focus on the problematics of the field.

SOC 346. Criminology (5). A study of the adult criminal, criminal behavior, and criminality in human societies.

SOC 348. Women and Crime (4). This course will critically assess the current theoretical

- and empirical literature on female criminality and social control.
- SOC 349. Law and Society** (5). Law is studied through the major sociological perspectives by examining law and its relations with the economy, policy, family, religion, socioeconomic production, social class, gender, and race and ethnicity. Prerequisite: SOC 107.
- SOC 350. Social Theory I** (5). An introduction to social theory through study of early social thinkers, emphasizing the works of Durkheim, Marx, and Weber. Prerequisites: SOC 107 and 10 units of sociology 300-and-above level courses.
- SOC 351. Sociology of Work** (5). An historical view of the impact of technology on society and social change. Importance of work as an institution. How work relates to the other social institutions, to culture, and to the development of personality.
- SOC 352. Punishment and Corrections** (5). Origin, maintenance, structure, and function of institutions of punishment and correction with particular emphasis on American society; problems of change in punishment and corrections.
- SOC 354. Minority Experience** (5). Explanations will be identified for institutional racism common to the history and character of American minorities. SOC 354 and ETS 354 are equivalent courses; students may not receive credit for both.
- SOC 356. Sociology of Gender** (5). A review and analysis of the development, maintenance, and consequences of masculine and feminine social roles.
- SOC 357. Sociology of Families** (5). Theory and research about familial interaction and society.
- SOC 362. Social Movements** (5). Causes, organizational problems, consequences of revolutions, and political, religious and social movements.
- SOC 363. Methods of Social Research** (5). Principles and applications of social research methods. Prerequisites: SOC 107 and 5 units of sociology 300+ level courses.
- SOC 364. Data Analysis in Sociology** (5). Prerequisite: SOC 363.
- SOC 365. Minority Groups** (5). Study of the social formation of minority groups in American society, their historical development, current conditions, and issues.
- SOC 366. Sociology of American Indians** (5). This course presents a sociological approach to Native American society. Specifically, it explores social institutions in Indian Country including political, economic, family, religious, and educational systems. Understanding the American Indian experience in relation to broader society is emphasized.
- SOC 367. Sociology of Religion** (5). The social organization of religious experience in small and large societies and the relationship of religious beliefs to human life.
- SOC 369. Mass Media and Society** (4). Relationship of the mass media to social institutions; including philosophy, responsibilities, regulations, and criticism. Variable topic, may be repeated for up to 8 credits. SOC 369 and COM 369 are equivalent courses.
- SOC 370. Social Change** (5). Social processes, institutional development and revolutions.
- SOC 375. Sociology of Conflict** (5). Major theories of conflict in society. Applications of theories to contemporary United States. Investigation of major factors related to societal power and conflict.
- SOC 380. Social Ecology** (5). The structure and development of human communities as they interact with environmental conditions.
- SOC 382. Sociology of the Future** (5). A sociological analysis of predictions of the future. Principal questions will revolve around the effects of technology on social structure and the individual.
- SOC 386. Seminar on Racism** (5). An advanced level of study examining the nature and dynamics of social forces in American society that produce the phenomena of racism. The changing forms of racism that occur historically at the intersection of class and gender oppression.
- SOC 398. Special Topics** (1-6).
- SOC 399. Seminar** (1-5).
- SOC 415. Urban Sociology** (5). Growth, structure, and functions of the city; their relationships to surrounding and rural areas, urban ecological patterns, planning, and the problems of urban living. Prerequisites: SOC 107 and 10 units of sociology 300-and-above level courses.
- SOC 425. Sociology of Education** (5). Impact of culture on schools. Examination of contemporary social trends and relationships among church, school, and government; contributions of sociology to the area of education in its broadest sense.
- SOC 442. Social Welfare Policy** (5). Review of U.S. social welfare policy, emphasis on 20th century social policies influencing nature of welfare state, and delivery of social services.
- SOC 445. Social Inequality** (5). The distribution of wealth, power, and prestige in society. Prerequisite: SOC 107.
- SOC 447. White-collar and Organization Crime** (5). This course explores crimes by and against social organizations. Crimes by the organization include illegal behavior by corporations, governments, and crime syndicates. Crimes against the organization include illegal acts by trusted professionals. Prerequisite: SOC 107.
- SOC 449. Contemporary Native American Cultures and Issues** (4). Analysis of contemporary Native American cultures and issues, including tribal sovereignty, resource management, education, religion, economic, and health status, and cultural continuity, and adaptation. SOC 440 and ANTH 449 are equivalent courses; students may not receive credit for both. Prerequisites: either ANTH 341, ANTH 347, SOC 366, and AIS 103.
- SOC 450. Social Theory II** (5). Study of selected modern social theories, including structural functionalism, conflict theory, exchange theory, symbolic interactionism, ethnomethodology, and the dramaturgical school. Prerequisite: SOC 350.
- SOC 459. Organizations** (5). Theory and research on the structure and development of organizations.
- SOC 460. Community Structure and Organization** (5). Community formation from inner-city to rural hamlet. Changes in community institutions and organizational life related to industrialization, politics, social stratification, and ethnicity. Students will conduct field research on specific community functions and social structures. Prerequisites: SOC 107 and 10 units of sociology 300-and-above level courses.
- SOC 464. Applied Data Analysis** (5). Application of the principles of research methodology and statistical analysis to the collection and analysis of social data. Prerequisite: SOC 364.
- SOC 470. Contemporary Social Thought** (4). Prospects for sociology theory. Prerequisite: SOC 450.
- SOC 488. Colloquy** (1-3). Current literature in sociology. May be repeated up to 10 credits.
- SOC 489. Senior Seminar** (1). A senior capstone course. Portfolio review, career planning, and program evaluation activities. Prerequisite: senior standing and admission to either the sociology or social services major.
- SOC 490. Cooperative Education** (1-12). An individualized contracted field experience with business, industry, government, or social service agencies. This contractual arrangement involves a student learning plan, cooperating employer supervision, and faculty coordination. May be repeated for credit. Grade will either be S or U. By permission.
- SOC 491. Workshop** (1-6).
- SOC 492. Sociology Teaching Experience** (1-5). Experience in the classroom and/or laboratory teaching. May be repeated up to 10 credits. By permission. Prerequisite: senior standing and admission to the sociology major.
- SOC 494. Research Practicum** (1-5). Supervised experience in qualitative research. May be repeated for a total of 10 credits.
- SOC 495. Sociological Research** (1-15). Individual research project. May be repeated up to 15 credits. Prerequisites: SOC 350, 363, and 364.
- SOC 496. Individual Study** (1-6).
- SOC 498. Special Topics** (1-6).
- SOC 499. Seminar** (1-5).

TEACHING ELEMENTARY, ADOLESCENT, AND YOUNG CHILDREN DEPARTMENT (TEACH)

College of Education and Professional Studies
Ellensburg
Black Hall, room 101

509-963-1464

Fax: 509-963-1162

www.cwu.edu/~education

See the website for how these programs
may be used for educational and career
purposes.

Faculty and Staff Chair

Virginia Erion, EdD

Professors

Susan Donahoe, PhD, elementary education

Associate Professors

Susan Donahoe, PhD, elementary education

Cory Gann, MA, early childhood education

Tina Georgeson, EdD, early childhood and
elementary education

Deborah Haskell, PhD, TEACH contributions
middle level programs and early childhood
education

Keith Salyer, PhD, early childhood and
elementary education

Assistant Professors

Virginia Erion, EdD, early childhood education

Khodi Kaviani, PhD, elementary education

Teresa Walker, EdD, early childhood
education

Lecturers

Susan Connolly, MEd, lecturer

Christine English, MEd, lecturer

Melanie Kingham, MEd, senior lecturer

Staff

Tina Clark, program support supervisor

Department Information, Standards, and Requirements

Major and/or minor programs in the
TEACH department include early childhood
education and elementary education.
Additionally the TEACH department
contributes to the middle-level teaching
programs in mathematics (see mathematics in
the catalog) and science teaching (see science
education in the catalog).

In addition to a listed major and/or
minor, students must maintain full admission
status in the Teacher Preparation Program (see
College of Education and Professional Studies
in the catalog) and complete the Professional

Education Program (see Department of
Education Foundations and Curriculum in
the catalog) to qualify for teacher certification
in the endorsable area. The early childhood
education major and minor offer options in
which these requirements do not apply (see
descriptions below). At least 75 percent of an
endorsable major or minor must be completed
prior to the Professional Education Program
course, EDCS 442 (Student Teaching).

All students seeking a teacher
certification endorsement must maintain
a 3.0 GPA or higher for the last 45 graded
credits. Students must also earn a minimum
grade of "C" in all required major, minor, and
Professional Education Program courses.

Bachelor of Arts in Education Early Childhood Education

Major (with Washington State Teacher Certification)

This major is intended to prepare
students to become birth through grade
3 teaching specialists. As it is less than a
60-credit major it requires a minor OR second
major. Students who elect to complete this
major for a teacher certification endorsement
in early childhood education are strongly
advised to simultaneously complete the
elementary education major (see a department
advisor as to how this may be effectively
accomplished). Students seeking the teacher
certification endorsement in early childhood
education must complete all Teacher
Certification and Professional Education
Program requirements, which include the
Professional Education Program courses (49-
52 credits). Also, EFC 480, Student Teaching,
of the Professional Education Program should
be completed at the K-3 level. Students are
advised to take EDEC 292, 232, and 332 as
the initial portion of their studies. Successful
completion of EDEC 493 is expected before
student teaching. Exceptions may be
granted by the department chair in unusual
circumstances. EDEC 292 and EDEC 493 will
be graded S or U. Students enrolling in either
EDEC 292 or EDEC 493 must have WSP and
FBI fingerprint clearance. Please check with
the CWU Teacher Certification Office (Black
Hall, room 228 or 509-963-2660) regarding
clearance.

Early Childhood Education

Major (without Washington State Teacher Certification)

A student may complete this major
without gaining entry to the Teacher
Preparation Program or completing the
Professional Education Program. Under
such circumstances a teacher certification
endorsement in early childhood will not
be granted. This option exists for those
individuals who wish to work with young
children in an infancy/toddler/preschool
setting only. While full application to the
Teacher Preparation program is not required,

students enrolling in either EDEC 292 or
EDEC 493 must have WSP and FBI fingerprint
clearance. Please check with the CWU Teacher
Certification Office (Black Hall, room 228 or
509-963-2660) regarding clearance.

Required Courses

EDEC 232 - Child Development	3
OR	
EDEC 310 - Infant Education (3)	
EDEC 332 - Theories in Child Development	3
EDEC 333 - ECE Curriculum: Pre- Kindergarten	3
EDEC 334 - ECE Curriculum: Kindergarten- Primary	3
EDEC 444 - Classroom Management in an ECE Classroom	3
EDEC 448 - Parent Involvement	3
EDEC 492 - Senior Practicum Seminar.	3
EDEC 493 - Practicum and Issues in ECE . .	12

Required Courses Credits: 33

Select from the following: 12

EDEC 232 - Child Development (3)	
OR	
EDEC 310 - Infant Education (3)	
(Whichever was not taken to fulfill the required course work)	
EDEC 292 - Assisting in the Child-Centered Classroom (5)	
EDEC 347 - History and Philosophy in ECE (3)	
EDEC 354 - Childhood Learning (3)	
EDEC 364 - Child Safety and Well-being (3)	
EDEC 389 - Professional Growth and Expectations (3)	
EDEC 396 - Individual Study (1-6)	
EDEC 415 - Child Language Acquisition (3)	
EDEC 418 - Equity, Culture, and Anti-bias in ECE (3)	
EDEC 421 - Play in Childhood Learning (3)	
EDEC 423 - Materials and Manipulatives in ECE (2)	
EDEC 425 - Responsible Childhood Assessment (3)	
EDEC 432 - Child Development Research (3)	
EDEC 443 - Lab Experience Teaching in ECE (3)	
EDEC 447 - Curriculum Exploration (3)	

Total Credits: 45

Elementary Education Major

This major satisfies the teacher
certification endorsement for elementary
education. As it is less than a 60-credit major
it requires a minor OR second major. There
is not an option to complete this major
without completing all Teacher Certification
and Professional Education Program
requirements, which include the Professional
Education Program courses (49-52 credits).

Students who complete this major will be
endorsed to teach in regular, self-contained
elementary classrooms. EDLT 308, EDLT 309,
EDLT 422, and EDEL 323 must be taken prior
to EFC 480 (Student Teaching).

Required Courses

EDEL 320 - Integrated Arts in the Elementary School	5
EDEL 323 - Teaching Elementary School Mathematics	4
EDEL 420 - Social Sciences in the Elementary School	4
EDEL 423 - Integrated Methods for the Elementary School	3
EDLT 308 - Literacy I	3
EDLT 309 - Literacy II	5
EDLT 421 - Teaching Children's Literature ..	3
EDLT 422 - Teaching the Language Arts	4
HED 446 - Health Education Curriculum for Elementary Teachers	3
MATH 164 - Foundations of Arithmetic	5
MATH 250 - Intuitive Geometry for Elementary Teachers	4
PE 334 - Physical Education Activities for the Elementary School	3
SCED 322 - Science Education in the Elementary School	4
Department-approved electives	3-5

Total Credits: 53-55**Early Childhood Education****Minor (with Washington State Teacher Certification)**

This minor is intended to prepare students to become birth through grade 3 teachers. Students who elect to complete this minor for a teacher certification endorsement in early childhood education are strongly advised to simultaneously complete the elementary education major (see a department advisor as to how this may be effectively accomplished). Students seeking the teacher certification endorsement in early childhood education must complete all Teacher Certification and Professional Education Program requirements, which include the Professional Education Program courses (49-52 credits). Also, EFC 480, Student Teaching, of the Professional Education Program should be completed at the K-3 level. Students are advised to take EDEC 292 and 232 or 332 as the initial portion of their studies. EDEC will be graded S or U. Students enrolling in EDEC 292 or EDEC 493 must have WSP and FBI fingerprint clearance. Please check with the CWU Teacher Certification Office (Black Hall, room 228 or 509-963-2660) regarding clearance.

Early Childhood Education**Minor (without Washington State Teacher Certification)**

A student may complete this minor without gaining entry to the Teacher Preparation Program or completing the Professional Education Program. Under such circumstances a teacher certification endorsement in early childhood will not be granted. This option exists for those individuals who wish to work with young children in an infancy/toddler/preschool setting only.

Required Courses

EDEC 310 - Infant Education	3
OR	
EDEC 332 - Theories in Child Development (3)	
EDEC 333 - ECE Curriculum: Pre-Kindergarten	3
EDEC 334 - ECE Curriculum: Kindergarten- Primary	3
EDEC 444 - Classroom Management in the ECE Classroom	3
EDEC 448 - Parent Involvement	3

Required Course Credits: 15**Select from the following electives** 12

EDEC 310 - Infant Education (3)	
OR	
EDEC 332 - Theories of Child Development (3)	
(Whichever was not taken to fulfill the required course work)	
EDEC 232 - Child Development (3)	
EDEC 292 - Assisting in the Child-centered Classrooms (5)	
EDEC 347 - History and Philosophy in ECE (3)	
EDEC 354 - Childhood Learning (3)	
EDEC 364 - Child Safety and Well Being (3)	
EDEC 396 - Individual Study (1-6)	
EDEC 415 - Child Language Acquisition (3)	
EDEC 418 - Equity, Culture, and Anti-Bias in ECE (3)	
EDEC 421 - Play in Childhood Learning (3)	
EDEC 423 - Materials and Manipulatives in ECE (2)	
EDEC 425 - Responsible Childhood Assessment (3)	
EDEC 432 - Child Development Research (3)	
EDEC 443 - Lab Experience Teaching in ECE (3)	
EDEC 447 - Curriculum Exploration (3)	
EDEC 489 - Professional Growth and Expectations (3)	

Total Credits: 27**Middle-level Mathematics Teaching Minor**

See program description under mathematics in the catalog.

Middle-level Science Teaching Minor

See program description under science education in the catalog.

Early Childhood Education Courses

EDEC 232. Child Development (3).	
Developmental characteristics of children with emphasis from conception to eight years. Includes observation techniques. EDEC 232 and FS 232 are equivalent courses; students may not receive credit for both.	

EDEC 292. Assisting in the Child-centered Classrooms (5).

Students work with children in ECE classrooms, learning and practicing the fundamentals of guidance, curriculum implementation, and maintaining the physical environment. Students participate in a two-hour seminar each week. May be taken twice for credit with the permission of the division head. Grade will be either S or U.

EDEC 296. Individual Study (1-6).**EDEC 298. Special Topics** (1-6).**EDEC 299. Seminar** (1-5).

EDEC 310. Infant Education (3). Needs and characteristics of infants and toddlers. Enrichment opportunities and effects on development. Implications for persons in care giving roles.

EDEC 332. Theories in Child Development (3).

Comparison of major theories. EDEC 332 and FS 332 are equivalent courses; student may not receive credit for both.

EDEC 333. ECE Curriculum: Pre-kindergarten (3).

Historical influences and knowledge of child development, psychological theories, and contemporary models as bases for curriculum development and implementation in pre-kindergarten settings. Prerequisites: EDEC 292 and either EDEC 232, or EDEC 332.

EDEC 334. ECE Curriculum: Kindergarten Primary (3).

Historical influences and knowledge of child development/psychological theories/contemporary models as a basis for curriculum development and implementation in kindergarten through primary settings. Prerequisites: either PSY 314, EDEC 232, or EDEC 332.

EDEC 347. History and Philosophies of Early Childhood Education (3).

Focus on select historical events and figures that have shaped the pedagogical and philosophical development of the field of early childhood education. Prerequisite: any psychology course.

EDEC 354. Childhood Learning (3). Origins and applications of learning/developmental theory emphasizing personalized, child-centered education. Prerequisite: either EDEC 232 or EDEC 332.

EDEC 364. Child Safety and Well-being (3).

Origins and applications of learning/developmental theory emphasizing personalized, child-centered education and wellness practices. Prerequisite: either EDEC 232 or 332.

EDEC 396. Individual Study (1-6).**EDEC 398. Special Topics** (1-6).**EDEC 415. Child Language Acquisition** (3).

Language acquisition from birth through eight years; aspects of phonological, grammatical, and semantic development in a natural language environment. Projects include transcription and grammatical analysis of a young child's speech. Prerequisites: either EDEC 232, FCSF 331, EDEC 332, FS 332, PSY 314, ENG 180, or ANTH 180.

EDEC 418. Equity, Culture, and Anti-bias in ECE (3). Principles of equity, cultural relevancy, and anti-bias approaches appropriate for programs serving children from birth through eight years of age.

EDEC 421. Play in Childhood Learning (3). Definitions, developmental aspects, and implications curricular emergence through play. Prerequisite: either EDEC 232 or EDEC 332 is required for enrollment.

EDEC 423. Materials and Manipulatives in ECE (2). Strategies are investigated for developing games and learning opportunities through the use of classic ECE manipulatives. The potential for fostering mathematical teaching knowledge and skills is emphasized.

EDEC 425. Responsible Childhood Assessment (3). Exploration and application of childhood assessment, birth elementary with emphasis on responsibility, ethics, purpose, decision making, and alignment; designed to impact individual learning outcomes, professional implementation, and program improvement.

EDEC 432. Child Development Research (3). The influence of family patterns and interaction on infant and child development; current research. EDEC 432 and FCSF 432 are equivalent courses; students may not receive credit for both. Prerequisite: either EDEC 232 or FCSF 331.

EDEC 443. Lab Experience/Teaching ECE (3). Assist ECE professors in teaching those courses which involve outside observation or participation.

EDEC 444. Classroom Management in an ECE Classroom (3). This course provides students the opportunity to explore, apply, synthesize, and evaluate techniques and strategies for creating positive classroom climates through organization and management techniques.

EDEC 447. Curriculum Exploration (3). Guided exploration of curriculum or guidance needs as identified by student self-evaluation. Consistency with the student's personal philosophy and child development will be emphasized. Prerequisites: either EDEC 232 or FCSF 331.

EDEC 448. Parent Involvement (3). Parent-child and parent-school interactions as educational and developmental aids. Emphasis upon the school's use of the home and community for educational purposes.

EDEC 465. Directing ECE Programs (3). Budgeting, governmental requirements, staffing, nutritional and health care, parental involvement, community and agency liaison, and the integration of developmental/educational curriculum.

EDEC 489. Issues in Early Childhood Education (3).

EDEC 490. Cooperative Education (1-12). An individualized contracted field experience with business, industry, government, or social service agencies. This contractual arrangement involves a student learning plan, cooperating employer supervision,

and faculty coordination. May be repeated for credit. Grade will either be S or U. By permission.

EDEC 492. Senior Seminar (3). This capstone seminar integrates the hands-on experiences from the EDEC 493 practicum with the ECE major course content. Students will actively problem solve, develop professional resources, compile a portfolio and career growth plan. May be repeated up to 6 credits. By permission. Prerequisite: 60 percent of the coursework for the ECE major must be completed prior to enrolling in this class. Corequisite: EDEC 493 must be taken concurrently (may be repeated with or without the EDEC 493 practicum).

EDEC 493. Practicum and Issues in ECE (3-18). Students will work in ECE settings for 20 hours per credit. Classroom interactions will include group instruction, individual tutoring, assessing students' learning, classroom management, classroom maintenance, as well as other duties determined by the site supervisors. 60 percent of the ECE major coursework must be completed prior to enrolling in class. Corequisite: EDEC 492 required for the initial experience (may be repeated a second time without the EDEC 492 practicum). May be repeated up to 18 credits. Grade will be either S or U. By permission.

EDEC 494. Advanced Practicum (3-10). A course designed to meet special needs as determined by the student, his/her advisor and the director. Grade will either be S or U. Prerequisite: EDEC 493.

EDEC 496. Individual Study (1-6).

EDEC 498. Special Topics (1-6).

EDEC 499. Seminar (1-5).

Elementary Education Courses

EDEL 296. Individual Study (1-6).

EDEL 298. Special Topics (1-6).

EDEL 299. Seminar (1-5).

EDEL 320. Integrated Arts in the Elementary School (5). This course contains content and methodology for elementary majors preparing to teach all of the arts (dance, drama/theatre arts, music and visual arts) with connections to pedagogy, artistic expression, and the other content area of elementary education. Recommended: acceptance into the Teacher Preparation Program.

EDEL 323. Teaching Elementary School Mathematics (4). Methods and materials for helping children learn mathematics with emphasis on the use of manipulatives, problem solving, cooperative learning, and communication. Prerequisites: MATH 164, MATH 250, and admission to the Teacher Preparation Program.

EDEL 396. Individual Study (1-6).

EDEL 420. Social Sciences in the Elementary School (4). Methods, techniques, content, and materials for the various grade levels with an emphasis on history, geography,

economics, civics, political science, and social studies skills, through the use of inquiry, primary source documents, and integration of content within the elementary school curriculum. Prerequisite: conditional or full admission to the Teacher Preparation Program is required for enrollment.

EDEL 423. Integrated Methods for the Elementary School (3). In this capstone course, elementary teacher candidates will explore interdisciplinary instruction and design standards-based unit plans that incorporate best teaching practices for specific teaching assignments. Teacher candidates must complete at least one course in each of four of six elementary content areas prior to enrolling: (arts, English/language arts, health/fitness, mathematics, science, and social studies). Prerequisite: complete four of the following courses; EDEL 320, EDLT 421, EDLT 422, EDEL 323, SCED 322, PE 334, HED 446, or EDEL 420, and acceptance into the Teacher Preparation Program.

EDEL 468. Teaching Problem-solving Techniques for Upper Elementary and Middle School Mathematics (3). Methods and materials for helping the upper elementary/middle school (5th-8th grade) students learn mathematics with emphasis on appropriate manipulatives, teaming, problem solving, and communication strategies. Prerequisites: either EFC 310 or EDF 301A, EDCS 311, EDEL 323, MATH 164, and application or admission to the Teacher Preparation Program.

EDEL 477. Middle School Students and Their Environment (4). An in-depth exploration of the developmental learning needs of 5th-8th grade students and the physical, social, and management systems utilized by middle-level education programs. The major focus of this course is to create developmentally appropriate classroom practices that merge educational developmental needs. Prerequisites: PSY 314, either EFC 310 or EDF 301A, and application or admission to the Teacher Preparation Program.

EDEL 478. Developmentally Responsive Curriculum in the Middle Grades (3). An in-depth exploration of research-based middle school curriculum that meets the development needs of young adolescents. This course focuses on middle school curriculum and its process by which it is designed, integrated, and evaluated. Prerequisite: conditional or full admission to the Teacher Preparation Program.

EDEL 482. Instruction and Assessment for the Middle Level: Grades Five through Eight (3). This course provides the future middle-level educator with comprehensive skills in instructional methods, curriculum alignment, lesson development, and assessment methodology within the middle school environment. Prerequisites: PSY 314, EFC 310, EDCS 311, and full admission to the Teacher Preparation Program.

EDEL 490. Cooperative Education (1-12). An individualized, contracted field experience with business, industry, government, or social service agencies. This contractual arrangement involves a student learning plan, cooperating employer supervision, and faculty coordination. May be repeated for credit. Grade will be either S or U. Prerequisites: prior approval and conditional or full admission to the Teacher Preparation Program.

EDEL 492. Practicum. (1-15). Experience working in educational settings. Arrangements are made through the office of student teaching. Students may accumulate no more than 15 hours of practicum credit. Grade will either be S or U. Prerequisite: conditional or full admission to the Teacher Preparation Program.

EDEL 496. Individual Study (1-6).

EDEL 498. Special Topics (1-6).

EDEL 499. Seminar (1-5).

THEATRE ARTS DEPARTMENT

College of Arts and Humanities
Ellensburg
McConnell Hall, room 102

509-963-1750

Fax: 509-963-1767

www.cwu.edu/~theatre

See the website for how this program may be used for educational and career purposes.

Faculty and Staff

Chair

Scott R. Robinson, MFA

Professors

Brenda Hubbard, MFA, performance head, acting, directing, literature

Scott R. Robinson, MFA, resident costume designer

Michael J. Smith, MFA, acting, directing, voice, literature, musical theatre

Associate Professor

Christina Barrigan, MFA, design head, resident lighting designer

George W. Bellah, 3rd, MFA, movement, stage combat, acting, Asian drama

Assistant Professors

David Brown, MM, musical directory, music theory

Terri Brown, PhD, music theatre head, history
Elise Forier, MFA, theatre education, youth theatre, playwriting

Marc Hanjuk, MFA, resident scenic designer
Nadine Pederson, PhD, graduate coordinator, history, literature

Lecturers

David Barnett, MFA, technology

Jerald Dougherty, MFA, production management

Keith Edie, MFA, performance
Shari Foster, ABD, literature and history
Elena Hartwell, MFA, playwriting and literature

M. Catherine McMillen, BA, wigs and makeup

Jessica Prible, MFA, costume design and technology

Staff

David Barnett, McConnell stage manager / technical director

Mary Makins, senior department secretary

M. Catherine McMillen, costume shop supervisor

Linda Waters, fiscal technician II

Department Information

The Department of Theatre Arts offers comprehensive study in the varied facets of theatre arts as they relate to theatre production. Coursework prepares students for rigorous and rewarding work within Central Theatre Ensemble (CTE), the production arm of the program. Based on a professional model of theatre, CTE offers students the opportunity to thrive in all aspects of theatre production in a safe and mentoring environment, working in state-of-the-art venues supported by fully equipped shops.

Admission Requirements

Entrance exam administered prior to admission to major.

Bachelor of Arts

Theatre General Studies

A perfect choice for the theatre artist, general studies allows for advanced study in a variety of areas allowing students to become the kind of well-rounded theatre artist who can go on to a focused study in graduate school or a variety of careers in the field. The general studies degree is also a great choice for the student who has a number of interests and needs the flexibility to explore several options.

The Department of Theatre Arts offers students a variety of emphasis areas to choose from to ensure that each participant receives specialized attention in the theatre discipline of their choice. By focusing on an emphasis, students can build skills and acquire the training to build strong resumes and portfolios in order to pursue professional jobs or advanced degrees.

BA Pre-admission Requirements

Students seeking a BA degree must complete one year of college / university study or two years of high school study of a single foreign language.

Pre-admission Requirements

TH 107- Introduction to Theatre 4

TH 144 - Foundations of Acting 3

TH 166 - Theory of Play Production 3

A cumulative grade point average of 2.7 in the pre-admission requirements courses must be achieved with a minimum grade of "C+" (2.3) in each course. The applicant must have earned a minimum cumulative GPA of 2.0 in all other collegiate study.

Students who have met all the above requirements will be admitted unless the number of eligible applicants exceeds available space. In that case, acceptance will be acceptance will be competitive, based on a selection index.

BA Requirements

Pre-admission Requirements. 10

TH 261 - Costume Technology 3

TH 267 - Scene Technology 3

TH 268 - Lighting Technology 3

TH 363 - Theatre History I 4

TH 364 - Theatre History II 4

TH 365 - Theatre History III 4

TH 495 - Senior Research Project 3

Choose any of the following for a total

of 8 credits 8

TH 375 - Asian Drama (4)

TH 377 - Staging Gender (4)

TH 382 - Ethnic Drama (4)

TH 383 - Contemporary World Drama (4)

Choose either of the following for a

total of 3 credits 3

TH 329 - Directing I (3)

TH 360 - Stage Management (3)

Complete 3 credits of TH 393 and

one credit of TH 493 4

TH 393 -Theatre Laboratory (1)

TH 493 - Theatre Laboratory (1)

Complete any of the following for a

total of 12 credits 12

TH 201 - Dance Production

Application (1-3)

TH 202 - Performance Studio (1-3)

TH 301 - Production Application (3)

TH 302 - Performance Application (3)

TH 303 - Management Application (3)

TH 332 - New Play Production (2)

TH 401 - Production Application (3)

TH 402 - Performance Application (3)

TH 403 - Management Application (3)

Choose any Theatre Electives for a total

of 14 credits (any TH course as
approved by advisor) 14

Total Credits: 75

Bachelor of Fine Arts Theatre

The BFA program is designed to prepare knowledgeable, skilled graduates who will compete at all levels in an increasingly competitive field. Students will also learn to assess, explain, and interpret the many roles and responsibilities inherent in the world of the professional theatre artist. They will also understand how to use the skills they have developed in other career paths related to their degree.

The BFA theatre program is innovative and interdisciplinary. Students complete a sequence of core foundation courses, gain admission into the program through audition/interview, and focus in a single emphasis-performance, design and production, or musical theatre.

Interdisciplinary course work is integral to the structure and success of the BFA theatre program. All of the required and elective courses for the degree are part of other major programs and are regularly taught. Besides the theatre arts courses, 29 interdisciplinary courses are offered by two colleges from seven other CWU departments: art, communications, dance, English, physical education, family and consumer sciences, industrial engineering, and music.

Admission to the BFA is by audition/interview only. Auditions/interviews are held each spring quarter, in late-February for new students and in early-March for continuing BA candidates. Continuing BFA students will sign up for audition/interview appointments as part of the annual BFA juries.

BFA candidates must maintain a cumulative GPA of 3.0 in Theatre Arts with a minimum grade of "B-" (2.7) in each course within their specialization. The applicant must earn a minimum cumulative GPA of 2.0 in all other collegiate study. Meeting this standard is reviewed as part of the annual jury in each specialization.

Theatre BFA students are required to complete the general education requirements established by the university.

BFA Core Requirements

TH 107 - Introduction to Theatre	4
TH 166 - Theory of Play Production	3
TH 261 - Costume Technology	3
TH 267 - Scene Technology	3
TH 268 - Lighting Technology	3
TH 363 - Theatre History I	4
TH 364 - Theatre History II	4
TH 365 - Theatre History III	4

Lab Component

Complete 3 credits of TH 393 and one credit of TH 493	4
TH 393 - Theatre Laboratory (1)	
TH 493 - Theatre Laboratory (1)	

Production Component

Complete one of the following	3
TH 301 - Production Application (3)	
TH 401 - Production Application (3)	

BFA Core Total Credits: 35

Performance Specialization

The performance specialization builds specific skills in production from a strong foundation of using the body as the artist's instrument through acting styles, voice, and stage movement. Students choose from a range of courses, both introductory and advanced, from writing and dancing, to stage and screen.

To help students prepare for future employment or graduate school, all students

are strongly encouraged to pursue practical experience through TH 490: Cooperative Education (Internship), as well as the production application courses, designed to put theory into practice as part of Central Theatre Ensemble's regular on-campus season.

Required Courses

Theatre Arts Core Requirements	35
TH 148 - Actor Conditioning-Monologues	1
TH 244 - Basic Acting I	3
TH 245 - Basic Acting II	3
TH 246 - Basic Acting III	3
TH 248 - Vocal Conditioning for the Actor (1)	2
May be repeated	
TH 329 - Directing I	3
TH 342 - Stage Voice	3
TH 344 - Intermediate Acting I	3
TH 345 - Intermediate Acting II	3
TH 444 - Acting Styles	4
TH 445 - Audition Techniques	3
TH 475 - Acting for Film and Television	4

Literature Component

Choose any of the following for a total of 8 credits	8
TH 375 - Asian Drama (4)	
TH 377 - Staging Gender (4)	
TH 382 - Ethnic Drama (4)	
TH 383 - Contemporary World Drama (4)	

Performance Component

Choose any of the following for a total of 15 credits	15
TH 202 - Performance Studio (1-3)	
TH 302 - Performance Application (3)	
TH 402 - Performance Application (3)	

Stage Movement Component

Choose any of the following for a total of 10 credits	10
PED 101 - Modern Dance I (2)	
PED 102 - Modern Dance II (2)	
PED 104 - Ballet I (Level 1) (1)	
PED 121 - Tap Dance I (1)	
PED 141 - Jazz Dance I (1)	
PED 142 - Jazz Dance II (1)	
PED 204 - Ballet II (Level 1) (2)	
PEID 120 - Beginning Fencing (1)	
PEID 121 - Intermediate Fencing (1)	
PEID 145 - Beginning Circus Acts (1)	
TH 312 - Creative Dramatics in School and Leisure (3)	
TH 333 - Stage Combat Fundamentals (3)	
TH 335 - Movement for the Actor (3)	
TH 433 - Advanced Stage Combat (3)	
TH 435 - Period Movement of the Actor (3)	

Special Skills Component

Choose any of the following for a total of 7 credits	7
COM 342 - Broadcast News Producing and Reporting (4)	
MUS 164 - Major Applied Area (Individual Instruction) (1, 2, 4)	
TH 202 - Performance Studio (1-3)	
TH 243 - Singing for Actors (1)	
TH 270 - Stage Makeup (3)	

TH 302/402 - Performance Application (3)	
TH 332 - New Play Production (2)	
TH 433 - Advanced Stage Combat (3)	
TH 435 - Period Movement for the Actor (3)	
TH 444 - Acting Styles (4)	
TH 481 - Kennedy Center Festival (1-2)	
TH 490 - Cooperative Education (1-12)	
TH 492 - Practicum in Producing and Touring Theatre (3, 6, 12)	

Total Performance Specialization Credits: 75

Total Credits: 110

Design and Production Specialization

The design and production specialization builds specific skills in production from a strong foundation of general knowledge of technical theatre and the design aspect of theatre. Students choose from a range of courses, both introductory and advanced from writing and drawing, construction, and sewing.

To help students prepare for future employment or graduate school, all students are strongly encouraged to pursue practical experience through TH 490 - Cooperative Education (internship) as well as the production application courses, designed to put theory into practice as part of Central Theatre Ensemble's regular on-campus season.

Required Courses

Theatre Arts Core Requirements	35
TH 144 - Foundations of Acting	3
TH 266 - Theatre Drafting	3
TH 340 - Introduction to Theatre Design	3
TH 360 - Stage Management	3
TH 366 - Theatre Rendering	3
TH 489 - Career and Portfolio Preparation	3
TH 495 - Senior Research Project	3

Literature Component

Choose any of the following for a total of 8 credits	8
TH 375 - Asian Drama (4)	
TH 377 - Staging Gender (4)	
TH 382 - Ethnic Drama (4)	
TH 383 - Contemporary World Drama (4)	

Production Component

Choose any of the following for a total of 15 credits	15
FCSA - 181 Fashion Show Production (2)	
TH 201 - Dance Production Application (1-3)	
TH 301 - Production Application (3)	
TH 303 - Management Application (3)	
TH 393 - Theatre Laboratory (1)	
TH 401 - Production Application (3)	
TH 403 - Management Application (3)	
TH 440 - Advanced Design Problems (3)	
TH 490 - Cooperative Education (1-12)	
TH 492 - Practicum in Producing and Touring Theatre (1-12)	
TH 493 - Theatre Laboratory (1)	

Core Skills Component**Choose from the following for a****total of 3 credits** 3

- ART 150 - Drawing I (5)
- TH 215 - Music Fundamentals for Musical Theatre (3)
- TH 465 - Costume and Fashion Drawing (3)

Area Skills Component**Choose from the following for a****total of 12 credits** 12

- COM 207 - Introduction to Communications Studies (4)
- COM 251 - Small Group Dynamics (4)
- EMS 245 - First Aid (3)
- FCSA 355 - Consumer Textiles (4)
- IET 160 - Computer Aided Design and Drafting (4)
- IET 161 - Architectural Computer Aided Drafting (3)
- SHM 201 - Introduction to Safety and Health Management (1)
- TH 270 - Stage Makeup (3)
- TH 353 - Stage Properties (3)
- TH 354 - Scene Painting (3)
- TH 356 - Stage Sound (3)
- TH 362 - Costume Crafts (3)
- TH 384 - Puppetry (3)
- TH 464 - Wig Creation, Styling, and Maintenance (3)

History/Writing Component**Choose any of the following for a****minimum of 6 credits** 6

- ADMG 385 - Business Communications and Report Writing (3)
- ART 235 - Ancient and Medieval Art (4)
- ART 236 - Renaissance through mid 19th Century Art (4)
- ART 237 - Impressionism through Post-Modern (4)
- ENG 310 - Technical Writing (4)
- FCSA/TH 452 - History of Fashion (4)
- FCSH 366 - History of Housing and Furniture I (3)
- FCSH 465 - History of Housing and Furniture II (3)

Intermediate Skills Component**Choose from the following for a minimum of****6 credits** 6

- HRM 381 - Management of Human Resources (5)
- OR
- MGT 380 - Organizational Management (5)
- TH 361 - Stage Costuming (3)
- TH 367 - Stage Scenery (3)
- TH 368 - Stage Lighting (3)

Advanced Skills Component**Choose from the following for a total****of 4 credits** 4

- TH 461 - Costume Design (4)
- TH 467 - Scene Design (4)
- TH 468 - Lighting Design (4)

Total Design and Production Credits: 75**Total Credits: 110****Musical Theatre Specialization**

The musical theatre specialization builds specific skills in production from a strong foundation of using the body as the artist's instrument through singing, voice, and stage movement in the musical theatre style. Students choose from a range of courses, both introductory and advanced, from writing and movement, dancing, and voice.

To help students prepare for future employment or graduate school, all students are strongly encouraged to pursue practical experience through TH 490 - Cooperative Education internship as well as the performance application courses, designed to put theory into practice as part of Central Theatre Ensemble's regular on-campus season.

Required Courses

Theatre Arts Core Requirements	35
MUS 152A - Class Piano I	1
MUS 153A - Class Piano II	1
MUS 154A - Class Piano III	1
TH 148 - Actor Conditioning-Monologues	1
TH 215 - Music Fundamentals for Musical Theatre	3
TH 216 - Music Fundamentals for Musical Theatre II	3
TH 217 - Music Fundamentals for Musical Theatre III	3
TH 243 - Singing for Actors (I)	3
May be repeated	
TH 244 - Basic Acting I	3
TH 245 - Basic Acting II	3
TH 246 - Basic Acting III	3
TH 252 - Stage Dance	2
TH 329 - Directing I	3
TH 343 - Singing for Actors II (I)	6
May be repeated	
TH 344 - Intermediate Acting I	3
TH 415 - Musical Theatre History and Literature I	3
TH 416 - Musical Theatre History and Literature II	3
TH 417 - Musical Theatre History and Literature III	3
TH 443 - Singing for Actors III (I)	4
May be repeated	

Movement Component**Choose any of the following for a total****of 11 credits** 11

- PED 101 - Modern Dance I (2)
- PED 102 - Modern Dance II (2)
- PED 104 - Ballet I (Level 1) (1)
- PED 121 - Tap Dance I (1)
- PED 141 - Jazz Dance I (1)
- PED 142 - Jazz Dance II (1)
- PED 204 - Ballet II (Level 1) (2)
- PEID 120 - Beginning Fencing (1)
- PEID 145 - Beginning Circus Acts (1)
- TH 248 - Vocal Conditioning for the Actor (1)
- TH 252 - Stage Dance (2)
- TH 312 - Creative Dramatics in School and Leisure (3)
- TH 333 - Stage Combat Fundamentals (3)
- TH 335 - Movement for the Actor (3)
- TH 352 - Stage Dance II (3)
- TH 433 - Advanced Stage Combat (3)
- TH 446 - Musical Theatre Audition (2)

Performance Component**Choose any of the following for a****total of 12 credits** 12

- TH 202 - Performance Studio (1-3)
- TH 270 - Stage Makeup (3)
- TH 302 - Performance Application (3)
- TH 332 - New Play Production (2)
- TH 345 - Intermediate Acting II (3)
- TH 402 - Performance Application (3)
- TH 429 - Directing II (3)
- TH 444 - Acting Styles (4)
- TH 490 - Cooperative Education (1-12)

Total Musical Theatre Credits: 75**Total Credits: 110****Bachelor of Arts****Theatre Arts: Teaching K-12**

This major satisfies the endorsement for drama. Students taking this major are required to complete the Professional Education Program requirements offered through the Department of Educational Foundations and Curriculum.

Required Courses

TH 107 - Introduction to Theatre	4
TH 144 - Acting Fundamentals	3
TH 166 - Theory of Play Production	3
TH 207 - Introduction to Children's Drama	3
TH 261 - Costume Technology	3
TH 267 - Scene Technology	3
TH 268 - Lighting Technology	3
TH 270 - Stage Makeup	3
TH 312 - Creative Dramatics in School and Leisure	3
TH 329 - Directing I	3
TH 340 - Intro to Theatre Design	3
TH 420 - Drama in Schools 1	3
TH 421 - Drama in Schools 2	3

Writing Component**Choose any of the following:** 3-4

- TH 313 - Writing Children's Theatre (3)
- TH 330 - Intro to Playwriting (4)

History Component**Choose any of the following** 4

- TH 363 - Theatre History I (4)
- TH 364 - Theatre History II (4)
- TH 365 - Theatre History III (4)

Literature Component**Choose any of the following** 4

- TH 375 Asian Drama (4)
- TH 377 - Staging Gender (4)
- TH 382 - Ethnic Drama (4)
- TH 383 - Contemporary World Drama (4)

Theatre Lab Component**Choose either of the following** 1

- TH 393 - Theatre Laboratory (1)
- TH 493 - Theatre Laboratory (1)

Theatre Production Component**Choose any of the following** 3

- TH 301 - Production Application (3)
- TH 302 - Performance Application (3)
- TH 303 - Management Application (3)
- TH 401 - Production Application (3)
- TH 402 - Performance Application (3)
- TH 403 - Management Application (3)
- TH 492 - Practicum in Producing and Touring Theatre (3, 6, 12)

Live Text Portfolio Component 2
TH 295 - Theatre Education Portfolio (1)

Leadership Component

Choose any of the following: 3
TH 429 - Directing II (3)
TH 360 - Stage Management (3)

Total Credits: 60-61

Apparel Design Minor

A minor in apparel design is administered jointly by the Fashion Merchandising Program and theatre arts department. It is designed to enable students with career interests in this field to gain experience in the competency areas expected of apparel designers. This minor allows the student to learn to apply the basic principles of design and creativity in developing apparel. Students will study the application of artistic and creative design elements, selection, and use of fabrics and textiles, and the techniques for transforming design concepts into garments in order to create a final saleable product for a target market.

Required Courses

FCSA 280 - Basic Sewing Techniques 3
OR
TH 261 - Costume Technology (3)
FCSA 301 - Principles of Fashion Merchandising 4
FCSA 355 - Consumer Textiles 4
FCSA 388 - Apparel Construction II 3
OR
TH 361 - Stage Costuming (3)
FCSA 389 - Fashion Trend Analysis 3
FCSA 488 - Fashion Line Development 3
TH 340 - Introduction to Theatre Design 3
TH 461 - Costume Design 4
TH 465 - Costume and Fashion Drawing 3

Total Credits: 30

Dance Performance Minor

Program Director

Therese Young

The dance performance minor is an interdisciplinary minor administered jointly by the Dance and Theatre Arts faculty designed for students who wish to broaden their academic background and receive a well-rounded dance education, thus preparing them in the area of dance performance in a wide variety of settings. Students will develop competencies in choreography, rhythmic concepts, and dance production.

Requirement: Minimum of one year active membership in *Orchesis Dance Company* and PED 112.

Required Courses

PED 102 - Modern Dance II 2
PED 103 - Modern Dance III 2
PED 112 - Dance Rehearsal and Performance (1) 3
Repeated for 3 credits
PED 142 - Jazz Dance II 1
PED 143 - Jazz Dance III 1
PED 161 - Cultural History of Dance 4

PED 204 - Ballet II (Level 1) 2
PED 205 - Ballet II (Level 2) 2
PED 206 - Ballet II (Level 3) 2
PED 211 - Music for Dance - Rhythms and Resources 2
PED 301 - Choreography 3
PED 302 - Dance Production 3
OR
TH 301 - Production Application (3)

Choose any of the following for a minimum of 10 credits 10

PED 116 - Beginning Folk Dance (1)
PED 121 - Tap I (1)
PED 122 - Tap II (1)
PED 135 - Ballroom Dance I (1)
PED 136 - Ballroom Dance II (1)
PED 138 - Swing Dance I (1)
PED 139 - Swing Dance II (1)
TH 252 - Stage Dance (2)
TH 353 - Stage Dance II (3)

Total Credits: 37

Theatre Arts Minor

The theatre arts minor offers an opportunity for students to study theatre while pursuing a degree in another discipline. This minor is often added to enhance study in art, music, politics, and interior design, among others.

Required Core

TH 107 - Introduction to Theatre 4
TH 144 - Foundations of Acting 3
TH 166 - Theory of Play Production 3

Select 3 credits of production participation from the following 3

TH 201 - Dance Production Application (3)
TH 202 - Performance Studio (1-3)
TH 301 - Production Application (3)
TH 302 - Performance Application (3)
TH 303 - Management Application (3)
TH 332 - New Play Production (2)
TH 393 - Theatre Laboratory (1)
TH 401 - Production Application (3)
TH 402 - Performance Application (3)
TH 403 - Management Application (3)
TH 493 - Theatre Laboratory (1)

Theatre electives as approved by advisor 17

Total Credits: 30

Non-profit Organization Administration Minor

The minor in non-profit organization administration is an interdisciplinary minor designed to provide an understanding of the organization, financing, and management issues in non-profit organizations. It is designed to complement majors in artistic, advocacy, and educational endeavors. The minor provides practical, hands-on skills as well as discussion of the issues facing non-profit organizations.

Required Courses

ACCT 301 - Financial Accounting Analysis . 5
COM 312 - Introduction to Non-profit Leadership 3
COM 427 - Grant Writing/Fund-raising 3
COM 470 - Applied Public Relations (5) ... 4-5
OR
COM 475 - Public Relations and Advertising Management (4)
Choose one of the following: 5
ANTH 490 - Cooperative Education (Internship) (5)
ART 490 - Cooperative Education (Internship) (5)
COM 490 - Cooperative Education (Internship) (5)
MUS 490 - Cooperative Education (Internship) (5)
TH 490 - Cooperative Education (Internship) (5)

Areas of Interest

Choose any of the following for a total of at least 9 credits 9
ANTH 360 - Introduction to Museum Studies (4)
ANTH 361 - Museum Exhibit Design (4)
COM 370 - Writing for Public Relations (4)
COM 487 - Public Relations Professional Seminar (3)
MUS 482 - Music Business (3)
TH 350 - Theatre Management (3)
TH 351 - Theatre Management (3)
TH 360 - Stage Management (3)

Total Credits: 29-30

Non-profit Organization Administration Certificate

The certificate in non-profit organization administration is an interdisciplinary approach designed to provide an understanding of the organization, financing, and management issues in non-profit organizations. It is designed to complement majors in artistic, advocacy, and educational endeavors. The courses provide practical, hands-on skills as well as discussion of the issues facing non-profit organizations.

Required Courses

ACCT 301 - Financial Accounting Analysis . 5
COM 312 - Introduction to Non-profit Leadership 3
COM 427 - Grant Writing/Fund-raising 3
COM 470 - Applied Public Relations (5) ... 4-5
OR
COM 475 - Public Relations and Advertising Management (4)
Choose one of the following: 5
ANTH 490 - Cooperative Education (Internship) (5)
ART 490 - Cooperative Education (Internship) (5)
COM 490 - Cooperative Education (Internship) (5)
MUS 490 - Cooperative Education (Internship) (5)
TH 490 - Cooperative Education (Internship) (5)

Total Credits: 20-21

Theatre Arts Courses

TH 101. Appreciation of Theatre and Film

(4). Viewing, discussing, and comparing film and live theatre performance.

TH 107. Introduction to Theatre (4).

Overview of the basic elements of the theatre arts and dramatic structure, and the environment for production of plays. Attendance at assigned outside events is required.

TH 143. Private Voice Lessons (1-4).

Individual vocal instruction in the musical theatre style. May be repeated for credit.

Grade will either be S or U. By permission.

TH 144. Foundations of Acting (3).

Introduction to the theory and practice of acting craft, development of the actor's tools, basic acting techniques, including pantomime, vocal conditioning, improvisation, and scene study.

TH 148. Actor Conditioning – Monologue

(1). Theory, technique, and practice of the acting craft with emphasis on choosing, analyzing, researching, and preparing monologues for audition and performance. May be repeated for credit. Grade will either be S or U. Corequisite: TH 244.

TH 166. Theory of Play Production (3).

Theories of production are explored through basic script analysis and the examination of protocol and procedures in the resident production company and a variety of world theatre models.

TH 201. Dance Production Application

(1-3). Skills learned in the classroom are applied to dance production work for public presentation. May be repeated up to 12 credits. Prerequisite: admission to the theatre major.

TH 202. Performance Studio (1-3). Skills

learned in the classroom are applied to performance in studio work, which may be presented publicly. May be repeated up to 24 credits.

TH 207. Introduction to Children's Drama

(3). History, literature, and aesthetics of children's drama techniques in the United States and throughout the world.

TH 215. Music Fundamentals for Musical Theatre I (3).

Basic music terminology, fundamentals of notation, scales, and the study of basic rhythms. Ear training, interval singing, and melodic dictation. Prerequisite: 1 credit of MUS 154A.

TH 216. Music Fundamentals for Musical Theatre II (3).

Study of major and minor scales, major and minor key signatures, major and perfect intervals, and continued study of rhythms. Interval and melodic singing, melodic dictation, and beginning of singing in counterpoint. Prerequisites: 2 credits of MUS 154A and TH 215.

TH 217. Music Fundamentals for Musical Theatre III (3).

Study of diminished, half diminished, and augmented intervals and scales, basic conducting patterns, exploration of lead sheets, and modern chord notation. Continuation of interval, melodic, and counterpoint singing, as well

as sight singing and the reading of rhythmic patterns. Prerequisites: 3 credits of MUS 154A and TH 216.

TH 243. Singing for Actors (1). An introduction to the mechanics of singing as applied to presentations of theatrical show music. May be repeated up to 9 credits.

TH 244. Basic Acting I (3). Theory and practice of essentials of acting craft—development of the actor's tools, the voice, body, and imagination. Introduction to Satnislavski method, with viewpoints and composition.

TH 245. Basic Acting II (3). Theory and practice of essential acting craft—development of the actor's tools, the voice, body, and imagination. Physical theatre techniques, improvisation, scene study. Prerequisite: TH 244.

TH 246. Basic Acting III (3). Theory and practice of essential acting craft—development of the actor's tools, the voice, body, and imagination. Concentration on physical theatre techniques, scene study, and text analysis. Prerequisite: TH 245.

TH 248. Vocal Conditioning for the Actor (1). Study and application of the techniques used in the development of the actor's foundational vocal conditioning. May be repeated for credit. Grade will either be S or U. Corequisites: TH 245 and TH 246.

TH 252. Stage Dance (2). Study and directed practice of individual and group dance in modern musicals and operas. May be repeated up to 8 credits.

TH 261. Costume Technology (3). Basic theory and study of costume construction and fabrication for the theatre. Emphasis on terminology, safe operating procedures of sewing machinery, basic stitches, and fabric identification. Participation in production work is required. Prerequisite: admission to the theatre major or apparel design minor.

TH 266. Theatre Drafting (3). Supervised study and practice of drafting theatrical sets, properties, and light plots. Prerequisite: admission to the theatre major.

TH 267. Scene Technology (3). Scene construction, rigging, painting, and shifting techniques. Participation in production work is required. Prerequisite: admission to the theatre major.

TH 268. Lighting Technology (3). Participation in production work is required. Applied study of lighting instruments, lighting accessories, hanging, cabling, focusing, lighting control systems, safety, and maintenance. Participation in production work is required. Prerequisite: admission to the theatre arts or film and video studies major.

TH 270. Stage Makeup (3). The history, functions, materials, and techniques of makeup as a theatrical art. Production application required. Prerequisite: TH 166.

TH 290. Cooperative Education Portfolio (1-6). A collection of individualized contracted field experiences with the industry. This contractual arrangement involves a student learning plan, with a cooperating employer,

under faculty coordination, that must be completed prior to the first experience to be included in the portfolio. May be repeated up to 6 credits. Grade will either be S or U. By permission.

TH 295. Theatre Education Portfolio (1).

Live Text portfolio will be employed to build professional portfolios, documenting theatre training, and compliance with state certification and NCATE standards. May be repeated for credit. Grade will either be S or U.

TH 298. Special Topics (1-6).

TH 300. Rehearsal and Performance (1-2).

Open only to non-majors participating in theatre arts productions. Does not satisfy any requirement for the major. Course meets with appropriate application course and instructor. May be repeated for credit.

TH 301. Production Application (3).

Skills learned in the classroom are applied to production work for public presentation. Different sections will be offered for participants in each area of the production team. May be repeated up to 18 credits. Prerequisite: admitted to the theatre arts major or dance performance minor.

TH 302. Performance Application (3).

Skills learned in the classroom are applied to performance work on productions for public presentation. May be repeated up to 18 credits. Prerequisite: admission to the theatre major.

TH 303. Management Application (3). Skills learned in the classroom are applied to stage management work on productions for public presentation. May be repeated up to 18 credits. Prerequisite: admission to the theatre major.

TH 312. Creative Dramatics in School and Leisure (3).

Theory and practice of dramatic improvisation as a stimulus for learning and creative recreation. Focus on exploratory drama for language acquisition and social interaction.

TH 313. Writing for Children's Theatre

(3). Prerequisites: TH 166 and TH 207, or admission to the English writing specialization.

TH 329. Directing I (3). Participation in and direction of fundamentals of applied directing. Prerequisites: TH 144 and TH 244.

TH 330. Introduction to Playwriting (4).

Fundamentals and practice in dramatic writing techniques and styles. May be repeated up to 8 credits. Prerequisites: either TH 107 and TH 166, or admission to the English writing specialization.

TH 332. New Play Production (2). An exploration of the problems and techniques specific to the production of original, student-written plays. Participation in public performances of new plays, including weekend and evening activities is required. May be repeated for credit.

TH 333. Stage Combat Fundamentals (3).

The study and practice of basic skills, techniques, and safety factors used in staging and performing violence for the stage and media. Focus is on falls, rolls, and

unarmed combat. May include use of one historical weapon. Prerequisite: TH 144 or TH 244.

TH 335. Movement for the Actor (3). The study and practice of various movement disciplines, such as Laban, Suzuki, Feldenkrais, Chekhov, Lessac, or Alexander, to enhance flexibility and expressiveness of the actor's body in a variety of performance applications. May be repeated if content or title changes up to 9 credits. Prerequisite: TH 144 or TH 244.

TH 340. Introduction to Theatre Design (3). An introduction to the basic elements of design used to create unified scenery, costume, lighting, makeup, and sound designs with an emphasis in research and conceptualization.

TH 342. Stage Voice (3). Advanced voice training for the actor. Study of phonetics, scansion, phrasing, and proficient use of the vocal instrument. Prerequisite: TH 246.

TH 343. Singing for Actors II (1). An introduction to the mechanics of singing as applied to presentations of theatrical show music. May be repeated up to 9 credits. Prerequisite: TH 243.

TH 344. Intermediate Acting I (3). Character interpretation and scene study through script analysis and scene work. TH 344 and TH 345 to be taken in sequence. Prerequisite: TH 246.

TH 345. Intermediate Acting II (3). Character interpretation and scene study through script analysis and scene work. Courses are to be taken in sequence. Prerequisite: TH 344.

TH 350. Theatre Management (3). Courses are to be taken in sequence. Policy and practice of theatre administration including budgets, contracts, box office, purchasing, staffing, marketing, and audience development. Prerequisites: TH 107 and TH 166.

TH 351. Theatre Management (3). Courses are to be taken in sequence. Policy and practice of theatre administration including budgets, contracts, box office, purchasing, staffing, marketing, and audience development. Prerequisites: TH 107 and TH 166.

TH 352. Stage Dance II (3). Advanced study and directed practice of individual and group dance in modern musicals. May be repeated up to 12 credits. Prerequisite: TH 252.

TH 353. Stage Properties (3). Research, methodology, design, and construction of stage props and furniture. Prerequisite: TH 267.

TH 354. Scene Painting (3). Study in the methodology and skills of scene painting, materials, and techniques.

TH 356. Stage Sound (3). Engineering and operation of the technologies for theatrical sound. Prerequisite: TH 166.

TH 360. Stage Management (3). Techniques, communication methodology, resources, practices, and technical training for the stage manager. Prerequisite: TH 166.

TH 361. Stage Costuming (3). Further study of construction and fabrication for the stage. Emphasis on patterning, dyeing, and distressing costumes for the stage. Prerequisite: TH 261.

TH 362. Costume Crafts (3). Advanced study in fabric manipulation and the construction of costume crafts, and properties. Special focus on advanced dying techniques, fabric painting, distressing, millinery, jewelry, manipulation, and body padding. Prerequisite: TH 261.

TH 363. Theatre History I (4). From origins to the Elizabethan Era. Prerequisite: TH 107.

TH 364. Theatre History II (4). From the Elizabethan period to Ibsen. Prerequisite: TH 107.

TH 365. Theatre History III (4). From Ibsen to the present. Prerequisite: TH 107.

TH 366. Theatre Rendering (3). Exploration and application of various rendering styles and media for theatrical applications.

TH 367. Stage Scenery (3). Introduction to technical direction and auditorium management. Advanced stage scenery construction techniques are studied and applied. Prerequisite: TH 267.

TH 368. Stage Lighting (3). Study of electricity, color, distribution, drafting, lighting paperwork, and light programming. Prerequisites: TH 266 and TH 268.

TH 375. Asian Drama (4). Survey of the traditional theatre, puppetry, and dance-drama forms of Asia. Historical development. Cultural and aesthetic aspects of the text in performance. Influence on contemporary world theatre. By permission. Prerequisite: sophomore standing or above.

TH 377. Staging Gender (4). Concepts of gender and their historical development are examined through analysis of dramatic literature, films, and contemporary performance culture. Prerequisite: sophomore standing or above.

TH 380. Studies in Drama (5). Intensive study of representative examples of drama. May be repeated up to 15 credits. Prerequisites: ENG 302 and ENG 303, and admitted to the theatre arts major.

TH 382. Ethnic Drama (4). Study of contemporary American multi-cultural plays by people of color and other ethnic groups. Prerequisite: sophomore standing or above.

TH 383. Contemporary World Drama (4). Selected post-First-World-War plays from around the world are studied. Prerequisite: TH 107.

TH 384. Puppetry (3). Survey of puppetry principles and their application to the classroom, recreational facility, and theatre. Production techniques. Analysis of literature adaptable to theatre form. Prerequisite: TH 166.

TH 393. Theatre Laboratory (1). Practical experience in all aspects of theatre production to better prepare for career opportunities. May be repeated up to 3 credits.

TH 398. Special Topics (1-6).

TH 400. Rehearsal and Performance (1-2). Open only to non-majors participating in theatre arts productions. Does not satisfy any requirement for the major. Course meets with appropriate application course and instructor. May be repeated for credit.

TH 401. Production Application (3). Skills learned in the classroom are applied to production work for public presentation. May be repeated up to 18 credits. Prerequisite: admission to the theatre major.

TH 402. Performance Application (3). Skills learned in the classroom are applied to acting work on productions for public presentation. May be repeated up to 18 credits. Prerequisite: admission to the theatre major.

TH 403. Management Application (3). Skills learned in the classroom are applied to stage management work on productions for public presentation. May be repeated up to 18 credits. Prerequisite: admission to the theatre major.

TH 413. Producing Children's Theatre (3). An exploration of the problems and techniques specific to the production of touring children's theatre productions and elementary-age theatre productions. Participation in the research, conceptualization, design, and building of properties, costumes, sets, sound, and puppets for children's theatre.

TH 415. Musical Theatre History and Literature I (3). The history of musical theatre from the inception of this uniquely American art form through the innovations of Oklahoma! The contributions of major lyricists, composers, directors, designers, performers, and choreographers, and an analysis of the works themselves, exploring the sociological relationships, ramifications, and cultural influences of the art form. Prerequisite: TH 365.

TH 416. Musical Theatre History and Literature II (3). The history of musical theatre from Oklahoma! to the inception of the rock musicals in the 1960s. The contributions of major lyricists, composers, directors, designers, performers, and choreographers, and an analysis of the works themselves, exploring the sociological relationships, ramifications, and cultural influences of the art form. Prerequisite: TH 415.

TH 417. Musical Theatre History and Literature III (3). The history of musical theatre from the rock musicals of the 1960s to the present. The contributions of major lyricists, composers, directors, designers, performers, and choreographers, and an analysis of the works themselves, exploring the sociological relationships, ramifications, and cultural influences of the art form.

TH 420. Drama in Schools 1 (3). Practicum experience in planning, creating, teaching, and assessing drama lessons for diverse populations. Prerequisites: TH 144 and TH 166.

TH 421. Drama in Schools 2 (3). Practicum in play production, curriculum development,

- traditions, and trends in the application of drama education in the K-12 classroom. Prerequisite: TH 420.
- TH 429. Directing II** (3). Script study emphasizing the specific artistic and logistical preparation involved in directing a play. Culminates in directing selected scenes. Prerequisite: TH 329.
- TH 430. Script Writers Workshop** (4). Fundamentals and practice in writing full-length dramatic scripts from concept to working draft, in a variety of areas such as: musical theatre libretto, radio plays, reader's theatre, and stage plays from films. Prerequisites: either TH 107 and TH 166, or admission to either the English writing or film and video studies major.
- TH 433. Advanced Stage Combat** (3). The study and practice of advanced skills, techniques, and safety factors used in staging and performing armed combat for the stage and media. Focus is on historical weaponry such as a single sword, rapier, and dagger, broadsword, and small sword. May be repeated for credit. Prerequisite: TH 333.
- TH 435. Period Movement for the Actor** (3). The study and practice of various period movement and dance styles, such as Greek, Renaissance, Farce, or Comedy of Manners, to prepare the actor's body for a variety of playing styles. May be repeated if course content changes. Prerequisite: TH 335.
- TH 440. Advance Design Problems** (3). Conceptualization, design, and application of advanced design techniques and theories through paper project or executed on mainstage productions in one of four areas: scenery, lighting, sound, or costumes. May be repeated up to 9 credits.
- TH 443. Singing for Actors III** (1). Advanced study of the mechanics of singing as applied to presentation of theatrical show music. May be repeated up to 9 credits. Prerequisite: 3 credits of TH 343.
- TH 444. Acting Styles** (4). Performance skills applied to heightened texts and stylized comedy including Shakespeare, Wilde, Coward, and other major playwrights. May be repeated up to 8 credits if content differs. Prerequisite: TH 344.
- TH 445. Audition Techniques** (3). Exploration and practice of advanced techniques and materials required for professional auditions. Prerequisite: TH 344.
- TH 452. History of Fashion** (4). Historical changes in fashion and costume design from Egyptian period through eastern civilization to present. Social, political, and religious influences on fashions. FCSA 452 and TH 452 are equivalent courses; students may not receive credit for both.
- TH 460. Production Management** (4). This course explores production management theory and practice, covering production estimating and budgeting, scheduling, and working with entertainment union contracts. Students will develop organization and communication skills specific to the duties of the production manager. Prerequisites: TH 166 and TH 360.
- TH 461. Costume Design** (4). Basic principles of design related to theatrical costumes. The role of the costume designer in planning and developing a sketch from the initial reading of the script through production, research, production meetings, and rendering technique. Prerequisites: either TH 361, both FCSA 388 and TH 366, or admission to the apparel design minor.
- TH 464. Wig Creation, Styling, and Maintenance** (3). The study and practice of creating, styling, and maintaining wigs for stage.
- TH 465. Costume and Fashion Drawing** (3). Sketching design ideas for theatrical costumes and street clothing in three-dimensional form with textural effects and color to present a realistic appearance on paper.
- TH 467. Scene Design** (4). Study, research, practice, and applied use of scenic design techniques and theory. Prerequisites: TH 266, TH 340, and TH 366.
- TH 468. Lighting Design** (4). Basic principles of design related to lighting design for the theatre. This class examines the role of the lighting designer from initial reading of the script through production, research, production meetings, and creation of the light plot. Prerequisites: TH 366 and TH 368.
- TH 475. Acting for Film and Television** (4). Study and practice of the techniques of performing for the camera. Topics may include the following: feature film, daytime drama, commercials, or other major applications. May be repeated for credit if content changes. Prerequisite: TH 344.
- TH 481. Kennedy-Center Festival** (1-2). Participation in the annual Kennedy Center American College Theatre Festival and/or the Northwest Drama Conference. May be repeated for credit. Grade will either be S or U. Prerequisite: admission to the theatre arts major or minor.
- TH 487. Theatre Pedagogy** (4). Student will be given individualized instruction in teaching practices and will participate in journal writing, critiquing, counseling, coaching, advising, leading discussion, and grading. TH 487 and TH 587 are equivalent courses; students may not receive credit for both. May be repeated up to 8 credits.
- TH 488. Introduction to Dramaturgy** (3). An introduction to research applied to production including author, world of the play, and the socio-political influences surrounding the text and its time.
- TH 489. Career & Portfolio Preparation** (3). Techniques and practice in preparation of professional portfolio, resumes, and letters of application for employment in the entertainment industry. Prerequisites: admission to the theatre arts major and junior standing or above.
- TH 490. Cooperative Education** (1-12). An individualized contracted field experience with business, industry, government, or social service agencies. This contractual arrangement involves a student learning plan, cooperating employer supervision, and faculty coordination. May be repeated for credit. Grade will either be S or U. By permission.
- TH 491. Workshop** (1-6).
- TH 492. Practicum in Producing and Touring Theatre** (3,6,12). Lecture, demonstration, and participation in producing and touring a show. A maximum of 3 credits may be applied to the specialization.
- TH 493. Theatre Laboratory** (1). Practical experience in all aspects of theatre production to better prepare for career opportunities. May be repeated up to 3 credits.
- TH 495. Senior Research Project** (3). Senior students shall present a research paper in a major area of interest. May be repeated one time for credit. Prerequisite: admission to the theatre arts major.
- TH 496. Individual Study** (1-6).
- TH 498. Special Topics** (1-6).
- TH 499. Seminar** (1-5).

UNIVERSITY AND ENRICHMENT

Undergraduate Studies

First Area-Skill Building

The first area includes the UNIV 101, 102, and 103 courses. These courses are ancillary courses that enable students to build skills needed to succeed at CWU. These courses allow students to learn about the General Education program, graduation requirements, develop skills for academic and social success, learn about major and minor programs, and how to approach developing an appropriate career. UNIV 101 is a required course for all students who have 39 or fewer transfer credits.

University Courses

- UNIV 101. Academic Advising Seminar** (1). This course is designed for students to learn about the mission of the general education program and majors in order to make informed academic decisions and discover opportunities for personal growth.
- UNIV 102. Strategies for College Success** (2). Course will teach essential study skills for succeeding in and graduating from college. Students will learn how to develop habits that lead to academic success.
- UNIV 103. Career Exploration** (2). Designed to assist students in researching and assessing their career goals through classroom coursework and career-related interest and personality inventories.
- UNIV 301. Career Management** (2). Identify work suited to interests, personality, goals, and values. Maximize ability to obtain work in chosen field, manage career moves to maintain interest and growth through economic changes and life stages while minimizing economic dislocation.

Second Area-Skill Exploration and Enrichment

The second area is the enrichment program, which includes UNIV 297, 497, and 597. These courses are designed to encourage student exploration and intellectual enrichment and are only offered during summer quarter. Enrichment courses are not intended to substitute for either general education requirements or major or minor requirements. These courses are a part of a student's enrollment planning—specifically as free electives. Only eight enrichment course credits can be counted toward a student's elective degree requirements.

University Courses

UNIV 297. Enrichment Course (1).

Enrichment course on various topics for freshmen and sophomores to broaden their interest areas. May be repeated for credit

UNIV 497. Enrichment Course (1). An enrichment course on varying topics for upper-division students to explore more deeply issues of academic interest. May be repeated for credit. Grade will either be S or U.

UNIV 597. Enrichment Course (1). An enrichment course on varying topics for graduate students to explore more deeply issues in their areas of academic focus. May be repeated for credit. Grade will either be S or U.

Third Area-Skill Practice and Engagement

The third area is the civic engagement program, which includes UNIV 109, 295, 308, and 309. These courses are designed to help students explore and engage in career interests while meeting community needs.

University Courses

UNIV 109. Introduction to Civic Engagement

(2). The student will use civic engagement to identify and explore career interests and meet community needs. May be repeated for credit.

UNIV 295. Introduction to Undergraduate Research (2). This class will prepare students to conduct faculty mentored research and creative expression projects. By permission.

UNIV 308. Civic Engagement Theory and Application (4). Student combines civic engagement theory and diversity sensitivity with real-world situations and major content to design and conduct a community project.

UNIV 309. Civic Engagement (2). Student will use program of study content knowledge to improve a community situation. UNIV 309 and EDCS 309 are equivalent courses. May be repeated for credit.

UNIV 509. Civic Engagement (3). Student will use program of study content knowledge to improve a community situation. Grade will either be S or U. UNIV 509, FCSG 509, EDAD 509, and EDCS 509 are equivalent courses; student may repeat up to 12 credits.

WOMEN'S STUDIES PROGRAM

College of the Sciences
Ellensburg
Language and Literature Bldg., room 318

509-963-2488

Fax 509-963-1822

www.cwu.edu/~womens_studies

See the website for how this program may be used for educational and career purposes.

Director

Cynthia D. Coe, PhD

Program Information

Women's studies cultivates a critical awareness of the contributions of women and the impact of gender in our lives, both historically and in the contemporary world. Our interdisciplinary scope includes examining these issues from the perspective of politics, anthropology, sociology, psychology, history, philosophy, art, and literature. The objectives of the program are:

1. To explore existing knowledge about women and gender in a variety of disciplines
2. To critically assess the traditional disciplines in the light of new data concerning women and gender
3. To provide an academic foundation for students planning careers in women's studies or related fields
4. To promote research about women and gender within existing disciplines

Women's studies offers an interdisciplinary minor as described below. With approval of the women's studies director, the student will select appropriate electives to meet personal and professional goals.

With faculty advisement, interested students may construct individualized majors in women's studies through the individual studies program for BA or BS major.

Women's Studies Minor

Required Courses

WS 201 - Introduction to Women Studies . . . 5

Select 18 credits from the following: 18

- ANTH 356 - Gender Roles in Cross-cultural Perspective (4)
- ANTH 384 - Language and Gender (4)
- COM 402 - Gender Communication (4)
- ENG 335 - Women's Literature (5)
- HIST 346 - Women in American History (5)
- HIST 352 - History of the American Family (3)
- HIST 449 - History of Women and the West (5)
- LAJ 403 - Sexual Minorities, the Law, and Justice (4)

- LAJ 453 - Domestic Violence Issues (4)
- PHIL 325 - Women and Philosophy (5)
- PHIL 357 - Race, Class, and Gender: Philosophical Perspectives (5)
- POSC 311 - Women and Politics (5)
- PSY 312 - Queer Theory and Sexuality (4)
- PSY 483 - Psychology of Women (3) (Prerequisite, PSY 101 (5))
- SOC 348 - Women and Crime (4)
- SOC 356 - Sociology of Gender (5)
- SOC 357 - Sociology of Families (5)
- TH 377 - Staging Gender (4)
- Special topics, internships, and individualized study

WS 488 - Colloquium 2

Total Credits: 25

Women's Studies Courses

WS 201. Introduction to Women Studies

(5). A survey of women studies from an interdisciplinary perspective. Basic terms, concepts, theories, and research methodologies will be introduced. Gender-related issues will be examined from the historical, cross-cultural, and cross-national perspectives.

WS 384. Language and Gender (4). This

course is designed to guide students to explore the active and rapidly expanding field of gender studies and language research dealing with how biological and cultural awareness of sexes are reflected in speech. WS 384 and ANTH 384 are equivalent courses; students may not receive credit for both.

WS 398. Special Topics (1-6).

WS 488. Colloquium (2). This course serves as the culminating experience for the women studies minor. Students will write a five-page paper that synthesizes the major approaches and ideas they have encountered in their coursework for the minor.

WS 490. Cooperative Education (1-12). An

individualized contracted field experience with business, industry, government, or social service agencies. This contractual arrangement involves a student learning plan, cooperating employer supervision, and faculty coordination. May be repeated for credit. Grade will either be S or U. By permission.

WS 491. Workshop (1-6).

WS 496. Individual Study (1-6).

WS 498. Special Topics (1-6).

WS 499. Seminar (1-5).



PRE-PROFESSIONAL PROGRAMS

These programs are planned for two groups of students—those who want one or two years of college work prior to entering an occupation, and those who want to do pre-professional work for one, two, three, or four years before entering a professional school, university, or college.

The programs described are not to be considered unalterable. They represent patterns that generally agree with the requirements of many professional schools. Since there are many variations in the requirements of the professional schools, students should, after consulting the CWU catalog, select courses required by the institution from which they expect to earn a degree.

The following pre-professional programs are offered: Pre-dentistry, Pre-dietetics, Pre-engineering, Pre-law, Pre-medicine, Pre-occupational Therapy, Pre-optometry, Pre-pharmacy, Pre-physical Therapy, and Pre-veterinary.

Pre-Dentistry

Advisor

Linda Raubeson, PhD
Department of Biological Sciences
Science Building 338L
509-963-2734

Most students enter dental school with a bachelor's degree. A pre-dentistry major is not offered. Any major is acceptable provided the dental school admission requirements are met. Most students major in biology or chemistry. Schools vary in which science classes are required. A background in the social sciences and humanities is also expected; however, there are no firm expectations for coursework in these subjects beyond English. The American Dental Association (ADA) website, www.ada.org/ provides links to individual dental schools. Pre-dental students are encouraged to learn the specific requirements for their potential schools. Students applying to dental school must have taken the Dental Aptitude Test (DAT). Information on the DAT is also available on the ADA website. General biology, general chemistry, and organic chemistry courses should be completed prior to attempting the DAT. Completing additional coursework in biology should also improve DAT performance.

Required at Most Dental Schools:

Required Courses

CHEM 181, 181LAB, 182, 182LAB, 183, 183LAB - General Chemistry I, 11, 111 . . . 15
CHEM 361, 361LAB, 362, 363, 363LAB - Organic Chemistry I, II, III . . . 8-13
PHYS 111, 111LAB, 112, 112LAB, 113, 113LAB - Introductory Physics . . . 15
BIOL 181, 182, 183 - General Biology . . . 15

Required at Some Dental Schools:

Required Courses

CHEM 431, 431LAB, 432 - Biochemistry I, II 8
MATH 153, 154 - Pre-Calculus
Mathematics I, II . . . 10
BIOL 323 - Microbiology . . . 5
One additional quarter of Microbiology, e.g., BIOL 426 - Medical Microbiology (3)

Recommended

BIOL 321 - Genetics . . . 5
BIOL 354 - General Vertebrate Embryology . 5
BIOL 355, 356 - Human Anatomy and Physiology . . . 5-10
OR
BIOL 455 - Zoophysiology
Additional coursework in biology, e.g. BIOL 421, BIOL 422, BIOL 423, BIOL 425, and / or BIOL 454

Total Credits: 91

Pre-Dietetics

Advisor

Virginia Bennett, PhD, RD, CD
Nutrition, Exercise, and Health Sciences
Department
Dorothy Purser Hall, room 134
509-963-3360

A registered dietitian (RD) is an expert on foods and how they affect human health. An RD is registered by the American Dietetic Association (ADA) as an individual who has completed an accredited four-year undergraduate program. The BS in food science and nutrition (nutrition and dietetics specialization) is an accredited program with the Commission on Accreditation for Dietetics Education (CADE). In addition, the individual must complete a 1,200-hour accredited supervised practice experience at one of over 200 dietetic internship sites. Finally, individuals must then pass the registration examination to attain the RD credential. Please see the advisor for more information. Dietitians may work in hospitals, clinics, and nursing homes as clinical dietitians; for government and public health agencies as community dietitians, and in food service departments of hospitals, schools, nursing homes, and restaurants as management dietitians. In addition, dietitians also are employed as researchers, educators, and as consultants in a variety of settings.

Pre-Engineering

Advisor

Michael Braunstein, PhD
Lind Hall, room 203D
509-963-2761

Assistant Professor

Sharon Rosell, MS
Lind Hall, room 203C
509-963-2757

Most colleges of engineering accept students into their programs only after they

have successfully completed a pre-engineering course of study. This usually takes the first two or three years of a student's college career, and can be done at CWU. Then the student must transfer to the engineering school of his or her choice and apply for admission to the particular engineering program wanted. She or he will graduate from that college and therefore must satisfy its requirements.

The course requirements in engineering vary considerably for different fields of engineering and for various colleges of engineering. The most important step a pre-engineering student can take is to consult the catalog of the particular college of engineering the student hopes to attend and then to plan a program at CWU to satisfy as many specific requirements of that college as possible. Students whose plans are not definite are advised to follow the typical first-year program outlined below and have a firm choice of an engineering program by the beginning of their second year. The pre-engineering advisor can assist you in these matters.

Students selecting this program must have completed a full year of high school calculus, or have a satisfactory score on the Math Placement Test Form PC, which is given by the mathematics department, or MATH 154. These are prerequisites to MATH 172.

The Department of Physics also offers a bachelor of science, physics major-engineering, in which the student receives degrees in physics and engineering. Consult the physics department chair, or pre-engineering advisors for additional information about this program.

First-year Courses

PHYS 181, 182LAB, 182, 182LAB, 183, 183LAB . . . 15
MATH 172, 173, 272 . . . 15
IET 165 . . . 4
CSS 177 . . . 4
ENG 101, 102 . . . 8
Electives . . . 5

Total Credits: 51

Pre-Law

Advisor

Charles Reasons, PhD, LLB, JD
Department of Law and Justice
Farrell Hall, room 316
509-963-1779

The attainment of a law degree ordinarily involves a seven-year program—the completion of an undergraduate degree (four years), followed by three years at law school. Before winter quarter of one's senior year, a future law student should take the Law School Admission Test (LSAT) and apply to law schools.

Law schools do not require a particular major or courses as a condition for admission. Common undergraduate majors found in the law school population are history, English, economics, business, political science, and philosophy. No specific major

will ensure admittance to law school. The most important criteria are your GPA and your score on the Law School Admissions Test (LSAT). The pre-law student should seek a course of study, which enhances his or her verbal comprehension and analytical thinking. Critical understanding of the human institutions and values with which the law deals is also very helpful.

The law and justice department offers an advisory program designed to assist students in choosing and gaining admission to law schools, with several advisors having law degrees. The pre-law student should carefully plan his or her program in close consultation with an advisor.

Pre-Medicine

Advisor

Levente Fabry-Asztalos, PhD
Department of Chemistry
Science Building, room 302J
509-963-2887

This program prepares students for entering professional schools of medicine (MD or DO). In addition to the required science courses, a broad humanities and liberal arts background is encouraged. Although pre-medical students usually major in the sciences (85 percent), any arts or science major is acceptable. Regardless of their academic major, pre-medicine students must work closely with the pre-medicine advisor in order to insure their proper preparation for medical school. The university's pre-medicine program is supported by approximately 20 full tuition and books scholarships, which are based on academic excellence, not need.

Pre-Nursing in Public Health

Advisor

Melody Madlem, PhD
Physical Education, School and Public Health
Department
Physical Education Building, room 108
509-963-1971

The pre-nursing in public health specialization within the public health major prepares students to meet entrance requirements to bachelor of science in nursing (BSN) programs throughout Washington. Armed with leading-edge scientific knowledge and liberal arts content, combined with an extensive public health internship, the pre-public health nursing specialization allows future professionals to enter nursing school with a solid background in public health theory and practice. CWU does not offer a degree program in nursing, but offers all prerequisite courses necessary for successful admission to professional nursing programs available across Washington.

Most pre-nursing students will complete the BS degree in public health with a specialization in pre-nursing in public health. The specialization also prepares students to

assume key roles within public health agencies as health promotion specialists / prevention specialists. With a comprehensive background in population-based health, graduating students can make immediate contributions to the health of the public.

Prerequisites for admission to nursing school that meet General Education Requirements for pre-nursing specialization: SOC 101 or 107 or 205; PSY 101; CHEM 111 and CHEM 111LAB; BIOL 201.

Public Health Core Requirements

HED 210 - Drugs and Health	3
HED 230 - Foundations of Health Education	3
HED 310 - Community Health	3
HED 317 - International Health	3
HED 320 - Environmental Health Education	3
HED 330 - Health Assessment	4
HED 370 - Current Trends in Health and Health Education	3
HED 387 - Principles of Fitness and Stress Management	3
HED 422 - Methods for Health Promotion	4
HED 445 - Health Education Professionalism	1
HED 450 - Community Organization and Coalition Development	3
HED 471 - Program Planning I	5
HED 472 - Program Planning II	5
HED 473 - Health Education Program Evaluation	3
HED 475 - Community Health Administration	3
HED 490 - Cooperative Education	10
NUTR 101 - Introduction to Human Nutrition	5
Total Core Credits:	64

Additional Courses

BIOL 220 - Introductory Cell Biology	5
BIOL 322 - Introductory Microbiology	5
BIOL 355 - Human Anatomy and Physiology	5
BIOL 356 - Human Anatomy and Physiology	5
CHEM 112 - Introduction to Organic Chemistry	4
CHEM 112LAB - Introduction to Organic Chemistry Laboratory	1
CHEM 113 - Introduction to Biochemistry	4
CHEM 113LAB - Introduction to Biochemistry Laboratory	1
MATH 311 - Statistical Concepts and Methods	5
PSY 313 - Developmental Psychology	4
Total Credits:	103

Pre-Occupational Therapy

Advisor

Susan Lonborg, PhD
Department of Psychology
Psychology Bldg., room 480
509-963-2397

The pre-occupational therapy program is an advising program through which a student can prepare for admission to a professional occupational therapy program

at another institution. CWU does not offer a degree program in occupational therapy or pre-occupational therapy, but does offer all prerequisite courses necessary for successful admission to the professional phase at another university.

Most pre-occupational therapy students will complete their undergraduate degree at CWU and then apply to the program(s) of their choice. Detailed information concerning appropriate undergraduate coursework and professional occupational therapy programs in the Pacific Northwest is available in the Department of Psychology or by visiting www.cwu.edu/~biology/ugrad/preprof/preOccupational.html.

Pre-Optometry

Advisor

Linda Raubeson, PhD
Department of Biological Sciences
Science Bldg., room 338L
509-963-2734

Optometrists are primarily involved in testing eyesight for the purpose of prescribing corrective lenses. Students interested in optometry usually obtain a four-year degree prior to entering optometry school. Alternatively, students may take a three-year pre-optometry program at Central and then transfer to the optometry school of their choice where they will complete a two- or three-year program. The 19 schools in the U.S. and Canada offering professional optometry degree programs vary in their entrance requirements. Therefore, students interested in pre-optometry should determine the specific requirements of the optometry school to which they wish to transfer. Most schools require some experience (observation) with optometry prior to application. Social science, humanities, and writing courses are usually required in addition to the science courses listed below. The OAT (Optometric Aptitude Test) scores are required to apply to most schools. For links to optometry schools, information about the OAT, application procedures, and other useful information, see the Association of Schools and Colleges of Optometry website at www.opted.org.

Commonly Required Courses

BIOL 181, 182, 183, 323	20
BIOL 355, 356 - Human Anatomy and Physiology	10
CHEM 181, 181LAB, 182, 182LAB, 183, 183LAB - General Chemistry I, II, III	15
CHEM 361, 361LAB, 362 - Organic Chemistry I, II	8
PHYS 111, 111LAB, 112, 112LAB, 113, 113LAB - Introductory Physics	15
PSY 101 - General Psychology	5
1 quarter calculus	5
1 quarter statistics	5

To earn a BA in biology the following courses would also be required:

BIOL 321, 499S - Plant Biology	6
1 quarter of ecology - (BIOL 360 or 420 or 464) - General Ecology	5

Pre-Pharmacy

Advisor

Levente Fabry-Asztalos, PhD
Department of Chemistry
Science Bldg., room 302J
509-963-2887

A pre-pharmacy program of study may be developed that prepares students for

admission into professional programs at any university granting a pharmacy doctoral degree (Pharm-D). Central does not offer a degree program in pharmacy, but does offer all prerequisite courses necessary for admission to pharmacy programs at other universities.

Contact the pre-pharmacy advisor, Professor Levente Fabry-Asztalos in the Department of Chemistry for help in

determining a program of study, for advice on scheduling, or for more details on any aspect of the pre-pharmacy program. See also the CWU Health Career Resources website at www.cwu.edu/~healthcareers/

Pre-Physical Therapy

Advisor

David Darda, PhD
Department of Biological Sciences
Science Bldg., room 338
509-963-2731

The pre-physical therapy program is an advising program through which a student can prepare for admission to a professional physical therapy program at another institution. CWU does not offer a degree program in physical therapy or pre-physical therapy, but does offer all prerequisite courses necessary for successful admission to the professional phase at another university.

Most pre-physical therapy students will complete their undergraduate degree at CWU and then apply to the program(s) of their choice. Detailed information concerning appropriate undergraduate coursework and professional physical therapy programs in the Pacific Northwest is available in the Department of Biological Sciences or by visiting www.cwu.edu/~biology/ugrad/preprof/prePhysical.html.

Pre-Veterinary

Advisor

R. Steven Wagner, PhD
Department of Biological Sciences
Science Bldg., room 236K
509-963-3105

A pre-veterinary program at CWU should prepare the student for admission into a veterinary medicine program. Students planning a career in veterinary medicine must complete the following before applying to a college of veterinary medicine. (Note: BIOL 499 is required for a BA or BS)

Required Courses

BIOL 181, 182, 183 - General Biology	15
BIOL 321 - Genetics	5
CHEM 181, 181LAB, 182, 182LAB, 183, 183LAB - General Chemistry I, II, III	15
CHEM 361, 361LAB, 362 - Organic Chemistry I, II	8
CHEM 431, 432 - Biochemistry I, II	6
MATH 153, 154 - Pre-calculus Mathematics I, II	10
PHYS 111, 111LAB - Introductory Physics . . .	5
Minimum Natural Science and Mathematics credits for admission to a college of veterinary medicine	69
Department-approved electives: General university requirements for graduation	45

Total Pre-veterinary credits required for admission: 114



Graduate Studies and Research

The university provides quality graduate programs in selected fields, taught by a faculty committed to excellence in teaching and research. A hallmark of this university is to offer our graduate students:

- Small classes
- Opportunities to work closely with professors
- An excellent learning environment
- Low tuition
- Hands-on research experience
- An attractive setting in a friendly community

Administration and Organization

The Office of Graduate Studies and Research welcomes visits and inquiries from graduate students and prospective graduate students. Our staff is here to assist the academic community, both in the area of graduate studies as well as in the sphere of grants and sponsored research.

Dean

Wayne S. Quirk, PhD

Director of Sponsored Research

Roger Fouts, PhD

Associate Director of Research and Sponsored Programs

Julie Guggino

Graduate Studies

Admissions Program Coordinator

Justine Eason

Post-admissions Program Coordinator

Dawn Muzzall

Program Assistant

Diane Houser

Barge Hall, room 305

509-963-3101

509-963-1799 Fax

masters@cwu.edu

www.cwu.edu/~masters

Business hours: 8 a.m.-5 p.m., Monday through Friday (PST), except holidays. If you call during non-business hours, be sure to let us know when and where to reach you and we will return your call as soon as possible.

General Information

The graduate experience at CWU is challenging, rewarding, and exciting. But, like every quality experience, it is subject to certain rules and policies to ensure that high academic standards are maintained. Below, we present information about CWU's graduate programs. We seek to ensure that graduate students are fully apprised of the

policies and procedures governing student progress. It is the responsibility of graduate students to familiarize themselves with these and the policies of the programs in which they are enrolled. Central believes in equal educational and employment opportunity for all without regard to race, color, creed, national origin, sex, age, marital status, or any sensory, physical, or mental handicap.

Additional information concerning university policies and regulations applicable to graduate programs, including accreditation, institutional memberships, grading practices, mission and roles, and tuition and fees, will be found in various sections of this catalog. Consult the Table of Contents or index for further information.

Definition of a Graduate Student

A graduate student is anyone duly admitted to graduate study at CWU, and who is officially enrolled in a graduate program here. Graduate programs offered include master's degree programs, fifth-year and other certification programs, and non-degree study as a resident or visiting graduate student.

Programs of Graduate Study

Central Washington University offers the following graduate degrees:

Master of Arts

Art

English: Literature

English: TESOL

History

Individual Studies

Theatre

Master of Arts in Teaching

Mathematics

Master of Education

School Administration

Individual Studies

Instructional Leadership

Master Teacher

Reading Specialist

School Counseling

School Psychology

Special Education

Master of Fine Arts

Art

Master of Music

Music

Master of Professional Accountancy

Master of Science

Biology

Chemistry

Mental Health Counseling

Engineering Technology

Experimental Psychology

Exercise Science

Family and Consumer Sciences

Geology

Health and Physical Education

Individual Studies

Nutrition

Primate Behavior

Resource Management

Graduate Certificates

In addition to the degree programs available, CWU offers the following graduate certificate programs. See graduate certificate programs below for details.

Renewal of Initial or Residency Certificate

Fifth-year of Study for Continuing or

Professional Certificate

Endorsement only Program

Continuing Principal's Certificate

Continuing Program Administrator

Educational Staff Associate Certificate

School Counselor

School Psychologist

Application and Admission to Graduate Study

Admissions Information

Central offers admission to applicants who have high potential for success in their chosen graduate disciplines. We seek to admit people with diverse backgrounds in order to enhance the learning environment for all students.

Admissions decisions are based upon a combination of factors. These include grade point average, letters of recommendation from professors or others able to critically assess an applicant's ability to succeed in a graduate program, a written statement of purpose, standardized test scores (if applicable), academic preparation for work in the proposed field, and the applicant's interests as matched with those of faculty.

Types of Admission

CWU distinguishes three types of admission: regular, probationary, and conditional.

Regular: To be eligible for regular admission, an applicant must have earned a bachelor's degree from a recognized four-year college or university in the U.S. or the equivalent from an institution abroad. The applicant must demonstrate, in the opinion of the faculty and the dean of Graduate Studies and Research, the ability to successfully complete a master's degree. The applicant must also have achieved at least a 3.0 (B) average in all coursework attempted during the last 90 quarter hours (60 semester hours) of study.

Probationary: An applicant who does not meet the minimum GPA admissions requirements, but who shows promise of success in a graduate program, will be considered for admission. He or she may be admitted on probationary status, based on departmental recommendations and a favorable review by the dean of Graduate

Studies and Research. If admitted, the applicant is placed on probation for one quarter, during which time he or she must complete at least 10 credits of coursework approved by the home department. A grade point average of 3.0 (B) or more is required. Upon meeting this requirement and with the favorable recommendation of the department, the student will be fully admitted and allowed to continue toward candidacy for a degree. If the student is unable to achieve a 3.0 GPA, he or she will be dropped from the program.

Conditional: An applicant may also be conditionally admitted to a master's program when he or she does not fully meet admission requirements. Typically such admittees lack certain field-related experiences and/or required background knowledge. An applicant may also be admitted to this category pending receipt of the official transcript(s) indicating completion of the bachelor's degree. A conditionally admitted student will achieve regular status when the condition has been satisfied and the admitting department recommends advancement to regular status.

Confirmation Fee: A nonrefundable \$55 tuition deposit/confirmation fee is required to verify acceptance of the offer of admission. This payment is due by May 1 for fall quarter, November 1 for winter quarter, and January 1 for spring quarter, or within two weeks of the date of acceptance, whichever is later. Although this prepayment is not required for summer quarter, a \$40 registration fee is required before registering for summer classes. These fees are subject to change when tuition rates are revised. Additionally, a letter of intent may be required by some departments.

Applying to CWU

CWU welcomes applications from all those who meet our minimum requirements for admission. To apply, visit our website at www.cwu.edu and click on the admissions link or obtain a set of our application materials from:

CWU Graduate Studies and Research
400 East University Way
Ellensburg, Washington 98926-7510

A completed application file consists of the following materials received by the Office of Graduate Studies and Research:

1. A completed application for graduate admission.
2. A written statement of educational and professional objectives.
3. Three letters of recommendation written by professors or others capable of assessing your potential for success in a graduate program.
4. Official transcripts from all universities and colleges attended.
5. Graduate Record Examination (GRE) or Graduate Management Admissions Test

(GMAT) scores if required by the program. Scores should be no more than five years old at the time of application.

6. A non-refundable application fee of \$50 payable at the time of filing application. Application fees may be paid by check, credit card (MasterCard and Visa only), or cash (please do not send cash through the mail). If you wish to pay by check, make it payable to Central Washington University and send it, along with the other application materials, to the Office of Graduate Studies and Research. If you prefer to pay by credit card, you may telephone the Cashiers Office with this information (509-963-2224) to make a payment. Cash transactions should be made in person at the Cashiers Office, Barge Hall, room 104.

International Applicant

In addition to the above requirements, all international applicants must complete the following:

1. If the applicant's native language is not English, he or she is required to submit one of the following: a) a minimum Test of English as a Foreign Language (TOEFL) score of 550 paper-based, or 79 Internet-based. Scores should be no more than two years old at the time of application, or b) a minimum International English Language Testing Systems (IELTS) score of 6.5 academic score. Scores should be no more than two years old at the time of application, or c) a baccalaureate degree from accredited U.S. university or an accredited international university where the main language of instruction is English. Please note that the department of English requires a TOEFL score of 580 paper-based or 92 internet-based, or an IELTS academic score of 7.0.
2. International applicants are also required to complete a confidential financial statement and submit evidence that sufficient funding is available in U.S. currency through either personal resources and/or a sponsor for one academic year's experience at CWU.
3. Foreign university transcripts must be accompanied by a course transcript evaluation. You can find more information regarding the evaluation and agencies that are accepted by CWU here: http://www.cwu.edu/~masters/new_international.html#transcripts.

Application Deadlines

The priority deadlines for submitting all application materials are as follows:

February 1 for fall quarter
April 1 for summer quarter
October 1 for winter quarter
January 1 for spring quarter

Deferred Admission

If a department and the graduate office wish to admit an applicant to a program that has no space available for a particular quarter, a deferred admission may be offered. The quarter for which admission is deferred will be negotiated between the applicant and the department. If both agree, the applicant will be asked to accept or decline in writing the deferred admission which will be valid for up to one year from the term in which the person was to have matriculated. If the applicant agrees to defer admission, no new application or application fee will be required. He or she will be expected to pay the non-refundable matriculation fee of \$55 and to obtain the concurrence of the home department and the dean of Graduate Studies and Research concerning the quarter in which he or she wishes to enroll.

An applicant who has been admitted to graduate study, but who wishes to defer matriculation to a subsequent quarter, may do so with the written authorization of the home department and the graduate office's concurrence. Such a deferment will be valid for up to one year from the term in which the student was to have matriculated. If the department is unable or unwilling to provide this authorization, the applicant will be obliged to reapply for admission, paying the admission application fee, and providing additional documents as needed.

Application for Certification and Non-degree Study

The university offers those seeking professional credentials, but who do not wish to pursue a master's degree, the opportunity to become post-baccalaureate students. Applications for admission to this status may be obtained from the Office of Admissions and returned to meet the appropriate deadlines.

Applicants for the continuing certificate must contact the Certification Office to organize an approved program.

Applicants for School Counseling or School Psychology programs leading to certification must also submit references and GRE scores. Admission procedures to these two certification programs are the same as for master's program admission.

Assistantships and Financial Aid

The university offers a number of assistantships during the academic year to beginning and continuing graduate students. Graduate assistantships are available in each of CWU's graduate program departments. Nearly two-thirds of the university's graduate assistants teach; the remainder serves as research assistants with a few performing university service functions. Applicants must

- 1) Be fully admitted to a master's degree program and registered for at least 10

credits (of these, at least 5 credits must be numbered 501 or higher unless on an approved Course of Study form) at the commencement of the contract period;

- 2) Be recommended to the position by the department where the appointee would be assigned;
- 3) Demonstrate a high level of professional and academic promise. Priority deadline is February 1.

Full-time assistantships require an average of 20 hours of service per week and enrollment in at least 10, but not more than 14 credit hours per quarter, and a minimum grade point average of 3.0 each quarter. All graduate assistantship appointments are made through a formal written contract letter from the dean of Graduate Studies and Research. Assistantship award announcements are not made until sometime after April 15.

Interested persons should contact the Office of Graduate Studies and Research for assistantship applications and information at www.cwu.edu/~masters.

Financial aid is available through the university from federal and state funds for students demonstrating financial need. Applications for financial aid may be obtained from the Office of Financial Aid and should be submitted no later than March 15. Employment opportunities, both on and off campus, are typically available as well through the financial aid office.

MASTER'S DEGREE REGULATIONS

General Regulations

The following are the general regulations governing master's degrees. Additional requirements established by specific departments and programs may be found in this catalog under the special headings of these units. Before a decision to enter into a particular graduate degree program is made, the student is urged to communicate directly with the department to determine the most current program requirements. The student is responsible for seeking academic advising in the department or program of the specialization chosen. The department can assist in many of the details necessary to completing program requirements, especially early in the student's program.

Please note that each graduate department is headed by a chair that is responsible for working with graduate students in developing individual courses of study, establishing graduate committees, and in advising graduate students. Some graduate departments also have a graduate coordinator. In such cases, graduate students are expected to work with this person as the program's chief officer for graduate affairs. In all matters relating to university regulations,

the dean of Graduate Studies and Research is the final arbiter, though he or she consults with departmental officers in carrying out these duties.

Graduate-Level Credit

Graduate-level credit is given for all courses at CWU numbered at the 500 level and above. However, courses which are specifically numbered "500" are reserved for professional development courses and cannot be counted toward a master's degree.

Graduate courses numbered 501 and above are typically restricted to students who have earned a bachelor's degree and who have formally been admitted to a graduate program of the university. Some courses may also require competitive admission to a specific departmental graduate program.

Undergraduate-level Credit

Courses at the 100, 200, and 300 level are not applicable to a master's degree at CWU. Courses at the 400 level may be accepted for credit toward a graduate degree at CWU provided that they are taken after the student has been admitted to the master's degree program and are approved as part of the student's official course of study. In such cases, graduate students are expected to perform at a high level, while completing requirements additional to those expected of undergraduates enrolled in the course.

Transferring Credit to CWU Graduate Degree Programs

Courses taken prior to formal admission to a CWU master's degree program may be considered for transfer to a CWU master's degree program provided that the criteria below are met.

A total of 15 graduate quarter credits may be applied to a CWU master's degree, of which no more than 9 quarter credits (6 semester credits) may be from accredited institutions offering graduate degrees other than CWU.

Credits accepted in transfer are those that are part of an accredited institution's regular graduate degree programs. In cases where courses sought for transfer generate both undergraduate and graduate credit, students receiving transfer credit are expected to have elected the course(s) at the graduate level and thus have completed more qualitatively and quantitatively than those who have taken the course(s) for undergraduate credit. Credit sought for transfer must be graded B or better and must have been completed no more than six years before the date of the student's master's degree program completion.

All credits intended for transfer must be recommended for approval by the departmental/program chair or graduate coordinator as a part of the official course of study filed with the Office of Graduate Studies and Research. Before transfer credit can be considered part of a graduate student's program, an official transcript from the registrar of the institution from which the

credit is to be transferred must be received by the graduate office.

Credits used to fulfill requirements for another degree, either at CWU or elsewhere, will not be transferred. Credit for short courses, attendance at conferences, brokered courses, workshops, and pass-fail courses are normally not accepted in transfer. Credit from any non-accredited institution or accredited institution not approved for graduate study will not be accepted for transfer. Credit obtained within the state of Washington from an accredited institution whose main campus is outside of the state will be considered for transfer only by special petition to the dean of Graduate Studies and Research. The university reserves the right to determine the acceptability of transfer credit from any institution.

Course Challenge (Credit by Examination)

Under certain circumstances, the university may award credit or waive requirements based on course challenges or prior learning experience. Graduate students who have been admitted to a graduate program must obtain permission from the Dean of Graduate Studies and Research, their advisor, and the course instructor to challenge a course.

Credit/No Credit

Graduate students may take advantage of the credit/no credit option as a way to explore academic areas in which they are interested. Credit/no credit courses will not be counted toward master's degrees nor will they be computed in the graduate grade point average. Students are allowed to select one class per quarter for a credit/-no-credit grade. A student electing this option must designate a class as credit/no credit during registration or during change of schedule period. The credit/no credit option is distinct from courses graded on a satisfactory/unsatisfactory (S or U) basis (see S or U grading).

Credits from Extension, Workshops, and Correspondence Activity

No more than a combined maximum of 8 credits of workshop courses (591s) may be applied toward a master's degree. Courses numbered 491 are not applicable to master's degree credit.

Credits earned in correspondence courses are not applicable to any master's degree.

Academic Policies

Scholastic Standards

Any graduate student in a master's program whose cumulative grade point average falls below 3.0 at the end of any quarter will be placed on academic probation for the next academic quarter. While on probation, a student may not hold a graduate assistantship. If, after one quarter of probation, the student fails to raise her or his cumulative grade point average to 3.0

or above, the student will be dropped from the university. Students may not receive a master's degree from Central if their cumulative grade point average is below 3.0.

The cumulative grade point average is calculated using all courses taken after admission into a graduate program, whether part of the approved course of study or not. Grades for all courses included on the course of study must average at least 3.0 (B). Credit will not be accepted for courses on the course of study in which a grade lower than C is earned.

Student Study Load

The normal course load for graduate students not holding a graduate assistantship is 10-16 credits per quarter, 10-14 for those with assistantships. Graduate assistants taking over 14 credits must have approval from the Office of Graduate Studies and Research. For a graduate student not holding an assistantship, a study load of 17-19 credits may be approved by the chair or graduate coordinator of the department of the student's specialization. Loads above 19 credits are not normally permitted. Exceptions may be made only by the dean of Graduate Studies and Research.

Maximum Time Limit to Degree Completion

No credit earned more than six years before the date of the master's degree award may be counted as part of the degree credit requirement except as may be approved by formal action by the dean of Graduate Studies and Research. This includes applicable work transferred from other institutions.

Master's degree students are expected to complete all requirements for the master's degree within six years from the date of first enrollment. Students seeking to interrupt their studies may do so with the approval of the chair or graduate coordinator of the home department, but must pay a non-refundable fee for registration as an on-leave student. This fee covers four successive academic quarters beginning with fall quarter. While on leave, graduate students retain library privileges. If a degree program is not completed during the six-year period from the quarter for which a student was admitted, the student must reapply to the university. If readmitted, only those credits graded B or better and completed no more than six years from the date of the student's program completion may be counted toward the degree.

Continuous Registration

All master's degree students, including students in attendance only during summer quarter, must satisfy the continuous registration requirement each fall quarter or summer to maintain active status. Students whose master's program runs throughout the academic year will be assessed this fee every fall quarter. Students whose program meets primarily in the summer months will be assessed the on-leave fee at the beginning

of summer quarter. A master's degree student may register as a full-time, part-time, or as an on-leave student to satisfy the requirement. Students desiring on-leave status are required to pay a \$40 fee each fall quarter. Failure to maintain continuous registration will be taken by the university to signify the student's resignation from the program. Students who resign and later wish to resume study toward a degree must reapply for admission and complete all steps outlined for master's admission. Readmission cannot be guaranteed.

Graduate Committee

Every master's degree candidate must have a graduate committee of at least three members. Interdisciplinary membership is strongly recommended. In some departments, a student may choose her/his committee in consultation with an advisor; in others, the chair or graduate coordinator assigns graduate committees. In either case, the graduate student is expected to work with the department chair or graduate coordinator in forming her/his committee. The student must submit a Graduate Committee and Option Approval Form to the graduate office. If approved, the committee becomes the student's official advisory committee. The thesis or non-thesis project advisor is the student's graduate committee chair and generally is a faculty member in the department of specialization.

Only a regular member of the graduate faculty may serve as chair of a graduate committee. Adjunct faculty may serve as committee members with the approval of the dean of Graduate Studies and Research.

Under unusual circumstances, and with the written recommendation of a graduate student's home department or program and the approval of the dean of Graduate Studies and Research, an associate member of the graduate faculty may serve as co-chair of a student's graduate committee. The associate member will serve as co-chair along with a regular member of the graduate faculty. The minimum number of members needed for a graduate committee will remain at three.

The Graduate Faculty

At CWU, graduate professors are teachers and mentors, as well as active researchers and artists. They blend instructional and research activities and in doing so afford our graduate students the benefit of state-of-the-art research and creative experience with personalized instruction.

Course of Study

All candidates must complete at least 45 credits (some programs require more credits) as outlined in an official course of study, endorsed by the department chair or graduate coordinator and the committee chair and filed with and approved by the Office of Graduate Studies and Research. The credit on the course of study must be separate and distinct from

credit applied toward any other degree. Course of study forms are available in the graduate office, Barge Hall, room 305.

The course of study should be filed before a graduate student has completed 25 quarter credits leading to the master's degree; however, it may be required prior to that for financial aid purposes. No more than 15 quarter credits completed at CWU before the quarter of formal admission will be accepted on the official course of study for the master's degree, although the department and the graduate office reserve the right to limit the use of such credit, or not count it at all. Graduate students are urged to discuss the counting of such credit as soon after being admitted as possible. An approved course of study must be on file with the graduate office before the graduate committee and an Option Approval form will be considered for approval.

The official course of study reflects the credit required to meet requirements for the master's degree. Unless revisions are approved by the department chair or graduate coordinator and the dean of Graduate Studies and Research, the student must complete satisfactorily or be currently enrolled for all credit specified before advancement to candidacy or before the degree award will be processed. Each graduate student, as part of degree requirements must complete a thesis, project and/or comprehensive examination (see below for information about culminating projects).

The student's graduate advisor or committee chair, in consultation with the department chair and/or graduate coordinator, works with the student in designing a program of study. Once agreed upon, the student prepares an official course of study form obtained from the graduate office, which is then endorsed by the department chair or graduate coordinator, along with the student's committee chair. Upon receipt in the graduate office, each course of study is reviewed to ensure that it meets the minimum requirements of the institution.

Individual Studies Programs

Individual studies degree programs are intended to allow highly motivated students to pursue an interdisciplinary course of study combining coursework from more than one discipline, where no such formal master's degree program is in place. Individual studies program proposals must show academic rigor, be programmatically coherent, and intellectually sound. Final approval of such programs resides with the dean of Graduate Studies and Research.

Prospective applicants seeking to pursue an individual studies degree must contact the dean of Graduate Studies and Research to discuss the feasibilities of the desired program.

Credits Required

A graduate student must complete at least 45 quarter credits (some programs require more credits) in the 400, 500, and above-credit level groups. At least 25 credits of the total required for the degree must be numbered 501 or above.

Some departments restrict the number of credits below the 500 level. Please consult the departmental listings in this catalog for specific additional credit level requirements.

At least 30 credits appearing on the course of study for the master's degree must be on a graded scale (not S or U). Credit/no credit courses will not be counted toward a master's degree at CWU.

Culminating Experience

All students pursuing the master's degree must demonstrate their ability to communicate effectively in writing by satisfactorily completing one or more of the following: (a) a thesis; (b) a written report of a field study, internship, or creative project; and/or (c) a comprehensive written examination. In programs allowing the option, the student's graduate committee in the area of specialization will decide with the student whether to carry out (a), (b), and/or (c) above. A prospectus of the thesis, field study, internship, or creative project must be approved by the student's committee before work begins. The report on the thesis, field study, internship, or creative project must conform to standards described in thesis regulations which are available in the Office of Graduate Studies and Research.

Thesis

A thesis is a written study prepared by the student that demonstrates her or his ability to conduct original, independent research. The thesis topic must be approved in its preliminary stages by the student's graduate committee, the chair of the department of specialization or graduate coordinator, and the dean of Graduate Studies and Research. A form for certifying thesis completion is available in the Office of Graduate Studies and Research.

The thesis must be prepared according to standards of format, style, typeface, and paper quality, as outlined in thesis regulations available at the Office of Graduate Studies and Research. The graduate student is expected to work closely with the thesis advisor and thesis committee in the conception, design, and execution of the thesis. Working with the thesis committee chair, a graduate student will submit copies of the thesis to the committee at least two full weeks in advance of the final examination. Draft copy must be provided with sufficient lead-time to allow faculty to review and critique it. It is very important that the student maintain close contact with committee members during thesis preparation. At the appointed time, the student will defend her or his work before

the committee. The thesis defense grade will be assigned as either satisfactory or unsatisfactory. Jointly written theses are not permitted.

Approval of a thesis is a two-stage process. First, if successfully defended, it must receive the written approval of all committee members. Second, it must be reviewed and approved by the graduate office. If approved by the thesis committee, a thesis approval page and the thesis grade report should be signed by all members of the committee after required corrections, if any, are made. Once the graduate student has prepared the thesis in the format required by the graduate office, and has double checked to ensure that all style and format rules have been observed, he or she should submit the thesis for review to the office.

The thesis must include an abstract (150 words or less) described in thesis regulations available in the Office of Graduate Studies and Research. The original and two copies of the completed approved thesis, with pages in proper order, must be submitted to the graduate office and accepted for binding before the student will be cleared for graduation.

The graduate office and the student share in the cost of binding the thesis. Each student pays a binding fee that helps defray the cost of binding the original and two copies of the thesis. Thesis binding fees are \$75 for three copies. Two copies are deposited in the library and one copy is given to the student. Students not wishing to retain a copy for themselves should submit the original copy plus one other in accordance with the above instructions. He or she will be assessed \$50 in binding fees.

Graduate students whose research involves human subjects or vertebrate animals may not commence research without first obtaining clearance to do so from the appropriate institutional review board. (See Institutional Review Board or Animal Care and Use Committee below.)

Institutional Review Board Approval

Central is concerned that no research conducted at this institution by its faculty or its students expose people who participate as subjects to unreasonable risk to their health, general well-being, or privacy. Therefore, all CWU-affiliated research, including student research projects which involve human subjects, must be reviewed by the university's Human Subjects Review Committee (HSRC), CWU's institutional review board for the protection of human subjects. Students apply for HSRC review by filling out an application form, which can be obtained online at www.cwu.edu/~hsrc or from the HSRC office. Early contact with the human protections administrator is recommended. No research can be initiated prior to formal approval.

Animal Care and Use Committee

Graduate students whose research involves vertebrate animal subjects may not commence research without first obtaining clearance from the Animal Care and Use Committee. Forms for applying for review may be obtained in the Office of Graduate Studies and Research or online at www.cwu.edu/~masters.

Project

Several departments allow a student to complete a project rather than a thesis. This is done in instances where the faculty and student determine that a special project, rather than a master's thesis, will strengthen the student's learning experience. Typically, projects are completed in professional programs.

Exam

Some departments allow a student to complete a written exam rather than a thesis or project. Please see individual program information.

Completing Degree Requirements

Final Folder Evaluation

All graduate students must contact the Office of Graduate Studies and Research for a final review of their file no later than the first week of their anticipated final quarter as soon as they have registered. At this evaluation, candidacy requirements, grade point average, course of study completion, and examination scheduling will be processed. Advancement to candidacy and final examination scheduling will not be permitted except during the final quarter.

Final Examination

After the student has registered and been cleared to proceed toward completion through a folder check by the graduate office, he or she must pass oral and/or written examinations covering courses, seminars and thesis, or such other examination as necessary to complete degree requirements. A permission form authorizing the final examination will be issued by the graduate office after a final evaluation of the student's course of study has been completed and once the student has met the final quarter enrollment requirements.

At least two weeks prior to the final examination, four (4) copies of a "brief" must be submitted to the Office of Graduate Studies and Research. A sample brief is included in the thesis/non-thesis guidelines available at the graduate office or online at the graduate studies web page, www.cwu.edu/~masters. Copies will be distributed to the student's graduate faculty committee prior to the examination. One copy will remain in the student's file.

For the final examination, an outside representative of the graduate faculty will routinely be assigned by the Office of Graduate Studies and Research.

Final Quarter Enrollment Requirement

A student admitted to a master's degree program must be registered for a minimum of two (2) credits at the university during the quarter the master's degree is conferred. Enrollment for this purpose should be completed during the usual early registration or regular registration periods to ensure degree conferral if requirements are met.

The permit for scheduling the final examination, approved by the committee, must be filed in the Office of Graduate Studies and Research at least three weeks in advance of the examination. The final examination must be scheduled between the hours of 7 a.m. and 6 p.m., Monday-Friday, when the university is in session (not between quarters). Final examinations are conducted by the candidate's committee and are open to the faculty. The committee alone shall decide upon the merit of the candidate's performance. Final assessment of the examination will be reported on a satisfactory/unsatisfactory basis. The candidate shall pass the examination if two-thirds of the official graduate faculty committee members so indicate. In the event of an unsatisfactory final examination, a second examination may be scheduled upon the endorsement of the major department chair and with the approval of the dean of Graduate Studies and Research for the subsequent quarter with at least two months intervening.

All degree requirements must be completed within the same or next quarter from the exam date. Failure to complete remaining requirements by the end of the next quarter will result in requiring the final examination to be retaken.

A student whose name has been placed on the degree list for a particular quarter but who does not complete the requirements for degree conferral by the published deadline (two weeks before the last day of finals) and who does complete all the requirements by the last day of that quarter, will receive the degree the following quarter without further registration.

Advancement to Candidacy

A student becomes eligible for advancement to candidacy for a master's degree upon fulfillment of the following requirements:

1. Completion of the course requirements as set forth in the course of study;
2. Completion of the thesis, project, or exam where appropriate;
3. Attainment of a cumulative grade point average of 3.0 (B) or better for all courses taken since admission to the graduate program and all work included in the course of study;

4. Completion of additional departmental requirements, e.g., proficiency in a foreign language;
5. Fulfillment of the statute of time limitation (six years) requirement; and
6. Passing of an oral and/or written examination covering courses, seminars, and thesis, or other examinations deemed necessary by the major department.

Graduation

Application for a master's degree must be submitted to the Office of Graduate Studies and Research by the stated quarterly deadline. (The application is generated by the graduate office.) The application will not be completed without payment of binding and degree fees. The fee for the master's degree is \$14 plus a \$1 student benefit fee. The application is for a specific quarter of degree conferral. If requirements are not met, the student must reapply and pay the fees for degree conferral in a subsequent quarter.

Candidates for the master's degree are encouraged to participate in the commencement exercises following the completion of degree requirements. See the academic calendar in the front of this catalog for deadline dates to arrange for regalia.

Second Master's Degrees

Students seeking a second master's degree must be admitted to the second program in accordance with admission regulations and must complete an approved course of study (of at least 45 credits) distinct from the courses offered for the first master's degree.

Graduate Certificate Programs

In addition to the degree programs outlined above, the following graduate certificate programs are offered at the university.

Renewal of Residency Teaching Certificate
Fifth Year of Study for Continuing or Professional Certificate
Endorsement-only Program
Continuing Principal's Certificate
Residency Program Administrator
Continuing Program Administrator
Educational Staff Associate Certificate:
School Counselor
School Psychologist

Application forms and further information can be obtained from the office of the associate dean of the College of Education and Professional Studies located in Black Hall, room 228. The Certification Office is open daily, Monday through Friday, from 8 a.m. to 5 p.m. General inquiries and information regarding the fifth-year program and teacher certification should be addressed to the certification director. The telephone number is 509-963-2661.

Renewal of the Residency Teaching Certificate

The residency teaching certificate is valid for five years from the date of issuance and may be renewed once for a two-year period when the following requirements are met:

1. The individual completes a residency certificate renewal application, which may be secured from the office of the associate dean of the College of Education and Professional Studies.
2. The individual has completed all coursework requirements for the continuing certificate or has completed at least 15 quarter hours of coursework since last certificate was issued.

Continuing Certificate

Candidates for the continuing certificate must meet the following requirements:

1. Have a valid residency teaching certificate.
2. Verify at least one year of full-time teaching experience.
3. Complete 45 credits of upper-division (300-level or higher) coursework, including courses in abuse, staff development and supervision, research and evaluation, and referral agencies.

To maintain the continuing certificate, each person must complete 150 clock hours of approved in-service education and/or 15 college or university credits every five years.

Professional Certificate

In addition to meeting requirements for the residency teaching certificate, candidates for the professional certificate must meet the following:

1. Completion of provisional status employment in a public or an approved private school defined as two years contracted teaching in the same district
2. Completion of an approved performance-based college/university professional certificate program. Please contact the office of the associate dean, College of Education and Professional Studies for application and information
3. Completion of coursework in issues of abuse.

To maintain the professional teaching certificate, an individual must complete 150 clock hours of in-service training every five years. Some of the clock hours must relate to one of the six state-salary criteria and some must relate to one of the three standards for the professional teaching certificate.

Endorsement-only Program

CWU's Endorsement-only Program is available to certified teachers who hold the Washington State residency or continuing teaching certificate and who wish to add a teaching endorsement to their certificate. Teachers interested in obtaining an endorsement from CWU should submit an application (available online at www.cwu.edu).

edu/~cert) and official transcripts. A credit evaluation of the applicant's records will be completed by the Certification Office, routed to the endorsing department for approval, and then forwarded to the applicant.

School Administration Certificates

Central has been authorized by the State Board of Education to recommend issuance of residency and continuing principal's certificates valid for service as vice principal, assistant principal, or principal of elementary, middle, junior high, and/or high schools. The university is also authorized to recommend issuance of the program administrator certificate as director of instructional leadership or special education. These programs of preparation include formal study and internship experiences. (See Master of Education, Administration, Special Education, or Instructional Leadership.)

Requirements for the residency certificate include:

1. Possession of a valid teacher or educational staff associate (whichever is appropriate) certificate;
2. Completion of the master's degree
3. If the master's degree is already earned from an accredited institution, please check with the school administration program director regarding program requirements;
4. Three years of successful, contracted teaching experience in a state-approved K-12 setting is required;
5. One academic year as an administrative intern at the level for which certification is being sought.

Requirements for the continuing certificate include:

1. Three years of full-time experience as a practicing administrator (for continuing principal certificate, experience must be as principal, vice principal, or assistant principal);
2. Completion of all requirements for residency certificate.

Persons seeking further information are invited to correspond with the school administration program director in the education department.

Special Certificates

Preparation for special certificates, authorized by the State Board of Education, is available at Central. Programs leading to the educational staff associate certificate are available in school counseling and school psychology.

Programs leading to certification in specific vocational areas are available in business education, marketing education, diversified occupation, family and consumer sciences, and trade and industrial (including health occupations and technical education.) For information regarding these programs, please contact the specific departments.

Applications for the school counselor or school psychologist ESA certificate can be obtained from the psychology department and are processed through the office of the associate dean of the College of Education and Professional Studies.

Those interested in other special certificates should contact the Washington State Director of Certification, Office of the Superintendent of Public Instruction, Old Capital Building, P.O. Box 47200, Olympia, WA 98504-7200.

Master's Degree and Certification

Please note that a graduate student enrolled in a master's degree program does not necessarily satisfy all certification requirements by completing the master's degree. Students pursuing master's degrees in combination with certificate programs should maintain contact with the department of their specialization and with the office of the director of certification to ensure that all requirements are met.

DEGREES OFFERED

Departments, degrees offered, and courses are listed in alphabetical order in this section. Courses numbered 596 designate individual study courses and are available for registration by prior arrangement with the course instructor and approval of the department chair.

The number in parentheses following the course title indicates the amount of credit each course carries. Variable credit courses include the minimum and maximum number of the credits within parentheses.

Not all of the courses are offered every quarter. Final confirmation of courses to be offered, information on new courses and programs, as well as a list of hours, instructor, titles of courses and places of class meetings, is available online in Safari which can be accessed through the CWU home page at www.cwu.edu. A registration handbook is available at Registrar Services or your university center office. This book will assist you in navigating through Safari.

CWU offers the following master's degrees:

Accounting Department

Master of Professional Accountancy

Advanced Programs Department

Master of Education School Administration
Master of Education Instructional Leadership

Art Department

Master of Arts
Master of Fine Arts

Biological Sciences Department

Master of Science Biology
Biomedical Sciences Specialization

Chemistry Department

Master of Science Chemistry

Educational Foundations and Curriculum Department

Master of Education Master Teacher

English Department

Master of Arts English (Literature)
Master of Arts English (TESOL)

Family and Consumer Sciences Department

Master of Science Family and Consumer Sciences
Family Studies Specialization
Career and Technical Education Specialization

Geological Sciences Department

Master of Sciences Geological Sciences

History Department

Master of Arts History

Individual Studies

Master of Arts
Master of Education
Master of Science

Industrial and Engineering Technology Department

Master of Science Engineering Technology

Language, Literacy, and Special Education Department

Master of Education Special Education
Master of Education Reading Specialist

Law and Justice Department

Master of Law and Justice

Mathematics Department

Master of Arts for Teachers, Mathematics

Music Department

Master of Music

Nutrition, Exercise, and Health Sciences Department

Master of Science Exercise Science
Master of Science Nutrition

Physical Education and School and Public Health Department

Master of Science Health and Physical Education
Athletic Administration Specialization

Primate Behavior and Ecology

Master of Science Primate Behavior

Psychology Department

Master of Education School Counseling
Master of Education in School Psychology
Master of Science Experimental Psychology
General Experimental Psychology Specialization
Applied Behavior Analysis Specialization
Master of Science Mental Health Counseling

Resource Management

Master of Science Resource Management

Theatre Department

Master of Arts, Theatre
Theatre Studies Specialization
Theatre Production Specialization

ACCOUNTING DEPARTMENT

College of Business
Ellensburg (E)
Shaw-Smyser Hall, room 327
CWU-Des Moines (D)
CWU-Lynnwood (L)

509-963-3340
Fax: 509-963-2875
www.cwu.edu/~cb/acct/
See the website for how this program may be used for educational and career purposes.

Faculty and Staff

Chair

Marvin Bouillon, PhD, (E)
Shaw-Smyser Hall, room 340

Director, MPA Program

Ronald R. Tidd, PhD, CPA (E)

Professors

Marvin Bouillon, PhD, CPA (E)
Norman J. Gierlasinski, DBA, CPA, CFE, CIA (D)
Gary W. Heesacker, MBA, CPA (E)
Robert E. Holtfreter, PhD (E)
Karen D. Martinis, MBA, CPA (E)
Ronald R. Tidd, PhD, CPA (E)

Associate Professors

MaryAnne Atkinson, PhD (L)
Linda Larson, DBA, CPA, CIA, CISA, CFE (L)
Michael Ruble, PhD, CPA (L)
James Thompson, PhD (D)

Assistant Professors

William Bailey, JD, LL.M., CPA (L)
Scott Leong, PhD (D)
Ke Zhong, PhD (D)

Staff

Sharon Damm, secretary

Master of Professional Accountancy Overview

The Department of Accounting offers a master of professional accountancy degree. The program's objective is to help students increase their knowledge about accounting and business, while developing skills in critical thinking, oral and written communications, teamwork, and the use of information technology to research and analyze accounting and business issues. MPA graduates will be able to identify and resolve such issues in a manner that complies with professional standards.

Admission Requirements

In addition to general regulations for admission to master's programs, admission to the master of Professional Accountancy Program requires the following:

1. Meet one of the following five degree requirements:
 - a. Bachelor's degree in accounting from an accredited U. S. university; or
 - b. Bachelor's degree in accounting from an accredited international university may be provisionally accepted. Full acceptance will be granted upon completion of the U.S. tax and business law courses listed below, with a 2.7 grade point average.
ACCT 346, Income Tax Accounting
BUS 241, Legal Environment of Business
 - c. Bachelor's degree in business administration from an accredited university may be provisionally accepted. Full acceptance for provisionally accepted students shall result upon completion of the core accounting courses listed below with a 2.7 grade point average.
ACCT 305, Cost Accounting
ACCT 346, Income Tax Accounting I
ACCT 350, Intermediate Accounting I
ACCT 351, Intermediate Accounting II
ACCT 460 Auditing
 - d. Bachelor's degree in managerial/ business economics from an accredited university may be provisionally accepted. Full acceptance for provisionally accepted students shall result upon completion of the core business and accounting courses listed below with a 2.7 grade point average.
ACCT 305, Cost Accounting
ACCT 346, Income Tax Accounting I
ACCT 350, Intermediate Accounting I
ACCT 351, Intermediate Accounting II
ACCT 460, Auditing
BUS 241, Legal Environment of Business
MGT 489, Strategic Management
 - e. Bachelor's degree from an accredited university in an area other than accounting, business administration, or managerial/ business economics may be provisionally accepted. Full acceptance for provisionally accepted students will result upon completion of the following core business courses with a 3.0 grade point average and the core accounting courses with a 2.7 grade point average.
ACCT 251, Accounting I
ACCT 252, Accounting II
ACCT 305, Cost Accounting
ACCT 346, Income Tax Accounting I
ACCT 350, Intermediate Accounting I
ACCT 351, Intermediate Accounting II
ACCT 455 Accounting Information Systems
OR
MIS 386 Management Information Systems
ACCT 460, Auditing
2. Applicants are required to submit a Test of English as a Foreign Language (TOEFL) Internet-based score of 79 or above or paper-based score of 550 or above or an International English Language Testing System (IELTS) score of 6.5 or above, if their native language is not English. Students wishing to have credits from non-United States institutions considered for transfer into the College of Business for any major or minor must have their transcripts evaluated through outside credential evaluators approved by the National Association of State Boards of Accountancy (NASBA), such as Education Credential Evaluations, Inc. (ECE), Foreign Academic Credentials Services (FACS), Global Services Associates (GSA), or World Education Services, Inc.
3. Applicants must submit Graduate Management Admission Test (GMAT) scores instead of Graduate Record Examination (GRE) scores. (At the program director's discretion, this requirement can be waived for applicants who request the waiver and have an undergraduate accounting degree from CWU and a GPA of 3.25 or higher in upper-division accounting courses). A minimum GMAT total score of 500 is desired for admission into the MPA Program. Admission to the program will be competitive based mainly on grade-point average and scores on the Graduate Management Admission Test (GMAT) using the following formula:
$$(\text{Grade point average on a 4.0 scale} \times 200) = 800 \text{ points possible}$$
$$+(\text{GMAT}) = 800 \text{ points possible}$$
$$\text{Total Score} = 1,600 \text{ points possible}$$

The factor will be used for the initial ranking of candidates for admission consideration. In addition to the factor rankings, the department may use other considerations to develop the final admissions list. Due to space considerations, a separate admissions list will be developed for each location. Students will be accepted into the program at a specific location and will be allowed to take classes only at that location. Students may not transfer to other locations without the permission of the department chair.

BUS 221, Introductory Business Statistics
BUS 241, Legal Environment of Business
ECON 201, Principles of Economics Micro
ECON 202, Principles of Economics Macro
FIN 370, Introduction of Financial Management
MGT 382, Principles of Management
MGT 489, Strategic Management
MKT 362, Essential Marketing Concepts

Program Requirements

To graduate with the MPA degree, the Office of Graduate Studies and Research requires a cumulative grade-point average of at least 3.0 in the courses listed in the student's course of study. In addition, the student must successfully pass the comprehensive exam (ACCT 700) in the last quarter of coursework and comply with the procedural requirements of the university and the Office of Graduate Studies and Research. MPA students should register for the Uniform CPA Examination during the fall quarter and attempt to take three sections of the examination and schedule the fourth section before graduation.

No more than five elective credit hours may be transferred toward meeting the requirements of the MPA program. Subject to the approval of the department chair and the college dean or designee, those credits can be earned in other accredited graduate programs.

Required Courses

ACCT 510 - Information Systems Security, Control, and Audit	5
ACCT 520 - Tax and Legal Strategies for Business	5
ACCT 570 - Foundations of Income Taxation	5
ACCT 581 - Seminar in Financial Accounting	5
ACCT 583 - Seminar in Auditing	5
ACCT 585 - Seminar in Professional Accountancy and Ethics	5
ACCT 700 - Master's Thesis, Project Study, and/or Examination	1
ECON 552 - Managerial Economics and Business Strategy	5
FIN 570 - Advanced Financial Management	5
MGT 525 - Strategic Management/Business Simulation	5

Program Total Credits: 46

Accounting Courses

ACCT 505. Controllanship (5). Use of case analysis and other techniques to develop managerial accounting analysis and decision-making skills. Study of financial management, planning, and measurement. Prerequisite: admission to the Master of Professional Accountancy Program.

ACCT 510. Information Systems Security, Control, and Audit (5). Study of techniques and issues in the design, control, and audit of accounting information systems. Use of various methods to develop critical thinking and analysis and communication skills. Prerequisite: admission to the Master of Professional Accountancy Program.

ACCT 520. Tax and Legal Strategies for Business (5). Case studies in business law and taxation. Improvement of business law and taxation knowledge and skills with emphasis on (1) legal issue considerations, (2) choice of entity, and (3) entity dissolution. Prerequisite: ACCT 570 and admittance to the Master of Professional Accountancy Program.

ACCT 561. Fraud Examination (5). Detection and prevention of financial statement fraud and other forms of business fraud. ACCT 461 and ACCT 561 are equivalent courses; students may not receive credit for both. By permission. Prerequisite: admission to the Master of Professional Accountancy Program.

ACCT 565. Current Issues in Information Technologies (5). Current issues in information technologies and their relevance for accounting professionals. Prerequisite: admission to the Master of Professional Accountancy Program.

ACCT 570. Foundations of Income Taxation (5). Introduction to income taxation of corporations, partnerships, individuals, and estates and trusts, with emphasis on tax compliance, planning, and computer-based tax research. Prerequisite: Admission to the Master of Professional Accountancy Program.

ACCT 570. Advanced Financial Management (5). An in-depth and rigorous review of the theory and empirical evidence related to the investment and financing policies of the firm, including, financial evaluations, capital management, financial decisions, and risk analysis through lectures and cases. Prerequisite: admission to the Master of Professional Accountancy program.

ACCT 580. Advanced Taxation (5). Taxation of trusts and estates, gratuitous transfers, and the formation and termination of corporations and partnerships, with emphasis on tax compliance and computer-based tax research. Prerequisite: admission to the Master of Professional Accountancy Program.

ACCT 581. Seminar in Financial Accounting (5). Use of case analysis and other techniques to develop financial accounting analysis and decision-making skills. Study of FASB Accounting Standards Codification. Prerequisite: admission to the Master of Professional Accountancy Program.

ACCT 583. Seminar Auditing (5). Use of case analysis and other techniques to develop auditing analysis and decision-making skills. Study of AICPA Professional Standards. By permission. Prerequisite: admission to the Master of Professional Accountancy Program.

ACCT 585. Seminar in Professional Accountancy and Ethics (5). Uses case analysis and other techniques to develop professional analysis, decision-making, and ethics skills. Study of AICPA Professional Standards. Prerequisite: admission to the Master of Professional Accountancy Program.

ACCT 590. Cooperative Education (1-5). An individualized, contracted field experience with business, industry, government, or social service agencies. The contractual arrangement involves a student learning plan, cooperating employer supervision, and faculty coordination. May be repeated for up to 5 credits. Grade will either be S or U. By permission. Prerequisite: admission

to the Master of Professional Accountancy Program.

ACCT 596. Individual Study (1-6). May be repeated for credit. Grade will either be S or U. Prerequisite: admission to Master of Professional Accountancy Program.

ACCT 598. Special Topics (1-6).

ACCT 700. Master's Thesis, Project Study, and/or Examination (1). Designed to credit and record supervised study for the master's thesis, non-thesis project, studio project, public recital, and/or examination. May be repeated for credit. Grade will either be S or U. Prerequisite: admission to the Master of Professional Accountancy Program.

Economics Course

ECON 552. Managerial Economics and Business Strategy (5). Application of micro economic theories to managerial decisions and planning under various market structures. Must be admitted to the Master of Professional Accountancy plan prior to enrolling in this course.

Finance and Supply Chain Management Course

FIN 570. Advanced Financial Management (5). An in-depth and rigorous review of the theory and empirical evidence related to the investment and financing policies of the firm, including, financial evaluations, capital management, financial decisions, and risk analysis through lectures and cases. Prerequisite: admission to the Master of Professional Accountancy Program.

Management Course

MGT 525. Strategic Management/Business Simulation (5). Developing accountants as business advisers. Performance measurement, financing, and overall corporate strategy. Business simulation involving professionals. Prerequisite: admission to the Master of Professional Accountancy Program.



ADVANCED PROGRAMS DEPARTMENT

College of Education and Professional Studies
Ellensburg
Black Hall, room 214-25
509-963-1751
Fax: 509-963-1424
www.cwu.edu/~ap/
See the website for how these programs may be used for educational and career purposes.

Faculty and Staff Chair

Henry Williams, EdD

Professors

Henry Williams, EdD
James Pappas, EdD

Associate Professors

Marwin Britto, PhD
Andrea Sledge, PhD

Assistant Professor

Dennis Szal, EdD

Lecturer

Leona Lindvig, MEd, library media

Staff

Stephanie Harris, secretary senior

Department Information and Requirements

Programs included in the Department of Advanced Programs are masters and certification of education administration, administrative certifications in education, library media endorsement and professional certification in school administrator and teaching.

The master of education school administration or master of education an instructional leadership degree programs prepare teachers for the residency principal's certificate or program administrator's certificate. A student shall complete 45 credits (school administrator or instructional leadership) in an approved course of study to be developed in consultation with the graduate advisor. There are also certificate programs available.

The Library Media Program qualifies students to become library media specialists for K-12 schools in Washington. A student shall complete 27 credits of required courses. Candidates must take and pass the WEST-E in library media prior to receiving endorsement.

Professional certification school administrator is for education administrators to renew their residency Principal or Instructional Leader/Program Administrator certificates (OSPI requirement). Professional

Certification Teacher is for teachers who wish to improve their classroom techniques and explore personal growth opportunities (OSPI requirement).

Program Admission Requirements

In addition to general requirements for admission into the master's program, students desiring admission to the Department of Advanced Programs in Education must meet departmental requirements. Members of the appropriate program will review the student's application materials from the Office of Admissions and, if deemed necessary, may meet with the student before a recommendation for admission can be made.

Required Educational Foundations and Research Courses

EDF 510 is required of all students earning the MEd degree. The candidate further must choose at least three credits from the following: EDF 501, Educational Foundations; EDF 502, History of Education; EDF 503, Philosophy of Education; or EDF 504, Educational Measurement for Teachers. Related courses may be substituted with permission of the student's graduate advisor or committee chair, the chair of the department, and the dean of Graduate Studies and Research.

Master of Education: School Administration

The Master of Education School Administration Program prepares teachers for the residency principal's certificate. A student shall complete 45 credits in an approved course of study to be developed in consultation with the graduate advisor. This program does not automatically qualify the student for the residency principal's certificate, which requires that an applicant complete an application and be accepted to the Administrator Certification Program and complete the required coursework in addition to a 12-credit, year-long internship. The MEd School Administration Program prepares individuals who can provide appropriate leadership and direction to the school professional staff and to the community by developing a unified system for managing human resources; developing long-range plans, policies and goals, and; executing the policies developed by the district.

Admission Requirements: One year of successful contracted teaching experience in a K-12 classroom setting; minimum GPA 3.0; full admission to CWU; statement of objectives; three references, one must be from your current principal; transcripts from all institutions attended. Note: Completion of the master's degree does not automatically allow you to achieve the administrator's certificate.

Students will not be allowed to register for EDAD courses until they have been fully admitted to either the master's degree program or the Administrator Certificate Program. See your advisor if you have completed recent graduate coursework in intercultural education (i.e., EDF 507).

Required Courses

Educational Foundations and Research courses (to include EDF 510)	7
EDAD 577 - Diversity Leadership	3
EDAD 579 - School Personnel	4
EDAD 580 - Educational Administration	4
EDAD 581 - Public School Finance	4
EDAD 582 - School Curriculum	4
EDAD 583 - School and Community	4
EDAD 584 - School Supervision	4
EDAD 586 - The Principalship	4
EDAD 589 - School Law	4
EDAD 700 - Master's Thesis, Project Study and/or Examination	3

Total Credits: 45

Master of Education: Instructional Leadership

The Master of Education Instructional Leadership Program prepares teachers for the residency program administrator certificate. A student shall complete 40 credits in an approved course of study to be developed in consultation with the graduate advisor. This program does not automatically qualify the student for the residency program administrator certificate, which requires that an applicant complete an application, be accepted to the Administrator Certification Program, and complete the required coursework in addition to a 12-credit, year-long internship. The MEd Instructional Leadership Program prepares individuals who can provide appropriate leadership and direction to the school professional staff and to the community by developing and implementing unified instructional programs in the district.

Admission Requirements: One year of successful, contracted teaching experience in a K-12 classroom setting; minimum GPA 3.0; full admission to CWU; statement of objectives; three references, one must be from your current principal; transcripts from all institutions attended. Note: Completion of the master's degree does not automatically allow you to achieve the administrator's certificate.

Students will not be allowed to register for EDAD courses until they have been fully admitted to either the master's degree program or the Administrator Certificate Program. See your advisor if you have completed recent graduate coursework in intercultural education (i.e., EDF 507).

Required Courses

Educational Foundations and Research Courses (to include EDF 510)	7
EDAD 577 - Diversity Leadership	3
EDAD 580 - Educational Administration	4
EDAD 581 - Public School Finance	4

EDAD 582 - School Curriculum	4
EDAD 583 - School and Community	4
EDAD 584 - School Supervision	4
EDAD 589 - School Law	4
EDAD 700 - Master's Thesis, Project Study and/or Examination	3
Advisor-approved Electives	3

Total Credits: 40

Administrative Certificates in Education

The Administrative Certification Program (ACP) qualifies students upon successful completion for their residency principal certificate or program administrator certificate in instructional leadership or in special education.

The Residency Principal's Certificate

This certification program is available to individuals who already possess a master's degree or who are currently working on a MEd in school administration. Three years of successful, contracted teaching experience in a K-12 educational setting within the most recent five years is required before admission to the program is granted. Contact the Department of Advanced Programs for details and admission information.

Students will not be allowed to register for EDAD courses until they have been fully admitted to either the master's degree program or the administrator certificate program. See your advisor if you have completed recent graduate coursework in Intercultural Education (i.e., EDF 507).

Required Courses

EDAD 577 - Diversity Leadership	3
EDAD 579 - Education Human Resources ..	4
EDAD 580 - Educational Administration ...	4
EDAD 581 - Public School Finance	4
EDAD 582 - School Curriculum	4
EDAD 583 - School and Community	4
EDAD 584 - School Supervision	4
EDAD 586 - The Principalship	4
EDAD 589 - School Law	4
EDAD 692 - Pre-autumn Intern.	3
EDAD 693 - Internship in School Administration	9

Total Credits: 47

Residency Program Administrator Certificate (Instructional Leadership)

This Certification Program is available to individuals who already possess a master's degree or who are currently working on a MEd in instructional leadership. Three years of successful, contracted teaching experience in a K-12 educational setting within the most recent five years is required before admission to the program is granted. Contact the Department of Advanced Programs for details and admission information.

Students will not be allowed to register for EDAD courses until they have been fully admitted to either the master's degree program or the Administrator Certificate Program. See your advisor if you have completed recent graduate coursework in Intercultural Education (i.e., EDF 507).

Required Courses

EDAD 577 - Diversity Leadership	3
EDAD 580 - Educational Administration ...	4
EDAD 581 - Public School Finance	4
EDAD 582 - School Curriculum	4
EDAD 583 - School and Community	4
EDAD 584 - School Supervision	4
EDAD 589 - School Law	4
EDAD 692 - Pre-autumn Intern.	3
EDAD 694 - Internship in Improvement, Inst/ Curr Development	9
Advisor-approved Electives	3

Total Credits: 42

Residency Program Administrator Certificate (Special Education)

This certification program is available to individuals who already possess a master's degree or who are currently working on a MEd in special education or related field. Three years of successful, contracted teaching experience in a K-12 educational setting within the most recent five years is required before admission to the program is granted. Contact the Department of Advanced Programs for details and admission information.

Students will not be allowed to register for EDAD courses until they have been fully admitted to either the master's degree program or the Administrator Certificate Program. See your advisor if you have completed recent graduate coursework in intercultural education (i.e., EDF 507).

Required Courses

EDAD 577 - Diversity Leadership	3
EDAD 580 - Educational Administration ...	4
EDAD 581 - Public School Finance	4
EDAD 584 - School Supervision	4
EDAD 692 - Pre-autumn Intern.	3
EDAD 694 - Internship in Improvement, Inst/ Curr Development	9
EDSE 512 - Educational Rights of Individuals with Disabilities	3
EDSE 585 - Administration and Supervision of Programs for Individuals with Disabilities	3

Total Credits: 33

Administrator Pro-Cert

Pro-Cert is designed as a performance- and evidence-based process in which administrators are engaged in an appropriate administrative role to effectively demonstrate their practice at a professional level. Students, upon successful completion, receive their administrator professional certificate.

Required Courses

EDAD 570 - Entry Seminar Phase I	2
EDAD 570 - Professional Growth Plan Phase II	2
EDAD 570 - Panel Presentation Phase III ...	2

Total Credits: 6

Library Media – All Levels, Supporting Endorsement

This program is to qualify students to become Library Media Specialists for K-12 schools in Washington State. This is an intensive, eight-week, cohort program taught over two summers (four weeks the first summer, four weeks the second summer) with a nine-month practicum to take place between the first and second summers.

Required Courses

EDLM 514 - Media Development	3
EDLM 516 - Advanced Media Utilization ..	3
EDLM 526 - Instructional Methods for Library Media Specialists	3
EDLM 536 - Selecting Literature for Children and Young Adults	3
EDLM 548 - Collection Development for Library Media Specialists	3
EDLM 558 - Cataloging and Classification for Library Media Specialists	3
EDLM 568 - Information Storage and Retrieval	3
EDLM 578 - Administration of Media/ Technology Programs	3
EDCS 596 - Individual Study (Practicum) ...	3

Total Credits: 27

Education Administration Courses

EDAD 509. Civic Engagement (3). Student will use program of study content knowledge to improve a community situation. UNIV 509, FCSG 509, EDAD 509, and EDCS 509 are equivalent courses. May be repeated up to 12 credits. Grade will either be S or U.

EDAD 516. Technology Application for School Leaders (3). This course is designed to provide the student with knowledge of computer technology related to administration, data gathering, personal productivity in administration, and organizational management.

EDAD 570. Administrator Pro-Cert Seminar (2-6). The course provides the candidate an opportunity to engage in the process to meet the benchmarks, using self-evaluation, utilizing the Profile of Leadership Effectiveness (POLE) 360 and other data to determine administrator's positive impact on student learning. May be repeated under different subtopics. May be repeated up to 6 credits. Grade will either be S or U. By permission.

EDAD 577. Diversity Leadership (3). Prepare school administrators in leadership skills in the area of diversity management across all sectors of education and society. By permission.

EDAD 578. Readings in School

Administration (2-5). Engage in reading, analyzing, reflecting, and critiquing contemporary books giving special attention to implications of the readings for educational administrators. May be repeated up to 5 credits. By permission.

EDAD 579. School Personnel (4). An examination of the functions of a Human Resource Office in an educational setting. Students will learn about recruitment, selection, placement of highly qualified teachers, administrators, and classified personnel; other essential personnel and human resources functions. Prerequisite: student must be admitted to the graduate program.

EDAD 580. Educational Administration (4). An examination of administrative theory, principles, concepts, and processes, and the administration of educational programs and services. Prerequisite: one year of teaching experience.

EDAD 581. Public School Finance (4). An examination of writing educational grants and contracts. Students will build budgets and become familiar with various types and use of state funds. For those students enrolled in either the MEd in administration or the administrator certification program. Prerequisite: EDAD 580 and be admitted to the master's in Administration, Initial Principal's, Program Administrator, or Master Teacher programs.

EDAD 582. School Curriculum (4). Examination of school curriculum for the improvement of instructional and student learning. Prerequisites: EDAD 580 and be admitted to the master's in Administration, Initial Principal's, Program Administrator, or Master Teacher Programs.

EDAD 583. School and Community (4). An in-depth examination of the relationship between the school and community for the improvement of instruction and student learning. Prerequisite: one year of teaching experience.



EDAD 584. School Supervision (4). An examination of problems and issues in supervision. Emphasizes evolving concepts of supervision, strategies, and practices of promoting instructional change.

EDAD 586. The Principalship (4). The administration of elementary, middle, junior high, and high schools. Covers common elements and those peculiar to specific levels. Prerequisite: one year of teaching experience.

EDAD 589. School Law (4). An introduction to U.S. constitutional, legislative, and regulative school law, with particular attention to the state of Washington. Covers the legal issues of governance, church/state relations, tort liability, personnel and student rights, rights of handicapped students, property and funding, minorities. Also covers basic legal research skills. Prerequisites: EDAD 580 and be admitted to the master's in Administration, Initial Principal's, Program Administrator, or Master Teacher Programs.

EDAD 591. Workshop (1-6). No more than two workshops for a combined maximum of 8 credits can be applied toward a master's program.

EDAD 596. Individual Study (1-6).

EDAD 597. Graduate Research (1-10). Individual student research under the direction of a faculty member. Maximum of 10 credits may be included on course of study for the master's degree.

EDAD 598. Special Topics (1-6).

EDAD 599. Seminar (1-5).

EDAD 692. Pre-autumn Internship (3). Emphasis on the principal's responsibilities prior to and during the opening of the school year. Permission to register only after approval of program director. Combines with EDAD 693 for 16 total credits in administrative internship. Grade will either be S or U. Prerequisites: EDAD 580, EDAD 586, and a minimum of three years of successful teaching experience.

EDAD 693. Intern School Administration (3-9). Meets the laboratory and internship requirements outlined by the State Board of Education for candidates for principal's credentials. Permission to register only after approval of program director. Credits earned in an administrative internship may not exceed a total of 12. Combines with EDAD 692 for 12 total credits in administrative internship. May be repeated up to 12 credits. Grade will either be S or U. Prerequisites: EDAD 580, EDAD 586, and a minimum of three years of successful teaching experience.

EDAD 694. Internship in Improvement of Instruction and Curriculum Development (3-9). Meets the laboratory and internship requirements outlined by the State Board of Education for candidates for a program administrator's credential in supervision instruction and curriculum development specializations. May be repeated up to 12 credits. Grade will either be S or U. By permission.

EDAD 700. Thesis/Project Study/Exam (1-3).

Designed to credit and record supervised study for the master's thesis, non-thesis project, studio project, public recital, and/or examination. May be repeated up to 3 credits. Grade will either be S or U. Prerequisites: EDF 510 and must be admitted to the master's in Administration, Initial Principal's, Program Administrator, or Master Teacher Programs.

Education Library Media Courses

EDLM 514. Media Development (3).

Introduction to design and production of various instructional materials from manual to more complex computer techniques. EDLM 414 and EDLM 514 are equivalent courses; students may not receive credit for both.

EDLM 516. Advanced Media Utilization

(3). Explores recent research, experimental programs, and new developments in the utilization of media. EDLM 416 and EDLM 516 are equivalent courses; students may not receive credit for both. Prerequisite: EDCS 316.

EDLM 526. Instructional Methods for Library Media (3).

Survey and learn instructional filled by library media specialists and the instructional methods they employ: storytelling, creative drama, authoring software, effective presentation, literature appreciation, reading motivation, puppetry, library skills, independent learning skills, and information literacy skills. EDLM 426 and EDLM 526 are equivalent courses; students may not receive credit for both.

EDLM 536. Selecting Literature for Children and Young Adults (3).

Prospective school library media specialists will learn how to develop quality children and young adult literature collections and programs. EDLM 436 and EDLM 536 are equivalent course; students may not receive credit for both.

EDLM 548. Collection Development/Library Media (3).

Explore the methods used and the issues and solutions involved in developing a collection in a school library media center. EDLM 448 and EDLM 548 are equivalent courses; students may not receive credit for both.

EDLM 558. Cataloging and Classification

for Library Media (3). Cataloging and classification of library media materials with an emphasis on MARC records. EDLM 458 and EDLM 558 are equivalent courses; students may not receive credit for both.

EDLM 568. Information Storage and

Retrieval (3). Reference collection development and utilization with print, electronic, and online resources. EDLM 468 and EDLM 568 are equivalent courses; students may not receive credit for both.

EDLM 578. Administration of Media/

Technology Programs (3). Develop skills and expertise needed to manage media/technology programs at school building, school district, college and university, and private-sector levels. EDLM 478 and EDLM 578 are equivalent courses; students may not receive credit for both.

ANTHROPOLOGY AND MUSEUM STUDIES DEPARTMENT

College of the Sciences
Ellensburg
Dean Hall, room 357

509-963-3201
Fax: 509-963-3215
www.cwu.edu/~anthro

See website for how this program may be used for educational and career purposes.

Faculty and Staff

Chair

Kathleen Barlow, PhD

Professors

John A. Alsoszatai-Petheo, PhD, biological anthropology

Tracy J. Andrews, PhD, sociocultural anthropology, ethnicity, medical and ecological anthropology, gender; Native North America

Anne S. Denman (emeritus), PhD, American culture, intercultural issues

Steve Hackenberger, PhD, archaeology, cultural resource management, North America and Caribbean

Patrick Lubinski, PhD, archaeology, zooarchaeology, cultural resource management, North America

Patrick McCutcheon, PhD, archaeology, evolutionary and environmental archaeology, cultural resource management

William C. Smith (emeritus), PhD, archaeology, museum studies, comparative world prehistory

Penglin Wang, PhD, linguistic and cultural anthropology; East and Central/Inner Asia, China

Associate Professors

Kathleen Barlow, PhD, learning and culture, psychological anthropology, museum anthropology, art and aesthetics, regional ethnography

Loran E. Cutsinger, PhD, cultural anthropology, informal economy, gender, globalization, transnationalism; British Caribbean

Lene Pedersen, PhD, sociocultural anthropology, visual and environmental anthropology, postcolonialism; SE Asia (Indonesia), E. Africa, circumpolar North
Lori K. Sheeran, PhD, biological anthropology, primate ecology, Black Gibbons; China

Assistant Professors

Mary Lee Jensvold, PhD, primate behavior and ecology, communication, CHCI

Joseph Lorenz, PhD, biological anthropology, anthropologist genetics, DNA, ancient DNA, genetics of American Indians, North America

Staff

Penelope Anderson, secretary senior

Department Information

Anthropology jointly coordinates the master of science degree program in resource management with the geography department. For further information, see resource management.

Anthropology Courses

ANTH 521. Cultural Resources Management

(3). Philosophy, history, and legislation relating to archaeology and historic preservation; design and implementation of cultural resources management programs.

ANTH 527. Environmental Archaeology

(4). Analyses of sediments and plant and animal remains from archaeological sites are used to explore relationships between humans and their environments. Case studies combine natural and physical sciences to study long-term change in landscapes and ecosystems. ANTH 427/527 and GEOG 427/527 are equivalent courses. Graduate credit requires an additional research paper to be specified in syllabus.

ANTH 596. Individual Study (1-6).

ART DEPARTMENT

College of Arts and Humanities
Ellensburg
Randall Hall, room 100

509-963-2665
Fax: 509-963-1918
www.cwu.edu/~art

See website for how this program may be used for educational and career purposes.

Faculty and Staff

Chair

Liahana Armstrong, PhD

Professors

Glen Bach, MFA, graphic design

Michael Chinn, MFA, wood design, design

Keith Lewis, MFA, jewelry and metalsmithing, design

Associate Professors

Maya Chachava, MFA, painting, drawing

Shari Stoddard, PhD, art education

Assistant Professors

Paula Airth, MFA, graphic design

Alex Emmons, MFA, photography and digital imaging

Stephen Robison, MFA, ceramics

Staff

Jeff Cleveland, department maintenance

Heather Horn Johnson, gallery manager

Sharon Jonassen, secretary

Department Information

The art department offers two graduate degree programs for students wishing to study visual art beyond the baccalaureate level. Each degree requires that candidates complete coursework in art concepts and criticism, art history, studio area of concentration, electives, and a creative thesis project.

The 45-credit, master of arts (MA) program offers students advanced study in the various studio areas. The MA is intended for students who desire graduate-level training in art and helps prepare them for various arts-related careers and for further advanced studies in art.

The 90-credit master of fine arts (MFA) is a terminal degree program providing students with professional levels of competency and experience in studio art. The MFA program qualifies students for careers as teachers in higher education, as professional studio artists, and for other studio-arts-related vocations. The following studio art concentrations are offered at Central:

Ceramics
Drawing
Jewelry and Metalsmithing
Painting
Photography
Sculpture
Wood Design

Policies and Procedures

Departmental policies and procedures regarding graduate study are fully described in the departmental "Graduate Handbook."

Application and Admission: In addition to the university regulations governing admission to graduate degree programs, the following specific regulations apply to both the MA and MFA programs:

- A. Acceptance is primarily based on the student's potential as evidenced by a portfolio, previous coursework in art, goals consistent with departmental resources, and other experiences relevant to art making. Applicants may be asked to have a telephone interview with a faculty member in their area of studio concentration before being admitted to a program.
- B. Applicants are required to submit examples of their work in the form of 35mm slides or other appropriate media. This documentation should represent the depth and breadth of the applicant's work. Students are strongly urged to visit the campus and arrange a personal interview with faculty members in their major area of concentration and with the art department chair prior to submitting an application. Consistent with the above criteria, applicants with undergraduate degrees in disciplines other than visual arts are encouraged to apply.

Transfer of Credits: The general provisions for the transfer of credits are set forth under the catalog heading, "General Master's Degree Regulations."

Residence Requirements: Students must be in residence three consecutive full-time quarters (excluding summers). All studio credits, except those approved under the transfer of credit provisions, must be taken in residence. For these purposes, residence may include credits taken in travel study,

internship programs, or other study taken elsewhere but listed on the approved course of study.

Graduate Committee: A committee of at least three faculty members will be organized by the student during the student's first quarter of residency. The members of this committee will be chosen in consultation with the student's committee chairperson. The chair of the committee, in consultation with the student, will schedule a meeting at least once each quarter. More frequent meetings may be scheduled. The purposes of these meetings are:

- To determine that the student is making satisfactory progress in the degree program
- To evaluate the student's studio work
- To identify problems and to offer solutions.

A first-year review will consist of an evaluation of the student's work, completed or in progress, including review of non-studio coursework. MFA/MA candidacy is contingent on successful progress in the following areas: studio work, knowledge of art history, and understanding of contemporary theory and criticism. Additional coursework may be required at the graduate committee's discretion.

Further details regarding the graduate committee process are provided in the graduate handbook.

Graduate Assistantships: Teaching or staff assistantships are awarded on a competitive basis. Assistants are granted by the dean of Graduate Studies and Research based upon the recommendation of the department chair.

Studio Space: Shared or individual studio workspace is provided to graduate students as available and will be allocated by the chair of the art department.

Studio Project: In order to successfully complete ART 700, Studio Project, the MFA/MA candidate must present a cohesive body of work completed in the last year of study as evidence of mastery in their area of concentration. This studio project is developed in consultation with the student's graduate committee and presented as a public exhibition. The studio project also requires students to present a written document that supports their body of work.

The written document must meet thesis format standards as required by the Office of Graduate Studies and Research.

Final Oral Examination: Upon completion of the studio project, the student will discuss and defend the project and the accompanying written document in an oral examination conducted by the graduate committee. Upon successful completion of the oral examination, the graduate committee will confer and render a determination of the success of the student's project.

Master of Arts in Art

Required Courses

ART 589 - Art Concepts and Criticism	3
Art History, 400 level and above	4
Major area of concentration in Art	16-24
ART 700 - Master's Thesis, Project Study and/or Examination	8
Electives	8-12

Total Credits Required: 45

Master of Fine Arts in Art

Required Courses

ART 589 - Art Concepts and Criticism	3
Art History, 400 level and above	12
Major studio concentration	40-56
Electives outside major studio concentration	12-24
ART 700 - Master's Thesis, Project Study, and/or Examination	12

Total Credits Required: 90

Art Courses

ART 525. Advanced Studies in Photography (2-5). May be repeated for credit.

Prerequisite: ART 425.

ART 541. Advanced Studies in Wood (2-5).

May be repeated for credit. Prerequisite: ART 441.

ART 546. Advanced Studies in Jewelry and Metalsmithing (2-5). Independent,

advanced exploration of jewelry or metalwork. Emphasis on conceptual strength, growth, and technical mastery. May be repeated for credit. Prerequisite: ART 446.

ART 550. Advanced Studies in Drawing (2-5). May be repeated for credit. Prerequisite: ART 450.

ART 556. History of Eastern Art (4). A survey of the architecture, sculpture, painting, and the crafts of India, Indonesia, China, and Japan. ART 556 and 456 are equivalent courses; students may not receive credit for both.

ART 560. Advanced Studies in Painting (2-5). May be repeated for credit. Prerequisite: ART 460.

ART 565. Advanced Studies in Ceramics (2-5). May be repeated for credit. Prerequisite: ART 465.

ART 580. Advanced Studies in Sculpture (2-5). May be repeated for credit. Prerequisite: ART 480.

ART 589. Art Concepts and Criticism (3). Study of the attitudes and values in relation to recent changes in art forms and contents. Analysis and practice in critical judgment.

ART 596. Individual Study (1-6).

ART 598. Special Topics (1-6).

ART 599. Seminar (1-5).

ART 700. Master's Thesis, Project Study, and/or Examination (1-12). Designed to credit and record supervised study for the master's thesis, non-thesis project, studio project, public recital, and/or examination. May be repeated for credit not to exceed 6 credits for MA degree and 12 credits for MFA degree. Grade will either be S or U. Permission of chair of student's graduate faculty supervisory committee.

BIOLOGICAL SCIENCES DEPARTMENT

College of the Sciences
Ellensburg
Science Building, room 338

509-963-2731

Fax: 509-963-2730

www.cwu.edu/~biology

See website for how this program may be used for educational and career purposes.

Faculty and Staff

Chair

Paul W. James, PhD

Professors

Daniel D. Beck, PhD, physiological ecology and herpetology

David M. Darda, PhD, evolutionary vertebrate morphology, herpetology

Kristina A. Ernest, PhD, terrestrial and community ecology

Paul W. James, PhD, ecology and fisheries biology

Sheldon R. Johnson, PhD, zoo physiology, mammalogy (emeritus)

Robert E. Pacha, PhD, microbiology (emeritus)

Wayne S. Quirk, PhD, sensation and perception, neuroscience

Linda A. Raubeson, PhD, evolutionary biology and genetics

Stamford D. Smith, PhD, entomology (emeritus,)

Lixing Sun, PhD, behavioral ecology and evolution

Associate Professors

Tom R. Cottrell, PhD, plant ecology

James E. Johnson, PhD, mycology, systematics

Holly C. Pinkart, PhD, microbiology,

microbial ecology

Mary E. Poulson, PhD, plant physiology

Ian J. Quitadamo, PhD, science education, cell and molecular biology

R. Steven Wagner, PhD, conservation genetics and herpetological science

Assistant Professors

Lucinda Camell, PhD, molecular behavioral genetics

Jennifer Dechaine, PhD, plant biology

Blaise Dondji, PhD, human physiology,

microbiology, parasitology, immunology

Jason T. Irwin, PhD, animal physiology

Alison Scoville, PhD, ecological and

evolutionary genomics

Daniel J. Selski, PhD, developmental

neurobiology

Gabrielle Stryker, PhD, microbiology,

immunology, and parasitology

Lecturers

Clay Arango, PhD

Lucy Bottcher, PhD

Raymon Donahue, PhD

Staff

Emily Babbik, engineering technician
 Jonathan Betz, instructional classroom support technician
 Mary Bottcher, instructional classroom support technician
 Eric Foss, instructional classroom support technician
 Kariann Linnell, secretary supervisor
 Jeff Wilcox, engineering technician

Program Description

The graduate program in biology is designed to provide training and expertise for those needing a terminal degree for entry-level biological science positions in state, federal, and tribal agencies, as well as for positions in private industry or teaching at the secondary or community college level. It serves other students by providing them with the skills and techniques required for further graduate study beyond the MS degree. Students considering further graduate study should work closely with their major advisor to design a program of coursework that meets the requirements for PhD programs. Graduate students in biology may tailor their program to emphasize a specific discipline within the biological sciences.

Admission

Admission is a two-step process. Applicants must first meet the general requirements for graduate study as determined by the Office of Graduate Studies and Research, and then the specific requirements of the Department of Biological Sciences. Items needed to enroll:

1. An undergraduate degree in biology or closely related field. Deficiencies in the student's undergraduate training as determined by the Department of Biological Sciences at the time of admission to the program must be removed without graduate credit during the first year of graduate study.
2. Students must submit GRE scores for the general test. Students applying to the masters in biology with a specialization in biomedical sciences may substitute MCAT scores for GRE scores.
3. International students for whom English is a second language must provide TOEFL scores to demonstrate English proficiency.
4. Students must arrange for a graduate faculty advisor in the Department of Biological Sciences to serve as their major advisor.

Biology, MS

Program Coordinator
 Kristina Ernest, PhD
 Science Building, room 326E

Program Requirements

The coursework leading to the master of science in biological sciences will total at least 45 credits in the biological sciences and related

subjects as outlined in an approved course of study filed with the Office of Graduate Studies and Research. The individual's program of coursework and thesis problem will be developed in consultation with the student's major advisor and other members of the student's graduate committee. Two quarters in residence are required.

Examinations

Candidates must pass an oral examination covering topics in their area of specialization and coursework taken for their degree at least one quarter prior to graduation. The final examination will consist of a public seminar to present the results of the thesis or project research as well as an oral exam administered by the student's thesis committee covering aspects of the thesis research.

Required Courses

BIOL 501 - Research Methods and Techniques	4
BIOL 502 - Research Proposal Presentations ..	2
BIOL 505 - Current Topics in Biology	6
BIOL 595 - Graduate Research	10
BIOL 602 - Research Presentations	2
BIOL 700 - Master's Thesis, Project Study, and/or Examination	6
Total Core Credits:	30

MS in Biology

Core Courses	30
Electives selected by advisement	15
Total Credits:	45

Specialization in Biomedical Sciences

Program Coordinator
 James E. Johnson, PhD
 Science Building, room 338J

The Central Washington University master of sciences in biology with a specialization in biomedical sciences degree program is a professional as well as pre-professional course of study designed for students seeking careers in biomedical research or to help students become stronger applicants to medical school or other professional programs. Students who have already completed their course requirements or admission to the medical school can strengthen their candidacy by demonstrating their performance in some of the same courses taken by first-year medical students at the Pacific Northwest University of Health Sciences (PNWU) Doctor of Osteopathic Medicine Program and broadening their background as scientists by conducting an original research project with faculty at CWU while earning a master of science degree in biology.

Preferred admission to the Pacific Northwest University of Health Sciences Doctor of Osteopathic Medicine Program will be granted to students who:

- Successfully complete the MS in biology-specialization in biomedical sciences with a B average or higher
- Have a minimum MCAT score of 22
- Are approved by the admissions interview committee at PNWU.

Financial Obligations

Because this is a self-support program, no tuition waiver programs apply, and additional continuing education tuition applies.

Required Courses

MS Biology Core	30
BIOL 521 - Cellular Science I	4
BIOL 522 - Cellular Science II	4
BIOL 523 - Cellular Science III	4
BIOL 553 - Medical Physiology I	4
BIOL 554 - Medical Physiology II	4
BIOL 555 - Medical Physiology III	4
Total Credits:	54

PNWU Admission Courses

The following elective courses are not required for completion of the specialization in biomedical sciences, but are required for preferred admission status to the PNWU Doctor of Osteopathic Medicine Program.

BIOL 556 - Gross and Developmental Anatomy I	6
BIOL 557 - Gross and Developmental Anatomy II	6
BIOL 558 - Gross and Developmental Anatomy III	6
Total Credits:	18

Biology Courses**BIOL 501. Research Methods and Techniques**

(4). An introduction to methods, techniques, and procedures commonly used in biological research. Experimental design of research projects will be emphasized.

BIOL 502. Research Proposal Presentations

(2). Students will work to develop their thesis proposal, present their proposal orally, and submit a formal written proposal. Prerequisite: BIOL 501.

BIOL 505. Current Topics in Biology (2).

Discussion of specific topics in biology from readings in journals, books, and other materials. May be repeated up to 10 credits.

BIOL 521. Cellular Sciences I (4). The first quarter of a three-quarter series covering the biochemistry, nutrition, molecular biology, immunology, and genetics of cells as they relate to both normal body function and pathological processes. Prerequisite: acceptance into the Biomedical Sciences Specialization.

BIOL 522. Cellular Sciences II (4). The second quarter of a three-quarter series covering the biochemistry, nutrition, molecular biology, immunology, and genetics of cells as they relate to both normal body function and pathological processes. Prerequisite: acceptance into the Biomedical Sciences Specialization.

BIOL 523. Cellular Sciences III (4). The third quarter of a three-quarter series covering the biochemistry, nutrition, molecular biology, immunology, and genetics of cells as they relate to both normal body function and pathological processes. Prerequisite: acceptance into the Biomedical Sciences Specialization.

BIOL 553. Medical Physiology I (4). The first quarter of a three-quarter series covering normal human physiology and neurophysiology with special emphasis on integration, control, and pathophysiology. Prerequisite: acceptance into the Biomedical Sciences Specialization.

BIOL 554. Medical Physiology II (4). The second quarter of a three-quarter series covering normal human physiology and neurophysiology with special emphasis on integration, control, and pathophysiology. Prerequisite: acceptance into the Biomedical Sciences Specialization.

BIOL 555. Medical Physiology III (4). The third quarter of a three-quarter series covering normal human physiology and neurophysiology with special emphasis on integration, control, and pathophysiology. Prerequisite: acceptance into the Biomedical Sciences Specialization.

BIOL 556. Gross and Developmental Anatomy I (4). The first quarter of a three-quarter series covering the macroscopic structure of the human body using a regional approach. Relationships between gross anatomy, development, and pathological conditions are emphasized. Prerequisite: acceptance into the Biomedical Sciences Specialization.

BIOL 557. Gross and Developmental Anatomy II (4). The second quarter of a three-quarter series covering the macroscopic structure of the human body using a regional approach. Relationships between gross anatomy, development, and pathological conditions are emphasized. Prerequisite: acceptance into the Biomedical Sciences Specialization.

BIOL 558. Gross and Developmental Anatomy III (6). The third quarter of a three-quarter series covering the macroscopic structure of the human body using a regional approach. Relationships between gross anatomy, development, and pathological conditions are emphasized. Prerequisite: acceptance into the Biomedical Sciences Specialization.

BIOL 565. Advanced Animal Behavior (5). Advanced knowledge in the study of animal behavior. Three hours lecture, two hours laboratory, one hour independent study per week. BIOL 465, BIOL 565 and PSY 565 are equivalent courses; students may not receive credit for more than one.

BIOL 566. Conservation Biology (5). An introduction to the theory and practice of conservation biology, with emphasis on case studies. Two hours lecture, one hour discussion, and four hours lab or field study per week. Weekend field trips may be required. BIOL 466 and BIOL 566 are equivalent courses; students may not receive credit for both. Prerequisite: BIOL 360 and graduate standing.

BIOL 590. Cooperative Education (1-5). An individualized, contracted field experience with business, industry, government, or social service agencies. The contractual arrangement involves a student learning plan, cooperating employer supervision, and faculty coordination. May be repeated for credit. Grade will either be S or U. Prior approval is required.

BIOL 592. Biological Field Studies (1-15). Individual or group off-campus experience in the field study of biological phenomena. May be repeated up to 15 credits. Grade will either be S or U.

BIOL 595. Graduate Research (1-10). Organization or conduct of an approved laboratory and/or field research problem. Maximum of 10 credits may be included on course of study for the master's degree. By permission.

BIOL 596. Individual Study (1-6).

BIOL 598. Special Topics (1-6).

BIOL 599. Seminar (1-5). Discussion of specific topics from readings in biological journals, books, and other materials. May be repeated up to 5 credits.

BIOL 602. Research Presentations (2). Student will discuss and develop effective oral presentation skills, prepare their research results for presentation, and give an oral presentation suitable for regional or national scientific meetings. Prerequisite: BIOL 502.

BIOL 700. Master's Thesis, Project Study, and/or Examination (1-6). Designed to credit and record supervised study for the master's thesis, non-thesis project, public presentation, and/or examination. May be repeated up to 6 credits. Grade will either be S or U. Permission of chair of student's graduate faculty supervisory committee.

CENTER FOR TEACHING AND LEARNING

College of Education and Professional Studies
Ellensburg
Black Hall, room 228-17
509-963-1409

The Center for Teaching and Learning (CTL) is the National Council for Accreditation of Teacher Education (NCATE) accredited unit that provides oversight for all CWU school personnel preparation programs. The CTL is intended to facilitate communication between and among the respective disciplines that contribute to the preparation of educators. CTL programs include the preparation of teachers, school administrators, school counselors, and school psychologists.

Center for Teaching and Learning Courses

ECTL 601. Professional Certificate: Pre-Assessment Seminar (4). Candidates attending the seminar will review required standards and criteria and identify evidence/indicators to meet each criterion. The seminar will culminate with approval of the candidate's Professional Growth Plan. Grade will either be S or U.

ECTL 602. Teacher Professional Certification Portfolio Seminar I (2). Study of the Teacher Professional Certificate standards, descriptions of practice, the portfolio entry directions, and portfolio rubrics. Grade will either be S or U. Prerequisite: admission to the Teacher Professional Certificate Program.

ECTL 603. Gathering and Evaluating Quality Evidence (2). Processes and methods of gathering and presenting evidence of positive impact on student learning as defined in the professional certificate descriptions of practice. Grade will either be S or U. Prerequisites: ECTL 601 and admission to the Teacher Professional Certificate Program.

ECTL 604. Teacher Professional Certificate Field Work (2). Gathering and evaluating evidence for the teacher professional certificate portfolio. Descriptive, analytic, and reflective writing on classroom evidence for the portfolio. Grade will either be S or U. Prerequisites: ECTL 602, ECTL 603, and admission to the Teacher Professional Certificate Program.

ECTL 608. Teacher Professional Certificate Portfolio Seminar II (2). Preparation of the teacher professional certificate portfolio for submission for eternal assessment. Peer and instructor review of the portfolio, using the portfolio entry rubrics. Grade will either be S or U. Prerequisites: ECTL 602, ECTL 603, and admission to the Teacher Professional Certification Program.



ECTL 609. Professional Certificate:

Culminating Seminar (2). Candidates attending the seminar will submit a portfolio of evidence to the Professional Growth Team. If the portfolio meets all requirements, the team will recommend the candidate for professional certification. Grade will either be S or U.

ECTL 613. Take One! Portfolio Entry Process

(2). Development of the portfolio of accomplished teaching practice by National Board Certified Teacher candidates. Compilation of student work samples and videotapes; development of analytic commentaries. Grade will either be S or U. Prerequisite: participant in Take One! from the National Board for Professional Teaching Standards.

ECTL 615. National Board Certified

Teacher Portfolio Process (3). Development of the portfolio of accomplished teaching practice by National Board Certified Teacher candidates. Compilation of student work samples and videotapes; development of analytic commentaries. Grade will either be S or U. Prerequisites: admission to National Board Certification, candidacy for the National Board Professional Teaching Standards, and registration with the National Board Certification Mentoring Program.

CHEMISTRY DEPARTMENT

College of the Sciences
Ellensburg
Science Building, room 302

509-963-2811

Fax: 509-963-1050

www.cwu.edu/~chem

See website for how this major may be used for educational and career purposes.

**Faculty and Staff
Chair**

JoAnn Peters, PhD

Professors

Anthony Diaz, PhD, inorganic, solid state
Martha J. Kurtz, PhD, chemistry and science
education

JoAnn Peters, PhD, organic, mechanistic
Carin Thomas, PhD, biochemistry, toxicology

Associate Professors

Levente Fabry-Asztalos, PhD, organic
Anne Johansen, PhD, environmental,
analytical

Tim Sorey, PhD, chemistry education

Assistant Professors

Gil Belofsky, PhD, organic
Stephen Chamberland, PhD, organic
Yingbin Ge, PhD, physical
Todd Kroll, PhD, biochemistry
Dion Rivera, PhD, physical, analytical

Staff

Tony Brown, stockroom manager
Don Davis, computer technician
Mari Sorey, stockroom assistant
Lisa Stowe, secretary
Jeff Wilcox, instrument technician

Master of Science Chemistry

Program Objectives and Descriptions:

The graduate program in chemistry is tailored to satisfy individual student aspirations and is designed to provide knowledge, skills, and discovery within the chemical sciences. The program prepares candidates for professional employment in chemistry careers including industry, consulting, local, state and federal government, and for teaching at the community college or secondary level. Additionally, the program provides a foundation for further graduate studies beyond the MS level in chemistry and related fields. Graduate students in chemistry can focus their studies in any of the major areas of chemistry, including biochemistry, organic, physical, analytical and inorganic chemistry, and chemistry education. Emphasis in a specific area through appropriate courses and seminars is enhanced by requisite graduate research. Practical and collaborative internship experiences through industrial, governmental, academic research, or community college teaching partnerships are possible. The department utilizes state-of-the-art and fully equipped laboratory facilities with an array of modern instrumentation and computation capabilities. Furthermore, it operates a state-certified environmental testing laboratory.

Program Admission Requirements:

Admission to CWU requires a bachelor's degree from an accredited institution. In addition, applicants must earn a minimum of a 3.0 grade point average (GPA) in all course work attempted in at least the last 90 quarter (60 semester) hours of recognized academic work. Admission decisions are based on a combination of factors: GPA, letters of recommendation from professors and others able to critically assess success in a graduate program, statement of purpose, standardized test scores (if applicable), academic preparation for work in the proposed field, and interests as matched with those of our faculty are all taken into consideration. Admission to the Chemistry Graduate Program requires an earned undergraduate degree in chemistry or a related field (equivalent to those offered at Central; see requirements for the BS and BA degrees in chemistry), and demonstrate a potential for superior scholarship. Applicants must provide GRE scores for the general test. Scores from the chemistry subject test may be requested in special cases. If a chemistry background deficiency exists at the time of student admission, appropriate courses must be taken to fill these gaps during the first year of graduate study without graduate credit.

International students for whom English is a second language must provide TOEFL scores to demonstrate English proficiency.

Program Requirements: The MS degree in Chemistry requires a minimum of 45 credits of graduate coursework and research study culminating with a thesis. Sixteen of these credits are research and thesis related (CHEM 595, CHEM 700). The remaining 29 credits are earned from coursework (a minimum of 18 at the 500 level or above). Of the 29 credits, students are required to take at least nine core credits in chemistry, enroll in CHEM 503, Introduction to Research, during the fall quarter of their first year, and take at least one credit of CHEM 505, Current Topics in Chemistry. Four credits of seminar (CHEM 589 taken twice) are also required. This leaves 14 credits for elective courses. The first 2 credits of CHEM 589 consist of a research proposal written by the student and a one hour professional seminar based on this document. The research proposal should be a maximum of 10 pages in length (12 point, double spaced) and be composed of an introduction (including a brief survey of related work), objectives of proposed research, description of experimental approach, expected outcomes, and projected time line. The document is to be submitted to committee members at least one week before the scheduled seminar and must be approved by the committee as a condition of receiving credit. It is advised that the student take these credits before completion of his/her third quarter as a graduate student. The second 2 credits of CHEM 589 are the final oral examination on the student's thesis project. A written thesis has to be prepared and submitted to the committee members following procedures specified by the Office of Graduate Studies and Research. Candidates must also pass a final oral examination on their thesis project and coursework that is administered by the candidate's graduate thesis committee. Normal completion of the master of science requires two academic years and an intervening summer of study.

Electives: Fourteen credits of elective coursework at the 400 or 500 level are required for the MS degree in chemistry. Elective courses are selected with advising from the thesis committee and provide expertise in the fields of the individual student's academic interests and research focus and complement professional goals. Elective topics offered by the chemistry department include biochemical toxicology, mechanistic organic chemistry, organic synthesis, environmental chemistry, solid-state chemistry, analytical instrumentation, graduate physical chemistry, and chemistry education. Elective courses from other departments (biology, geology, mathematics, physics, and psychology, among others) may be selected with graduate committee approval.

Graduate Committee: Before the end of the candidate's second quarter in the program and after consultation with all members of the chemistry graduate faculty, the student will select a thesis advisor, to act as chair of the candidate's graduate committee. The candidate, in consultation with the selected thesis advisor will assemble a three-member thesis graduate committee; two members of the committee must be from the chemistry faculty.

Examination: Each candidate must prepare a written thesis that documents the methods, analysis, and results of the research they carried out during their graduate study. In addition, each candidate must pass a final oral examination on all phases of the student's program. The review covering the student's thesis and coursework consists of a seminar open to the public followed by queries from the thesis committee.

Chemistry, MS

Required Courses

CHEM 503 - Introduction to Research	1
CHEM 505 - Current Topics in Chemistry	1
CHEM 589 - Graduate Student Seminar	4
CHEM 595 - Graduate Research	10
CHEM 700 - Master's Thesis, Project Study, and/or Examination	6
Chemistry Electives	9
Electives to be selected by advisement	14

Program Total Credits: 45

Chemistry Courses

CHEM 503. Introduction to Research (1).

An overview of the original research work being done in the Department of Chemistry. Class meetings are comprised of presentations by different faculty members. Grade will either be S or U.

CHEM 505. Current Topics in Chemistry (1).

May be repeated for credit when subject matter differs up to 5 credits.

CHEM 511. Advanced Biochemistry (3). A

course in advanced biochemical concepts focusing on current topics in metabolism, membrane transport systems, electron transport, oxidative phosphorylation, and DNA using mitochondria as a model system. Prerequisites: CHEM 362 and CHEM 432, or BIOL 320.

CHEM 512. Biochemical Toxicology (3). An

introduction to the principles of toxicology followed by a survey of the biochemical mechanisms involved in cytotoxicity, including reactive intermediates and their interaction with macromolecules.

CHEM 542. Teaching Chemistry at

Community Colleges (3). This course is designed to give students a working knowledge of teaching chemistry at the community college.

CHEM 551. Atmospheric Chemistry (3).

The chemistry of the stratosphere and troposphere; chemistry of the atmospheric aqueous; the meteorology of air pollution;

cloud microphysics; mathematical chemical/transport modeling. Prerequisite: CHEM 382.

CHEM 555. Microsystems and Nanotechnology in Analytical Chemistry (3).

Understanding the fundamental chemistry and engineering involved in the design of analytical devices that employ nanotechnology and microsystems.

Prerequisites: CHEM 332 and 452. CHEM 381 and 382 recommended prerequisites.

CHEM 564. Medicinal Organic Chemistry (3).

A multi-component study of drugs and other biologically potent materials in terms of chemical synthesis, radiochemistry, biochemical evaluation, and biological and receptor interactions. Prerequisites: CHEM 363 and CHEM 431.

CHEM 565. Organic Synthesis I (3).

Fundamentals of modern synthetic organic chemistry. Major emphasis is on carbon-carbon bond forming methodology. Topics include carbonyl annulations, cycloadditions, sigmatropic rearrangements, and organometallic methods. Prerequisite: CHEM 363.

CHEM 571. Topics in Solid State

Chemistry (3). A survey of the structures and properties of inorganic solids: crystallography, X-ray diffraction, phase equilibria, electronic structure and luminescence. Prerequisites: CHEM 350 and CHEM 382.

CHEM 583. Quantum Chemistry (3). Three lectures weekly. Principles of quantum chemistry: basic theories, methods, and applications. Prerequisites: Mathematics through multivariable calculus and CHEM 383.

CHEM 589. Graduate Student Seminar (2).

A one hour professional seminar encompassing a contemporary topic is provided to the department and campus community. May be repeated for credit.

CHEM 590. Cooperative Education (1-5).

May be repeated for credit. Grade will either be S or U.

CHEM 592. Laboratory Experience in

Teaching Chemistry (2). Practical experience in teaching chemistry laboratories. An introduction to teaching, teaching philosophies, safety, and hazardous waste management. May be repeated for credit but only 2 credits may be applied to the chemistry MS degree. Grade will either be S or U. By permission.

CHEM 595. Graduate Research (1-10). May

be repeated for credit. By permission.

CHEM 596. Individual Study (1-5).

CHEM 598. Special Topics (1-6).

CHEM 599. Graduate Seminar (1).

CHEM 700. Master's Thesis, Project Study, and/or Examination (1-6). Designed to credit and record supervised study for the master's thesis, non-thesis project, studio project, public recital, and/or examination. May be repeated up to 6 credits. Grade will either be S or U. By permission.

COMMUNICATION DEPARTMENT

College of Arts and Humanities
Ellensburg
Bouillon Hall, room 232A

509-963-1066

Fax: 509-963-1060

www.cwu.edu/~comm

See website for how these programs may be used for educational and career purposes.

Faculty and Staff

Chair

Philip Backlund, PhD

Professors

Philip Backlund, PhD, communication studies
James L. Gaudino, PhD, communication studies

Michael R. Ogden, PhD, journalism, film and video studies

Associate Professors

Lois J. Breedlove, MA, journalism
Robert C. Fordan, MA, journalism

Assistant Professors

Cesar Garcia, PhD, public relations
Elizabeth Kerns, public relations
Xiaodong Kuang, PhD, public relations, advertising
Steve Jackson, MA, journalism, convergent media
Cynthia Mitchell, MBA, journalism
Maria Sanders, MA, film and video studies

Lecturers

Katherine Horowitz, MA, communication studies
Sacheen Mobley, PhD, communication studies
Toby Staab, MA, journalism

Staff

Crystal Bookman, secretary senior
Kristin Gaskill, *Observer* business manager

Department Information

The Department of Communication does not offer any graduate programs at this time.

Communication Courses

COM 501. Advanced Communication

Theory (4). Course examines historical and current approaches to communication theory emphasizing contributions of communication studies scholars. Course covers theories of language, systems theory, rules theory, and critical theory.

COM 540. Corporate Media Management (4).

This course instructs students in the methods of media management for corporate media production. Students in this course will take the role of "above-the-line" producers, and will learn research, writing, and client handling.

COM 556. Convergent Gaming Research (4).

This course is a comprehensive look at the use of games in research and methods of

researching the games industry. Students will supervise undergraduate research teams, develop unique research agendas, and test research methods in virtual worlds.

COM 569. Media and Cultural Studies (4).

Detailed examination of the media from the perspectives and insights of critical theoretical approaches ranging from the Frankfurt School, to cultural studies, to post-modern theory. Emphasis on unlocking the domains of meaning, value, politics, and ideology in the development of entertainment and information technology industries. COM 469 and 569 are equivalent courses; students may not receive credit for both.

COM 590. Cooperative Education . An individualized contracted field experience with business, industry, government, or social service agencies. This contractual arrangement involves a student learning plan, cooperating employer supervision, and faculty coordination. May be repeated up to 8 credits. Grade will either be S or U. By permission.

COM 598. Special Topics (1-5).

COM 599. Seminar (1-5).

COMPUTER SCIENCE DEPARTMENT

College of the Sciences
Ellensburg
Hebeler Hall, room 219

509-963-1495

Fax: 509-963-1449

www.cwu.edu/~cs_dept

See website for how these programs could be used for educational and career purposes.

Faculty and Staff

Chair

James Schwing, PhD

Professors

Boris Kovalerchuk, PhD, artificial intelligence, simulation and optimization, computer architecture

James Schwing, PhD, parallel algorithms, user interface design, computer graphics, computer-aided design

Associate Professors

Razvan Andonie, PhD, neural networks, parallel and distributed computing, computational intelligence, data mining
Edward Gellenbeck, PhD, user interface design, web development, software engineering

Assistant Professor

John Anvik, PhD, software engineering, machine learning, computer supported collaborative work

Staff

Vacant, secretary

Zachary Geesaman, systems analyst

Computer Science Courses

CS 528. Advanced Data Structures and Algorithms (4). This course is a detailed introduction to advanced algorithms and data structures used in the computational science MS program. Prerequisite: CS 301 and MATH 330.

CS 529. Advanced Algorithms for Scientific Computing (4). The course presents specialized algorithms and data structures for scientific computing and it a continuation of CS 528. Prerequisite: CS 528.

CS 530. High-performance Computing (4). This course will provide foundations and concepts on high-performance computing. It provides an overview of computer hardware, software, and numerical methods that are useful on scientific workstations, massively parallel architectures, and supercomputers. Prerequisite: CS 528.

CS 540. Algorithms for Biological Data Analysis (4). The course introduces the algorithms used in bioinformatics. Prerequisite: CS 529.

CS 545. Data and Information Visualization (4). Data visualization includes the visualization pipeline, basic and advanced data representations, fundamental and advanced visualization algorithms, visualization on the web, applications and software tools. Prerequisite: CS 529.

CS 556. Data Mining (4). Introducing concepts, models, algorithms, and tools for solving data mining tasks; decision trees, time series, Bayesian methods, k-nearest neighbors, and relational databases. CS 456 and CS 556 are equivalent courses; students may not receive credit for both. Prerequisite: CS 529.

CS 557. Computational Intelligence (4). Introducing concepts, models, algorithms, and tools for development of intelligent systems: artificial neural networks, genetic algorithms, fuzzy systems, swarm intelligence, and hybridizations of these techniques. CS 457 and CS 557 are equivalent courses; students may not receive credit for both. Prerequisite: CS 528.

CS 573. Parallel Computing (4). Major parallel architectures and languages. Parallel programming methodologies and applications. CS 473 and CS 573 are equivalent courses; students may not receive credit for both. Prerequisite: CS 528.

CS 595. Graduate Research (1-10). Graduate research activity resulting in a paper (technical report, conference paper, journal paper). May be repeated for credit.

CS 700. Thesis/Project (1-5). Preparation of the thesis/capstone project. Permission of the chair of the student's graduate faculty supervisory committee. May be repeated for credit.

EDUCATIONAL FOUNDATIONS AND CURRICULUM DEPARTMENT

College of Education and Professional Studies
Ellensburg
Black Hall, room 101

509-963-1461

Fax: 509-963-1162

www.cwu.edu/~education

See the website for how these programs may be used for educational and career purposes.

Faculty and Staff

Chair

Barry Donahue, EdD

Graduate Programs Coordinator

Cathy Bertelson, PhD

Director of Field Experience

Repton Lynn, EdD

Professors

Catherine Bertelson, PhD, educational technology

Rebecca S. Bowers, EdD, curriculum and instruction

Barry Donahue, EdD, philosophy, research design

Steven A. Schmitz, EdD, sociology, philosophy, history, assessment, curriculum
David Shorr, PhD, early childhood education
Don B. Woodcock, PhD, policy and management, multicultural, and American Indian education

Associate Professors

Kim M. Jones, PhD, curriculum and instruction

Mary Lochrie, EdD, classroom management, assessment, curriculum and instructional planning

Ian Loverro, PhD, educational technology and communication

Steve Nourse, EdD, curriculum and instruction, supervision

Lee Plourde, PhD curriculum and instruction, supervision, administration

Assistant Professors

Yukari Amos, PhD, bilingual education

Gary Ballou, PhD, field supervision

Benson, Kelly, EdD, leadership, law

Naomi Jeffery Petersen, EdD, philosophy, assessment, STEM, informal settings

Molly Ross, EdD, field supervisor

Lecturers

Alex Alexandrou, MA, field supervisor

Jerry St. George, MEd, field supervisor

Staff

Jan Case, program support supervisor

Linda Huber, secretary senior

Department Information

The Master Teacher, MEd degree program is designed primarily for elementary and secondary school teachers and school service personnel. Since the program may also prepare the student for community college teaching and for advanced study, the student should seek advice from program advisors.

Admission Requirements

In addition to the university regulations concerning admission to graduate degree programs, students desiring admission to the Master Teacher, MEd Program must meet departmental requirements. Members of the department will review the student's application materials and, if deemed necessary, may meet with the student before a recommendation for admission can be made.

Elective Educational Foundations Courses

The candidate must choose at least six credits from the following: EDF 501, Educational Foundations; EDF 502, History of Education; EDF 503, Philosophy of Education; EDF 504, Advanced Educational Statistics; EDF 505, Educational Measurement for Teachers; EDF 506, Education Futurism; EDF 508, Comparative Education; EDF 567, Educational Change; PSY 552, Advanced Human Growth and Development; PSY 559, Advanced Educational Psychology. (Only one of PSY 552 or PSY 559 may be included to meet the foundations requirement). Related courses may be substituted with permission of the student's graduate advisor or committee chair, the chair of the department, and the dean of Graduate Studies and Research.

Elective Area of Emphasis Courses

Students should select one or more areas of emphasis in consultation with their graduate advisor or committee chair. Areas of emphasis must be approved by the department chair on the Course of Study form available from the Office of Graduate Studies. Students should obtain Course of Study approval early in their programs to assure that all courses taken will be accepted.

Master Teacher, MEd

Program Description

The Master Teacher is a program of advanced preparation for classroom teachers intending to become teacher scholars and to assume positions of leadership within their schools with respect to the development of curriculum, instructional strategies, and related classroom concerns.

The program is intended to allow current teachers to focus on areas of emphasis in the P-12 classroom settings.

Prerequisite: A minimum of one year of contracted teaching experience in a P-12

classroom setting is required for admission to the Master Teacher Program. One of the three required recommendations for admission to the Master Teacher Program must come from the applicant's current or most recent principal or designee.

Program: The student will complete at least 48 credits as outlined in an approved course of study filed with the Office of Graduate Studies and Research and Continuing Education. The development of a course of study most appropriate to the professional goals and purposes of each individual student must be completed and approved by a program advisor or committee chair upon the completion of 18 credits.

Required Courses

EDBL, EDCS, EDEL, or EDF 700 - Thesis (or option)	6
EDF 507 - Studies and Problems in Intercultural Education	3
EDF 510 - Educational Research and Development	4
*Educational Foundations and Research electives	6
*Area of emphasis electives	29

Program Total Credits: 48

*See elective Educational Foundations courses under general information.

*See elective area of emphasis courses under general information.

Curriculum Courses

EDCS 509. Civic Engagement (3). Student will use program of study content knowledge to improve a community situation. UNIV 509, FCSG 509, EDAD 509, and EDCS 509 are equivalent courses. May be repeated up to 12 credits. Grade will be either S or U.

EDCS 513. Creative Teaching (3). Includes opportunity for creative expression as well as sharing creative teaching ideas, aids, and methods. The purpose of the course is to help teachers become more imaginative and creative in planning, conducting and evaluating classroom instruction. Emphasis on classroom management and organization. Prerequisite: teaching experience.

EDCS 539. Educational Games (3). This course will emphasize the purpose and benefits of educational games and provide each student with experience in planning, developing, and presenting as well as playing games of their own creation for use as an instructional tool. Participants will be responsible for any expense involved in the construction of their games. Prerequisite: graduate standing or one year of teaching experience.

EDCS 545. Classroom Teaching Problems (3). Open to experienced teachers. Prerequisite: teaching experience

EDCS 546. Advanced Laboratory Experience (2-5). Consult chair of department of

curriculum and supervision for permission to register for this course. May be repeated for credit.

EDCS 565. Program of Curriculum Improvement (3).

EDCS 571. Continuous Progress School (3). The relationship of the instructional program to levels of learning based on individual capacities and maturity.

EDCS 590. Cooperative Education (1-8). An individualized, contracted field experience with business, industry, government, or social service agencies. The contractual arrangement involves a student learning plan, cooperating employer supervision, and faculty coordination. May be repeated for credit. Grade will be either S or U. Prior approval is required.

EDCS 591. Workshop (1-6). No more than two workshops for a combined maximum of 8 credits can be applied toward a master's program.

EDCS 596. Individual Study (1-6).

EDCS 597. Graduate Research (1-10). Individual student research under the direction of a faculty member. Maximum of 10 credits may be included on course of study for the master's degree.

EDCS 598. Special Topics (1-6).

EDCS 599. Seminar (1-5).

EDCS 700. Master's Thesis, Project Study, and/or Examination (1-6). Designed to credit and record supervised study for the master's thesis, non-thesis project, studio project, public recital, and/or examination. May be repeated up to 6 credits. Grade will be either S or U. Prerequisite: EDF 510.

Education Foundations Courses

EDF 501. Educational Foundations (3).

Provides a background in selected areas of sociological, historical, and philosophical foundations of education. Also covers current and emerging problems of education.

EDF 502. History of Education (3).

Background: historical development in America.

EDF 503. Philosophy of Education (3).

Various philosophic positions which lead to an understanding of the educational enterprise. EDF 503 and PHIL 503 are equivalent courses; students may not receive credit for both.

EDF 505. Educational Measurement

for Teachers (3). Designed primarily for graduate students. Emphasis is on formal and informal measurement.

Test theory, formative and cumulative evaluation; criterion and norm referenced measurements, and construction and use of classroom tests are emphasized.

EDF 506. Education Futurism (3). A study of the literature on alternative futures in American society and their possible impacts upon education. The methods of creative forecasting or future research. The desirability of deciding between alternative

futures in education and the methodology of helping to bring about the more desirable future. Futurism in elementary and secondary schools.

EDF 507. Studies and Problems in Intercultural Education (3). Research and analysis of models in intercultural and interpersonal school relations. Awareness of the student-teacher relation in creating school climate in multicultural settings. Analysis of the principles used to interpret these interactions, and practice in brief interventions involving staff, teachers, and students.

EDF 508. Comparative Education (3). A comparative look at national systems of education.

EDF 510. Educational Research and Development (4). A study of the types, methodology, and uses in practice of educational research and development skills pertinent to the design and execution of research thesis and education developmental projects.

EDF 511. Planning for Learning (3). Principles of planning, instruction, curriculum development, and pedagogy used in teaching primary, middle, and secondary level students. By permission.

EDF 520. Teaching in Classics (3). Techniques for teaching the great works of literature, philosophy, and history of classical Greece and Rome.

EDF 567. Educational Change (3). Education change; barriers, characteristics, trends, processes; role of change agent in school organization; leadership techniques for facilitating change.

EDF 590. Cooperative Education (1-8). An individualized, contracted field experience with business, industry, government, or social service agencies. The contractual arrangement involves a student learning plan, cooperating employer supervision, and faculty coordination. May be repeated for credit. Grade will either be S or U. Prior approval is required.

EDF 591. Workshop (1-6). No more than two workshops for a combined maximum of 8 credits can be applied toward a master's program.

EDF 596. Individual Study (1-6).

EDF 597. Graduate Research (1-10). Individual student research under the direction of a faculty member. Maximum of 10 credits may be included on course of study for the master's degree.

EDF 598. Special Topics (1-6).

EDF 599. Seminar (1-5).

EDF 700. Master's Thesis, Project Study, and/or Examination (1-6). Designed to credit and record supervised study for the master's thesis, non-thesis project, studio project, public recital, and/or examination. May be repeated up to 6 credits. Grade will either be S or U. Prior approval required. Prerequisite: EDF 510.

ENGLISH DEPARTMENT

College of Arts and Humanities
Ellensburg
Language and Literature Building, room 423

509-963-1546

Fax: 509-963-1561

www.cwu.edu/~english

See website for how these programs may be used for educational and career purposes.

Faculty and Staff Chair

George Drake, PhD

Professors

Laila Abdalla, PhD, English Medieval and Renaissance literature

Liahna Armstrong, PhD, American literature, popular culture, film

Patsy Callaghan, DA, rhetoric, world literature, English education

Toni Culjak, PhD, American, world, and multicultural literature, film

Bobby Cummings, PhD, rhetoric, English education, computer composition

Loretta Gray, PhD, applied linguistics, composition, TESOL

Charles Xingzhong Li, PhD, linguistics, TESOL, linguistic approaches to literature

Terry Martin, PhD, English education, women's literature

Steven Olson, PhD, American literature, film

Paulus Pimomo, PhD, British literature, post colonial studies

Joseph Powell, MFA, creative writing, modern poetry

Gerald J. Stacy, PhD, English Renaissance literature

Christine A. Sutphin, PhD, Victorian

literature, English novel, women's literature

Associate Professors

George Drake, PhD, British literature, English novel

Christopher Schedler, PhD, American and multicultural literature

Katharine Whitcomb, MFA, creative writing

Assistant Professors

Virginia Mack, PhD, general education, Irish literature

Lisa Norris, MFA, creative writing

Emeritus Professors

Philip B. Garrison, MA, non-fiction, poetry

writing, world, and Chicano literature

Mark W. Halperin, MFA, poetry writing, folk literature, modern poetry

John L. Vifian, PhD 18th century literature, English novel

Senior Lecturer

Lila Harper, PhD

Staff

Theresa Stevens, secretary supervisor

Department Information

The English department offers two options for the master of arts degree: master of arts, English (literature) and master of arts, English (TESOL - teaching English to speakers of other languages).

English Literature, MA Master of Arts English (Literature)

The MA in English (literature) offers a rigorous, individualized program of advanced study of literature in English. Students choose from an array of courses and select a thesis/project or exam option. Although allowed flexibility in their course of study, students are required to complete courses in British, American, and world literatures, as well as literary and critical theory. Students enter the program to further their understanding of literature, to strengthen their teaching qualifications, to broaden their writing experiences, or to prepare for doctoral work.

Admission Requirements

In addition to the university regulations concerning admission to graduate degree programs, students applying to the MA in English (literature) Program must also submit a writing sample of 5-10 pages directly to the English department. The writing sample must include the student's name, birth date and student ID number for identification. The GRE general test is also required for applicants to the MA in English (literature) Program.

General Requirements of the Program

Students will complete a thesis/project or comprehensive examination. Students in each option take a minimum of 48 credits. At least 30 credits must be at the graduate level in English. Up to 15 credits may be taken in approved courses at the 400 level in English. Up to 10 credits may be taken in approved courses offered outside the English department.

Thesis/Project Option

Students who choose the thesis/project option may complete a research thesis or a creative writing project. Students completing a creative writing project must take two 400-level creative writing courses, at least one in the genre of their proposed creative writing project. To prepare for and complete their thesis/project, students must take English 588 and 6 credits of English 700 with the chair of their thesis/project committee. In all cases, students will create in conjunction with a three-member faculty thesis/project committee an analytical introduction and a reading list for their thesis/project that includes both texts central to their thesis/project and texts that contextualize their

thesis/project within their chosen field of study. After completing their thesis/project, students must pass an oral exam administered by the committee over the thesis/project introduction and reading list.

Exam Option

Students who choose the exam option create, in conjunction with a three-member faculty exam committee, an individualized reading list of the material covered in that student's coursework, and must pass a comprehensive written examination developed by the committee over that material. To prepare for and complete this exam, they will take three credits of English 596, Individual Study, with the chair of their exam committee.

Required Courses

ENG 512 - Introduction to English Graduate Study	5
ENG 515 - Advanced Studies in American Literature	5
ENG 517 - Advanced Studies in World Literature	5
ENG 518 - Advanced Literary and Critical Theory	5
ENG 519 - Advanced Studies in British Literature	5

Complete one of the following two options:

Thesis/Project Option

Approved Electives (Includes two 400-level creative writing courses for creative writing projects)	15
ENG 588 - Thesis/Project Colloquium	2
ENG 700 - Master's Thesis/Project (1-6)	6

OR

Exam Option

Approved Electives	20
ENG 596 - Individual Studies (1-6)	3

Total Credits: 48

English: TESOL, MA Master of Arts English (TESOL—Teaching English to Speakers of Other Languages)

The MA in English (TESOL) is an intensive program that can be completed in four quarters. The program is designed to

foster the awareness, understanding, and skills necessary for the effective teaching of English to speakers of other languages. Through study in language, pedagogy, and culture, it prepares educators to work with adult language learners in the United States and abroad. Graduates are qualified to work in colleges and universities, private institutes, and programs and schools in the United States and abroad that provide instruction in English.

Admission Requirements: Pre- or corequisites to completion of the program include an upper-division linguistics course and intermediate to high proficiency in a second language. International students whose first language is not English automatically meet this proficiency prerequisite. Applicants can be admitted to the program without this background, but they will be required to gain it while enrolled in the program. Students who do not have the prerequisites or who have assistantships are strongly advised to complete the program over a two-year period due to the challenging workload.

The language proficiency requirement may be met in one of three ways:

1. Thirty quarter credits of college courses in a foreign language with a minimum 3.0 GPA in those courses
2. Intermediate to high score on the Diagnostic ACTFL Oral Proficiency Interview
3. Intermediate to high score on the Diagnostic ACTFL Writing Proficiency Test

Applicants whose native language is not English are required to submit a minimum TOEFL score of 570 paper-based (230 computer-based/88 Internet-based; those with a baccalaureate degree from an accredited U.S. university may opt for a satisfactory TOEFL or GRE score. If the applicant's native language is English, scores for the GRE general test are required.

All applicants for assistantships must submit a writing sample of 5-10 pages directly to the English department. The writing sample must include the student's name, birth date, and student ID number for identification.

General Requirements of the Program:

The program consists of 45 credits, as outlined below, and offers both a thesis and an exam option.

Thesis or Exam Option: The thesis option requires candidates to write a thesis and pass a one-hour oral examination over the thesis. In order to choose the thesis option, students must have a GPA of 3.75 or higher in the program. If the exam option is chosen, students must pass a comprehensive written examination and take an additional approved elective. In order to prepare for the exam, students will register for two credits of ENG 596.

Required Courses

ENG 531 - Principles and Practices of TESOL	5
ENG 532 - Phonetics and Phonology	5
ENG 533 - Second Language Acquisition ...	5
ENG 535 - Linguistics, Literature, and TESOL	5
ENG 537 - Pedagogical Grammar and Discourse	5
ENG 538 - Pedagogical Grammar and Discourse II	5
ENG 592 - Practicum (1-5)	5
Department-approved electives	4

Complete one of the following options:

Thesis Option

ENG 700 - Master's Thesis/Project (1-6)	6
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Exam Option

ENG 596 - Individual Study (1-6)	2
Department-approved electives	4

Total Credits: 45

English Courses

ENG 510. Teaching First-year Composition

(2). The study and practice of the teaching of composition. Associated classroom experience as a teaching assistant or other experience as approved by the department. Does not count toward the MA degree. May be repeated for credit. Grade will either be S or U. By permission.

ENG 512. Introduction to English Graduate Study (5). The philosophy of literature; research methods. Required of all MA candidates.

ENG 513. Composition Theory (5). Focuses on research, theories, and practical issues relevant to the teaching of composition.

ENG 515. Advanced Studies in American Literature (5). May be repeated for credit under a different subtitle. Prerequisite: ENG 512.

ENG 517. Advanced Studies in World Literature (5). May be repeated for credit under a different subtitle. Prerequisite: ENG 512.

ENG 518. Advanced Literary and Critical Theory (5). Advanced study of the theory and practice of various critical perspectives and strategies as they inform the study of literary texts. Prerequisite: ENG 512.

ENG 519. Advanced Studies in British Literature (5). May be repeated for credit under a different subtitle. Prerequisite: ENG 512.

ENG 531. Principles and Practices of TESOL (5). Focuses on research, theories, and approaches relevant to the teaching of English to speakers of other languages. Prerequisite: Admission to the TESOL Graduate Program.

ENG 532. Phonetics and Phonology (5). Study of English phonetics and phonology as well as pronunciation pedagogy. Prerequisite: admission to the TESOL Graduate Program.

ENG 533. Second Language Acquisition (5). Integrated historical and contemporary



views on language and non-language factors affecting second language acquisition and on methodology in second language teaching and learning. Pre or Corequisite: ENG 532 and admission to the Graduate English TESOL Program.

ENG 535. Linguistics, Literature, and TESOL (5). Linguistic perspectives on an approaches to literature, with an emphasis on poetry and prose. Prerequisite: admission to the TESOL Graduate Program.

ENG 537. Pedagogical Grammar and Discourse (5). Study of English grammar and approaches to grammar instruction. Prerequisite: admission to the TESOL Graduate Program.

ENG 538. Pedagogical Grammar and Discourse II (5). Advanced study of English grammar, discourse, and approaches to grammar instruction. Prerequisite: ENG 537.

ENG 580. CWWP I: Writing Pedagogy (6). Summer course in which K-12 teachers learn to implement writing and language arts across the curriculum and prepare to lead teacher in-service workshops. Participants must register concurrently for EDCS 581. By permission.

ENG 581. CWWP II: Applied Writing Research (6). CWWP follow-up course in which teachers design, implement, document and present the results of classroom-based research projects. Participants must register concurrently for ENG 580.

ENG 588. Thesis/Project Colloquium (2). This course covers applied English research skills, including forms of inquiry, literature reviews, annotated bibliographies, and scholarly conventions. Students will produce a formal research proposal. Prerequisites: ENG 512 and graduate GPA of 3.7 or better.

ENG 591. Workshop (1-6).

ENG 592. Practicum (1-5). Supervised field experience in literacy education or teaching English as a second language/foreign language. May be repeated for credit. Grade will either be S or U.

ENG 595. Graduate Research (2-10). For students doing advanced research, writing, and study. Students using faculty time and departmental resources for thesis work must be registered for ENG 595 or 700. May not be included in the course of study for the master's degree. May be repeated for credit. Grade will either be S or U. Prerequisite: ENG 512.

ENG 596. Individual Study (1-6).

ENG 598. Special Topics (1-6).

ENG 599. Seminar (1-5).

ENG 700. Master's Thesis/Project (1-6). Designed to credit and record supervised study for the master's thesis/project. May be repeated up to 6 credits. Grade will either be S or U.

FAMILY AND CONSUMER SCIENCES DEPARTMENT

College of Education and Professional Studies
Ellensburg
Michaelsen Hall, room 100

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www.cwu.edu/~fandcs

See website for how these programs may be used for educational and career purposes.

Faculty and Staff Chair

Jan Bowers, PhD

Professors

Kimberlee Bartel, PhD, career technical education

Jan Bowers, PhD, family and consumer sciences education,

Robert Perkins, EdD, career technical education, recreation, leadership

Marla Wyatt, PhD, family and consumer sciences education

Associate Professors

Dorothy Chase, PhD recreation and tourism

Barbara Masberg, PhD, recreation and tourism

Kenneth Cohen, PhD, recreation and tourism

Duane Dowd, PhD, CLFE, family studies

Andrea Eklund, MA, fashion merchandising

John Hudelson, PhD, global wine studies

Amber Paulk, PhD, family studies, director of

family resource center

Lecturers

Vivian Baglien, PhD, family consumer sciences education

Karen Bergh, MEd, family consumer sciences education

Richard DeShields, MA, family studies

Jaff Hagler, MA, recreation and tourism

Ximenia Hedrick, MA, interior design

Jodi Hctor, BS, recreation and tourism

Connie Kolokotronis, MS, interior design

Peggy Roberts, MA, family studies

Lynn Whelan, MS fashion merchandising

Emeritus Professors

Joan Amby, PhD, family studies

Willa Dene Powell, PhD, family and consumer sciences education

Carolyn Schactler, MS, apparel design

William Vance, EdD, recreation and tourism

Staff

Sheri Hubbard, programs coordinator

Alex Lange, secretary senior

Department Information

The graduate programs are designed to provide an opportunity for students to concentrate at the master's level in one or

more of the subject areas related to family and consumer sciences and family and consumer sciences/career and technical education. The goal of the program is to prepare persons for further graduate study, for public school or college teaching, as specialists in service agencies, or as professionals in, or consultants to business, industry, and government.

In consultation with a faculty advisor, and with the approval of the department chair, students may develop a program of courses in one of two specializations. Each student will complete a set of core courses plus coursework specific for each specialization. The core courses include research methods, applied statistics, field experience and the thesis credits. Students can use a thesis, or test, or project to fulfill thesis credit requirements. The two specializations include family and consumer sciences/career and technical education, and family studies. All candidates shall complete an approved course of study filed with the Office of Graduate Studies and Research. The student's advisor and graduate committee members can be selected from another department. Application to graduate study is made through the Office of Graduate Studies and Research. Interested students are encouraged to contact the department chair for information and guidance.

Master of Science Family and Consumer Sciences

Program Coordinator

Jan Bowers, PhD

Michaelsen Hall, room 100

Purpose: The purpose of this program is to provide an opportunity for students to concentrate at the master's level in one or more of the subject areas related to family and consumer sciences. The goal of the program is to prepare persons for further graduate study, for public school or college teaching, as specialists in service agencies, or as professionals in, or consultants to business, industry, and government.

Program: In consultation with a faculty advisor, and with the approval of the department chair, students may develop a program of courses in one of two specializations. Each student will complete a set of core courses plus coursework specific for each specialization. The two specializations include family studies and family and consumer sciences/career and technical education. All candidates shall complete at least 45 credits as outlined in an approved course of study filed with the Office of Graduate Studies and Research. The student's advisor and graduate committee, comprised of at least three faculty, will assist in the development of the program. With approval by the department chair and the committee chair, faculty can be selected from another department.

It is expected that four to six thesis credits will be included in the student's program.

Family Studies Specialization

The family studies specialization is an advanced interdisciplinary study of interpersonal and family relationships. The graduate program has a strong emphasis on community involvement, practical application and research. Graduates are prepared for advanced career opportunities in family service agencies, parent education programs, family counseling centers, other family life education settings or doctoral study in family relations.

Graduate students in the family studies specialization who enter the program without prior coursework needed for preparing them for the graduate degree will need to take undergraduate courses as deficiencies or demonstrate sufficient knowledge in the area. Deficiency courses include FS 334, FS 433, and PSY 454.

Required Core Courses

FCSG 501 - Research Methods.	4
FCSG 502 - Statistics.	4
FCSG 509 - Civic Engagement (3).	12
OR	
FCSG 590 - Cooperative Education (1-12)	
FCSG 700 - Thesis/Project.	6

Required Specialization Courses

FS 532 - Family Interaction.	4
FS 542 - Conflict Management.	3
Department-approved Electives.	14

Total Credits: 47

Master of Science

Family and Consumer Sciences, Career and Technical Education Specialization

Graduate students enrolling in the FCS/CTE Specialization Program, as entry-level professionals, will complete courses that prepare them to demonstrate entry-level employment competencies. Each student will work with a faculty advisor to identify his or her entry competency level. Each student will also work with a faculty advisor to identify the exit competency level required for each of the six specialization courses. The number of credits available for some of the specializations courses varies from 1 to 5 credits per course. The number of credits a student needs to earn for each specialization course will be dependent upon his or her entry skill level. The credit requirement for finishing the graduate program will be 45 credits.

Required Core Courses

FCSG 501 - Research Methods.	4
FCSG 502 - Statistics.	4
FCSG 509 - Civic Engagement (3).	12
OR	
FCSG 590 - Cooperative Education (1-12)	
FCSG 700 - Thesis/Project, Examination. . .	4-6

Total Credits: 24-26

Required Specialization Courses

CTE 551 - Principles of Career and Technical Education.	4-5
FCSG 526 - Program Delivery Methods. . .	1-5
FS 521 - Curriculum Development.	1-5
FS 522 - Survey of Research.	1-5
Department-approved Electives.	7-15

Total Credits: 45

Career and Technical Education Courses

CTE 501. Research Methods (4). An examination of methods of conducting research on human behavior with an emphasis on application. FCSG 501 and CTE 501 are equivalent courses; students may not receive credit for both.

CTE 502. Statistics (4). Introduction to the quantitative statistics in social sciences. Topics include conducting analysis using computer software (SPSS), evaluating the results of statistical analysis, and drawing appropriate conclusions. CTE 502 and FCSG 502 are equivalent courses; students may not receive credit for both.

CTE 521. Curriculum Development (1-5). Use program standards to determine and develop program scope and content. CTE 521, FS 521, and FCSG 521 are equivalent courses; students may not receive credit for both. May be repeated for credit.

CTE 522. Survey of Research (1-5). The historical, philosophical, and legislative basis of program development and profession growth. CTE 522, FCSG 522, and FS 522 are equivalent courses; students may not receive credit for both. May be repeated for credit.

CTE 526. Program Delivery Methods (1-5). Course addresses theories of learning and human development in selecting program delivery strategies and resources. Includes models for management, assessment, evaluation, and public relations. CTE 526 and FCSG 526 are equivalent courses; students may not receive credit for both. May be repeated for credit.

CTE 551. Principles of Career and Technical Education (4-5). This course addresses the planning and implementation of CTE programs including work and career, leadership development, advisory committees, program promotion, and professional responsibilities.

CTE 580. Administration (1-5). The study of the administration and directorship of the laws, trends, issues and agency or program standards. CTE 580 and FCSG 580 are equivalent courses; students may not receive credit for both. May be repeated for credit.

CTE 581. Program Resource Management (1-5). Grant writing and the study of the local, state, and federal financing (both revenue and expenditure). CTE 581 and FCSG 581 are equivalent courses; students may not receive credit for both. May be repeated for credit.

CTE 583. Partnerships and Advisory

Committees (1-5). Examination of how education systems create and use industry partnerships and advisory committees to enhance education programs. CTE 583 and FCSG 583 are equivalent courses; students may not receive credit for both. May be repeated for credit.

CTE 584. Supervision and Evaluation (1-5).

The development of constructive guidance, observation, and assessment skills. CTE 584 and FCSG 584 are equivalent courses; students may not receive credit for both. May be repeated for credit.

CTE 590. Cooperative Education (1-8). An individualized, contracted field experience with business, industry, government, or social service agencies. This contractual arrangement involves a student learning plan, cooperating employer supervision, and faculty coordination. May be repeated for credit. Grade will either be S or U.

CTE 592. Practicum (2-16). Supervised field experience in specialization content area. CTE 592 and FCSG 592 are equivalent courses; students may not receive credit for both. May be repeated for credit. Grade will either be S or U. Prerequisite: student must be at graduate standing to enroll in this course.

Family and Consumer Sciences General Courses

FCSG 501. Research Methods (4). An examination of methods of conducting research on human behavior with an emphasis on application. FCSG and CTE 501 are equivalent courses; students may not receive credit for both.

FCSG 502. Statistics (4). Introduction to the quantitative statistics in social sciences. Topics include conducting analyses using computer software (SPSS), evaluating the results of statistical analyses, and drawing appropriate conclusions. FCSG and CTE 502 are equivalent courses; students may not receive credit for both.

FCSG 509. Civic Engagement (3). Student will use program of study content knowledge to improve a community situation. UNIV 509, FCSG 509, EDAD 509, and EDCS 509 are equivalent courses; students may only receive up to 12 credits. May be repeated for credit. Grade will either be S or U.

FCSG 512. Career Transitions (4). Identify body of knowledge for profession and required skills. Investigate professional development options and assessment strategies for the options. Grade will either be S or U.

FCSG 521. Curriculum Development (1 - 5). Use program standards to determine and develop program scope and content. CTE 521, FS 521, and FCSG 521 are equivalent courses; students may not receive credit for both. May be repeated for credit.

FCSG 522. Survey of Research (1-5). The historical, philosophical, and legislative basis of program development and

profession growth. CTE 522, FCSG 522, and FS 522 are equivalent courses; students may not receive credit for both. May be repeated for credit.

FCSG 526. Program Delivery Methods (1-5).

Course addresses theories of learning and human development in selecting program delivery strategies and resources. Includes models for management, assessment, evaluation, and public relations. CTE 526 and FCSG 526 are equivalent courses; students may not receive credit for both. May be repeated for credit.

FCSG 580. Administration (1-5). The study of the administration and directorship of the laws, trends, issues and agency or program standards. CTE 580 and FCSG 580 are equivalent courses; students may not receive credit for both. May be repeated for credit.

FCSG 581. Program Resource Management (1-5). Grant writing and the study of the local, state, and federal financing (both revenue and expenditure). CTE 581 and FCSG 581 are equivalent courses; students may not receive credit for both. May be repeated for credit.

FCSG 583. Partnerships and Advisory Committees (1-5). Examination of how education systems create and use industry partnerships, and advisory committees to enhance education programs. CTE 583 and FCSG 583 are equivalent courses; students may not receive credit for both. May be repeated for credit.

FCSG 584. Supervision and Evaluation (1-5). The development of constructive guidance, observation and assessment skills. CTE 584 and FCSG 584 are equivalent courses; students may not receive credit for both. May be repeated for credit.

FCSG 590. Cooperative Education (1-12). An individualized, contracted field experience with business, industry, government, or social service agencies. This contractual arrangement involves a student learning plan, cooperating employer supervision, and faculty coordination. May be repeated for credit. Grade will either be S or U.

FCSG 592. Practicum (2-16). Supervised field experience in specialization content area. CTE 592 and FCSG 592 are equivalent courses; students may not receive credit for both. May be repeated for credit. Grade will either be S or U. Prerequisite: student must be at graduate standing to enroll in this course.

FCSG 595. Graduate Research (1-10). Development and investigation of an approved laboratory or field research problem. Maximum of 6 credits may be included in course of study for the master's degree. Grade will either be S or U. By permission.

FCSG 596. Individual Study (1-6).

FCSG 598. Special Topics (1-6).

FCSG 599. Seminar (1-5).

FCSG 700. Master's Thesis, Project Study, and/or Examination (1-6). Designed to credit and record supervised study for the

master's thesis, non-thesis project, studio project, public recital, and/or examination. May be repeated up to 6 credits. Grade will either be S or U. By permission.

Family Studies Courses

FS 503. Family Communication (4). This course is designed to provide an overview of family dynamics and the processes that influence family communication and family functioning. FS 403, COM 403, and FS 503 are equivalent courses; students may not receive credit for more than one.

FS 519. Research in Family Studies (4). Methods of research used in studying families and relationships, including measurement, research design, ethics, sampling, and casual inference. Students will complete a research project emphasizing application of material. FS 419 and FS 519 are equivalent courses; students may not receive credit for both.

FS 521. Curriculum Development (1-5). Use program standards to determine and develop program scope and content. CTE 521, FS 521, and FCSG 521 are equivalent courses; students may not receive credit for both. May be repeated for credit.

FS 522. Survey of Research (1-5). The historical, philosophical, and legislative basis of program development and professional growth. CTE 522, FCSG 522, and FS 522 are equivalent courses; students may not receive credit for both. May be repeated for credit.

FS 531. Conceptual Frameworks in Family Analysis (3). Sociological, psychological, and developmental theories relating to study of family patterns and practices.

FS 532. Family Interaction (4). Analysis of relevant literature associated with establishing and maintaining interpersonal and family relationships. Prerequisite: 8 credits of upper-division coursework in family studies or the behavioral sciences.

FS 533. Family and Consumer Sciences Department (4). The broad objective, trends, methods and materials of family life education programs in various settings. FS 433 and FS 533 are equivalent courses; students may not receive credit for both.

FS 534. Human Development Across the Life Span (3). Life span approach to the understanding of normative and non-normative developmental processes. Understanding of the scholarship of human development as applied to the helping professions. By permission. Prerequisite: admission to the MS program.

FS 535. Family Resource Management (3). Decisions individuals and families make about developing and allocating resources including time, money, material assets, energy, friends, neighbors, and space to meet their goals. By permission.

FS 536. Parent Education (4). Principles, methods, and materials for parent education with special attention given to program development, implementation, and evaluation.

FS 537. Sexuality Education (2). Advanced approaches to teaching comprehensive sexuality education in school and community settings. Prerequisite: FCSF 337.

FS 539. Families and Public Policy (4). Impact of governmental policies on families; policy implications of changes in the structure and composition of families. FS 439 and FS 539 are equivalent courses; students may not receive credit for both.

FS 542. Conflict Management (3). Introduction to conflict management. Topics include using power, analyzing personality traits, assessing conflict, negotiating skills, mediating skills, and how to build partnerships and long-term positive relationships in the work place and in one's personal life.

FS 544. Family Problems and Mediation (4). Problems arising out of the interaction of family members. Mediation techniques, family policy, and theories and ethics in studying families. FS 334 and FS 544 are equivalent courses; students may not receive credit for both.

FS 590. Cooperative Education in Family and Consumer Science (1-12). A field experience in business, industry, government, or service agency that is relevant to and consistent with the family life education profession. By permission.

Recreation and Tourism Courses

RT 505. Hospitality Catering (3). Basics of off-premise catering including menu planning, budgeting, logistics, and marketing. NUTR 405, RT 405, and RT 505 are equivalent courses; students may not receive credit for more than one.

RT 574. Hotel Operations Analysis (2). Analysis of hotel performance and forecasting, with tools typically used in a lodging environment. RT 474 and RT 574 are equivalent courses; students may not receive credit for both. Prerequisites: Math Basic and Breadth requirements, ACCT 301, RT 272, and permission.

RT 591. Workshop (1-6).

RT 596. Individual Study (1-6).

RT 598. Special Topics (1-6).

RT 599. Seminar (1-5).



GEOGRAPHY DEPARTMENT

College of the Sciences
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www.cwu.edu/~geography

See website for how these programs may be used for educational and career purposes.

Faculty and Staff Chair

James Huckabay, PhD

Professors

Anthony Gabriel, PhD, hydrology, lake and river ecosystems, coastal and wetlands management

Robert Hickey, PhD, environmental impacts, coastal zones, GIS, Australia

James Huckabay, PhD, energy resources, climatology, resource conflict management, Europe

Robert Kuhlken, PhD, land-use planning, cultural ecology, historical geography, Oceania

Karl Lillquist, PhD, physical geography, geomorphology, soils, environmental change in arid and alpine watersheds

Morris Uebelacker, PhD, human geography, Yakima River basin, field methods

Assistant Professors

John Bowen, PhD, economic geography, transportation geography, Asia

Jennifer Lipton, PhD, cultural ecology, remote sensing, climate change, Latin America

Michael Pease, water resources, watershed planning and analysis, North America

Craig Revels, PhD, cultural-historical geography, landscape, Latin America

Megan Walsh, PhD, biogeography, paleoecology, NW fire history, climate change

Senior Lecturer

Elaine K. Glenn, MS, political geography, world regional geography, Middle East

Lecturer

Clay Arango, PhD, environmental geography, field methods, aquatic landscapes

Emeritus Faculty

Joel M. Andress, PhD

James Brooks, PhD

Dee Eberhart, MA

Kenneth Hammond, PhD

Nancy Hultquist, PhD

Martin Kaatz, PhD

George Macinko, PhD

John Ressler, PhD

Staff

David Cordner, instructional technician
Marilyn Mason, secretary senior

Department Information

Geography jointly coordinates the master of science degree program in resource management with the Department of Anthropology. For further information see resource management.

Geography Courses

GEOG 527. Environmental Archaeology

(4). Analyses of sediments and plant and animal remains from archaeological sites are used to explore relationships between humans and their environments. Case studies combine natural and physical sciences to study long-term change in landscapes and ecosystems. ANTH 427, ANTH 527, GEOG 427, GEOG 527 are equivalent courses; students may not receive credit for more than one. Graduate credit requires an additional research paper to be specified in syllabus. Prerequisites: ANTH 120 or GEOG 107.

GEOG 596. Individual Study (1-6).

GEOG 599. Seminar (1-5).

GEOLOGICAL SCIENCES DEPARTMENT

College of the Sciences
Ellensburg
Lind Hall, room 108B

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Fax: 509-963-2821

www.geology.cwu.edu

See website for how these programs may be used for educational and career purposes.

Faculty and Staff Chair

Wendy A. Bohrsen, PhD

Professors

Lisa L. Ely, PhD, geomorphology,

paleohydrology, and quaternary geology

Jeffrey Lee, PhD, active and regional tectonics, structural geology

M. Meghan Miller, PhD, crustal deformation, GPS geodesy, active tectonics, and remote sensing

Charles M. Rubin, PhD, paleoseismology, earthquake hazards, and active tectonics

Associate Professors

Wendy A. Bohrsen, PhD, volcanology, isotope geochemistry, igneous petrology

Carey Gazis, PhD, environmental geochemistry, stable isotope geochemistry, and hydrogeology

Timothy I. Melbourne, PhD, seismology, continental dynamics

Assistant Professors

Chris Mattinson, PhD, mineralogy and petrology

Beth Pratt-Sitaula, PhD, Earth science education and geomorphology

Lecturers

Marie Ferland, PhD, marine stratigraphy, climate change

Winston Norrish, PhD, petroleum geology

Emeritus Professors

Robert D. Bentley, PhD, structural geology,

igneous and metamorphic petrology,

regional geology of the Pacific Northwest

James Hinthorne, PhD, mineralogy,

geochemistry, spatial information systems

Staff

Jocelyn Robinette, secretary

V. Marcello Santillan, scientific programmer and GPS data analyst

Craig Scrivner, systems analyst

Nick Zentner, instructional technician supervisor

Geological Sciences, MS

Program Objectives and Description:

The graduate program in the geological sciences is designed to prepare students for professional employment in geoscience careers in industry, consulting firms, local, state, or federal government, teaching at the community college or secondary level, and serves as a foundation for graduate studies beyond the MS level. It is also suitable training for careers in environmental law and natural resource and hazard planning. The department encourages an integrative, multi-disciplinary approach.

Admission Requirements:

Incoming students are expected to meet the requirements of the graduate school, have a solid background in science and mathematics, and show evidence of superior scholarship. All students entering the MS program are expected to have a background equivalent to that required for the bachelor of science degree in geology at CWU and to have completed a geological field camp for college credit. Applicants must provide Graduate Record Examination (GRE) scores for the general test. Graduates in chemistry, physics, engineering, biology, or other technical disciplines are also encouraged to apply. Deficiencies in the student's undergraduate training as determined by the Department of Geological Sciences at the time of matriculation must be removed without graduate credit during the first year of graduate study. If English is a secondary language, students must score 550 or above on the TOEFL examination.

Application Deadlines and Supporting

Materials: Applications and all supporting materials are due by February 1 for fall quarter entrance. Applications will include a statement of your background and purpose, official transcripts, general GRE scores, and three letters of recommendation.

Program Requirements: The department offers an MS degree that requires a minimum

of 60 credits of graduate study. Fifty-four credits are earned from coursework and research (35 credits at the 500 level or above) and six credits are allowed for thesis (GEOL 700). All graduate students must register for GEOL 501, Current Topics in Geology, and GEOL 502, Regional Geology of the Pacific Northwest, (both during the fall quarter of their first year), and GEOL 503, Introductory Graduate Research Methods (during the winter quarter of their first year). GEOL 504, Graduate Seminar Series, is required during the first six quarters of a student's graduate program. Candidates must pass a final oral examination on their thesis project and supporting coursework, given by a thesis committee consisting of the thesis advisor and two other faculty. Normal completion of the master of science requires two academic years and an intervening summer of field study. Students may be encouraged to begin field work prior to matriculation.

Areas and Electives in Specialization:

Course requirements are tailored to the individual student's academic background, professional goals, and research interests through advising from the graduate faculty and thesis committee chair. The greatest departmental strengths are in active and regional tectonics, seismology, geodesy, geomorphology and quaternary geology, paleohydrology, environmental geo-chemistry, mineralogy, petrology, and volcanology. The department is a participating member of the Southern California Earthquake Center, a National Science Foundation sponsored (NSF) science and technology center. The department houses the data analysis center for the Pacific Northwest Geodetic Array (PANGA), a network of continuously operating GPS receivers distributed throughout the Pacific Northwest, the U.S., and Canada. In addition, the department has strong ties with the Jet Propulsion Laboratory (JPL), administered by Caltech for National Aeronautics and Space Administration (NASA); the opportunity to participate in JPL programs is a unique feature of the Geology Program at Central. The department is a participating member of the Western North America Interferometric Synthetic Aperture Radar Consortium (WinSAR) and Incorporated Research Institutions for Seismology (IRIS).

Central Washington University lies on the Columbia River basalt plateau, adjacent to the crystalline core and majestic volcanoes of the Cascade Mountains. Seismicity and active volcanism of the Cascadia subduction zone, highly deformed rocks of northern Washington and British Columbia, and a water- and natural-resource-based economy in central Washington provide ideal opportunities to study a wide variety of geologic problems.

Equipment and Computer Facilities: The geological sciences department has excellent research computer facilities including Linux computation workstations and file

storage and department mail, web and ftp servers. A mix of Macs and PCs are used for image processing, basic data analysis, and generating papers and presentations. Software packages available for data processing on these platforms include GIPSY, SAC, MatLab, ArcGIS, GAMIT, LAPACK, GSL, compilers, and other development tools.

The Geodesy Laboratory houses the data processing center for the Plate Boundary Observatory and PANGA. The laboratory analyzes continuous data from the permanent GPS array in the western United States. Processing is done on a dedicated 60-node Linux cluster. Additional geodesy equipment includes a number of Trimble SSI and 4700 receivers and digital surveying equipment (Leica Total Stations and Trimble kinematic GPS).

The department has Nikon and Leica petrographic microscopes, research polarizing reflected and transmitting light microscopes, with CCD-video camera displays.

With support from CWU, the national Science Foundation, and the M. I. Murdock Charitable Trust, the department has acquired sample preparation facilities, a geochemistry laboratory with an ICP-MS and stable-isotope mass spectrometer, and an automated Philips PW 3400 Powder X-Ray Diffractometer. Laboratories include a stable isotope laboratory, equipped with a general purpose extraction line for analysis of waters, carbonates, and soils, and a modern geochemistry laboratory, equipped for isotopic, major-element, and trace-element analysis of Earth materials.

Graduate Committee: The student must have a three-member graduate committee, selected in consultation with the advisor; two members must be from the geological sciences department.

Examination: Candidates must pass a final examination on their thesis and coursework.

Required Courses

GEOL 501 - Current Topics in Geology	3
GEOL 502 - Regional Field Geology of the Pacific Northwest	2
GEOL 503 - Introductory Graduate Research Methods	3
GEOL 504 - Graduate Seminar Series.	6

Subtotal Credits: 14

Electives and Seminars (to be selected by advisement)	25-31
GEOL 595 - Graduate Research (1-10)	9-15
GEOL 700 - Master's Thesis, Project Study, and/or Examination (1-6)	6

Total Credits: 60

Geological Sciences Courses

GEOL 501. Current Topics in Geology (3). Course will introduce beginning graduate students to current research topics in a variety of subdisciplines in geology

through readings, discussions, and student presentations.

GEOL 502. Regional Field Geology of the Pacific Northwest (2). Field studies in the Pacific Northwestern United States and Canada.

GEOL 503. Introductory Graduate Research Methods (3). Discussion and exploration of research methods in geology, including library and Internet resources, thesis project selection and design, and literature review. Three hours per week. Prerequisites: GEOL 501 and GEOL 502.

GEOL 504. Graduate Seminar Series (1). Research seminar series comprising the Geological Sciences weekly seminar series. Includes discussion with speaker following seminar. May be repeated for a total of 12 credits. Grade will either be S or U.

GEOL 515. Earthquake Geology and Neotectonics (5). Geomorphology, stratigraphy, and structural geology applied to the study of active faults and folds in a variety of tectonic settings. Relation of seismicity and geodetic measurements to geologic structure and active tectonic processes. Three hours of lecture and four hours of laboratory per week. GEOL 415 and 515 are equivalent courses; students may not receive credit for both. Prerequisites: Either GEOL 101 or 102, and 101LAB.

GEOL 523. The Cryosphere (5). Components of the cryosphere (ice sheets, mountain glaciers, ice shelves, global snow cover, sea ice extent, and permafrost/frozen ground) will be examined, including anticipated changes in the cryosphere due to changing climate. GEOL 423 and GEOL 523 are equivalent course; students may not receive credit for both. Prerequisites: GEOL 501 and 502.

GEOL 525. Environmental Geochemistry (5). Global geochemical cycles, influences of rocks and soils on water chemistry, behavior of isotopes and trace elements. Includes class project studying local environmental geochemistry topic. Three lectures plus one three-hour lab per week. GEOL 425 and GEOL 525 are equivalent courses; students may not receive credit for both. Prerequisites: CHEM 181, 181LAB, CHEM 182, and 182LAB.

GEOL 528. Pacific Northwest Active Continental Margin Geology (1-5). Through a problem-solving approach, students will learn how geoscientists developed our understanding of active continental margin tectonics and volcanism in the Pacific Northwest and how current research is advancing frontiers of knowledge. May be repeated up to 8 credits. By permission.

GEOL 530. Remote Sensing (5). Principles of acquisition, analysis, and use of remotely sensed data (LANDSAT, SPOT, Ikonos, etc.). Applied experience using image-processing software. Three hours lecture and three hours laboratory per week. GEOG 430, 530, and GEOL 430 are equivalent courses;

students may not receive credit for more than one. Prerequisites: GEOG 410 or GEOL 210.

GEOL 532. Field Geodetic Techniques (3).

Training in field geodetic techniques, including scientific application of two or more precision-surveying instruments: geodetic GPS, differential GPS, and electronic distance meter. Three hours a week and field project, or one-week field course. GEOL 432 and GEOL 532 are equivalent courses; students may not receive credit for both. Prerequisites: GEOL 101 or GEOL 102, 101LAB, GEOL 200, and GEOL 210.

GEOL 534. Petroleum Geology (5).

Petroleum geology delivers a comprehensive introduction to the application of geology in the oil and gas industry, including the origin and occurrence of petroleum, application of geology in exploration and production, and the evolution of the industry in the context of global demand. GEOL 434 and GEOL 534 are equivalent courses; students may not receive credit for both. Prerequisites: GEOL 101, 101LAB, GEOL 370, and either GEOL 200 or GEOL 210.

GEOL 541. Climate Variability and Climate Change (5).

Examine past, present, and future changes in climate, and the factors that contribute to climate change of various timescales. GEOL 441 and GEOL 541 are equivalent courses; students may not receive credit for both. Prerequisite: GEOL 200.

GEOL 545. Hydrogeology (5).

Study of the occurrence and movement of ground water using geology, hydrology, and geochemistry, with an emphasis on practical problems in water management. Three hours lecture and three hours laboratory per week. GEOL 445 and GEOL 545 are equivalent courses; students may not receive credit for both. Prerequisites: GEOL 101 or GEOL 102, 101LAB, and MATH 154.

GEOL 553. Seismology (5).

Elasticity theory, the wave equation, ray theory, diffraction, waveform modeling, travel time inversion. Data analysis. Three hours lecture and four hours of scientific computing lab per week. Offered alternate years. GEOL 453 and GEOL 553 are equivalent courses; students may not receive credit for both. Prerequisite: MATH 173.

GEOL 554. Geostatistics (5).

Introduction to statistical analysis and numerical simulation of problems relevant to Earth science. Three hours of lecture and three hours of laboratory per week. No prior Unix experience necessary. GEOL 454 and GEOL 554 are equivalent courses; students may not receive credit for both.

GEOL 556. Geodynamics (5).

Study of plate tectonics and mountain building processes that shape our Earth. Lab includes introduction to Matlab software for analysis and visualization. Required field trip. GEOL 456 and GEOL 556 are equivalent courses; student may not receive credit for both.

Prerequisite: GEOL 101. Corequisite: MATH 172.

GEOL 563. Tectonic Investigations (2).

Classroom study and analysis of tectonics of a selected region. Emphasis will be on developing background skills and knowledge to undertake a tectonic field investigation in GEOL 463LAB or 563LAB. GEOL 463 and GEOL 563 are equivalent courses; students may not receive credit for both. By permission. Prerequisite: GEOL 360.

GEOL 563LAB. Tectonic Field Investigation (3).

Tectonic investigation and analysis of select field sites employing a variety of field and laboratory measurements such as mapping, tectonic geomorphology, GPS and Total Station surveying. Course consists of either weekly local field trips during the quarter, or single one-week field trip over spring break to another region. GEOL 463LAB and 563LAB are equivalent courses; students may not receive credit for both. Corequisite: GEOL 563.

GEOL 565. Tectonic Evolution of Orogenic Belts (2).

Overview of the tectonic, structural, stratigraphic, and geophysical evolution of orogenic belts. Two hours of discussion and student presentation per week. May be repeated once for credit under a different title.

GEOL 570. Fluvial Geomorphology (4).

Advanced course covering hydrologic and geomorphic processes in rivers. Exploration of current geomorphic research, practical experience in field techniques, and geomorphic models. Prerequisite: GEOL 386.

GEOL 574. Quaternary Geology (4).

Study of geological processes affecting Earth's most recent history. Course emphasizes global quaternary environmental change, glacial epochs, paleoclimatic methods, and dating techniques. GEOL 474 and 574 are equivalent courses; students may not receive credit for both. Prerequisite: GEOL 386.

GEOL 575. Petrography and Petrogenesis (5).

Petrogenetic, hand specimen and thin section study of igneous, metamorphic or sedimentary rocks. Three hours lecture and four hours laboratory or field work per week. Required field trips. GEOL 475 and GEOL 575 are equivalent courses; students may not receive credit for both. Offered in alternate years. By permission.

GEOL 578. Volcanology (5).

Study of volcanoes and associated deposits, styles of eruption, physical and chemical controls on eruption mechanisms and volcanic hazards and hazard mitigation. Three hours lecture and four hours laboratory per week. Required field trips. GEOL 478 and GEOL 578 are equivalent courses; students may not receive credit for both. Offered in alternate years. By permission.

GEOL 583. Isotope Geochemistry (5).

Covers principles of isotope geochemistry and applications to studies of geological processes such as hydrologic cycling, volcanic petrogenesis, and climate change.

Three hours lecture per week and required laboratory work and field trips. GEOL 483 and GEOL 583 are equivalent courses; students may not receive credit for both. Offered in alternate years. Prerequisites: CHEM 182, 182LAB, and MATH 154.

GEOL 584. Geochronology (5).

Principles, analytical methods, and interpretation of several of the most widely applied geochronologic methods. Computer-based data analysis of problems in igneous and metamorphic petrology, structural geology, sedimentary geology, geomorphology, paleoseismology, and planetary science. GEOL 484 and 584 are equivalent courses; students may not receive credit for both. Prerequisites: MATH 172 and GEOL 346.

GEOL 595. Graduate Research (1-10).

May be repeated for credit. Grade will either be S or U.

GEOL 596. Individual Study (1-5).

May be repeated for credit.

GEOL 598. Special Topics (1-6).

May be repeated for credit.

GEOL 599. Seminar (1-5).

May be repeated for credit.

GEOL 700. Master's Thesis, Project Study, and/or Examination (1-6).

Designed to credit and record supervised study for the master's thesis, non-thesis project, studio project, public recital, and/or examination. May be repeated up to 6 credits. Grade will either be S or U. By permission.

HISTORY DEPARTMENT

College of Arts and Humanities

Ellensburg

Language and Literature Bldg., room 100

509-963-1655

Fax: 509-963-1654

www.cwu.edu/~history

See website for how this program may be used for educational and career purposes.

Faculty and Staff

Chair

Karen J. Blair, PhD

Professors

Karen J. Blair, PhD, 20th century U.S.,

women's history

Roxanne Easley, PhD, Russia, Eastern Europe

Marji Morgan, PhD, 19th century British social and cultural history

Associate Professors

James Cook, PhD, East Asia

Daniel Herman, PhD, U.S. pre-1877

Jason Knirck, PhD, Britain/British Empire,

Western Europe

Stephen Moore, PhD, Pacific Northwest,

foreign relations, social studies education

Visiting Professors

Stephanie Ballenger, PhD

Brian Carroll, PhD

Emeritus Professors

Beverly Heckart, PhD, Germany, Europe
 Zoltan Kramar, PhD, Ancient World
 Larry Lowther, PhD, Colonial and
 Revolutionary America
 Kent Richards, PhD, American West, Pacific
 Northwest

Staff

K. Angie Hill, secretary

Master of Arts History

Master of arts students may choose from among three different options: thesis, project, or written examination. Please note that the thesis option, but not the project and written exam options, requires students to fulfill the department's foreign language requirement.

Thesis: This option is appropriate for those who wish to pursue a PhD, either immediately after receiving the MA or at some point in the future. A thesis is a lengthy monographic work (usually 50 to 150 pages long) that addresses a topic of importance to historians in an original way.

Project: Occasionally, when student background or experience allows, and when faculty availability and expertise exists, students may complete a project in lieu of the traditional thesis. A project may take the form of a narrative history, a documentary film, or website, or some other effort approved by the committee.

Written examination: This option consists of an eight-hour written exam given at the end of one's graduate career. It is designed for students who do not plan to pursue a PhD in history. It is especially useful for secondary school teachers who want to attain the MA in a timely manner.

Required Courses

HIST 511 - Historiography	5
Students must take 15 credits of the following:	15
HIST 512 - History Graduate Readings Seminar (5)	
HIST 515 - History Graduate Research Seminar (5)	
HIST 512 or HIST 515 for an additional 5 credits (5)	
HIST 700 - Master's Thesis, Project Study and/or Examination	6
Department-approved electives from 500-level courses in History	10
Department-approved electives from 400- 500-level courses in History or other approved fields (courses must pertain to student's thesis)	9

Total Credits: 45

Graduate Fields of Study

Whether pursuing the thesis, a project, or the exam option, students must choose a primary field of study from a list of fields approved by the faculty. Currently, the Department of History offers the following primary fields. Fields other than those listed

need prior approval from the student's advisor.

Colonial/Revolutionary America
 19th century America
 20th century America
 American Foreign Relations
 American West
 American Environmental History
 American Women's History
 Pacific Northwest History
 American Social History
 American Cultural History
 Native American History
 Colonial Latin America
 Modern Latin America
 Imperialism
 Pre-imperial Russia
 Imperial Russia
 Soviet Union
 Modern Britain and the Empire
 Modern Ireland
 Modern France
 Modern Germany
 Comparative Gender and Colonialism
 Ming/Qing China
 20th century China
 Modern Japan
 Modern Southeast Asia
 Environmental History

Thesis Requirements and Timeline

Before starting research on a thesis, you must choose an advisor and submit to her/him a short research prospectus. The prospectus is a proposal of about 8-10 pages, including the following:

- The topic and scope of your thesis or project
- A tentative thesis statement
- The primary sources you intend to use
- Historiographical review, including a statement of your work's place within it
- Preliminary chapter outline.

Once your advisor approves your prospectus, she or he will assist you in assembling a thesis committee composed of three historians or, in rare cases, two historians and one academic specialist from outside the department (as approved by the advisor). The prospectus must be submitted on or before the third week of the fourth quarter or before the completion of 30 credits, whichever comes last, and must be defended before the assembled committee before the end of the fourth full quarter of graduate study. By the end of the sixth full quarter, the student must submit at least one completed chapter of the thesis to the thesis director/advisor for approval. Students who do not meet the above deadlines for submission/approval of a prospectus and chapter may not be permitted to continue to pursue the thesis option. After the thesis is complete, the student will defend his/her findings before his/her committee. The final draft of the thesis (the draft to be defended) must be

given to both secondary advisors at least three weeks in advance of the defense date.

Project Requirements and Timeline

As with the thesis, students who choose the project option must enlist an advisor and submit to her/him a short research prospectus (see thesis requirements, above, for prospectus guidelines). The prospectus must be submitted on or before the third week of the fourth quarter or before the completion of 30 credits, whichever comes last, and must be defended before the end of the fourth full quarter. Once your advisor approves your prospectus, she/he will assist you in assembling a thesis committee composed of three historians or, in rare cases, two historians and one academic specialist from outside the department (as approved by the advisor). The prospectus must be submitted on or before the third week of the fourth quarter or before the completion of 30 credits, whichever comes last, and must be defended before the assembled committee before the end of the fourth full quarter of graduate study. By the end of the sixth full quarter, the student must submit a significant part of the project to her/his director/advisor for approval. Students who do not meet the above deadlines may not be permitted to further pursue the project option. After the project is completed, the student will defend his/her work before his/her committee.

Exam Requirements and Timeline

Students who choose the exam option must select an advisor by the beginning of fourth quarter or after completion of 30 credits, whichever comes last. In advance of the exam, the exam director/advisor will work with the student to choose a committee and to delineate a major field (see list of fields above). In consultation with the advisor, the student will then develop a major field bibliography consisting of at least 30 books that must be read in preparation for the exam. The student must also choose a second advisor who will help the student develop a minor field bibliography of at least 15 books. The exam will consist of three (3) written questions in the major field and two written questions (2) in the minor field. After the exam is completed, the student must defend her/his answers before the committee.

Foreign Language Requirement

Those who choose the thesis option must meet the department's foreign language requirement. The requirement can be met in two ways: (1) by attaining a grade of B in the final course of a two-year sequence of undergraduate-level foreign language instruction (the sixth quarter or fourth semester) either during the student's undergraduate or graduate career; (2) by passing the department's foreign language

exam. The department's foreign language exam requires students to translate (usually a paraphrase rather than a word-for-word translation) two short passages, one from a primary source and one from secondary literature. Students taking the language exam may use dictionaries. Faculty members with the appropriate language skills will grade the exam on a pass/fail basis. If you plan to enter a PhD program in the future, we strongly urge you to gain proficiency in at least one foreign language during your MA career.

History Courses

HIST 511. Historiography (5).

HIST 512. History Graduate Readings Seminar (5). May be repeated for credit.

HIST 515. History Graduate Research Seminar (5). May be repeated for credit.

HIST 522. British Isles to 1763 (5). The British Isles from Roman times to the conclusion of the Seven Year War. Course will cover the rise of the English monarchy, the Renaissance, and Reformation in England, and the beginnings of the British Empire. HIST 422 and HIST 522 are equivalent courses; students may not receive credit for both.

HIST 523. The Irish Revolution (5). History and historiography of the Irish revolution. Topics include the constitutional and revolutionary antecedents, the course of the revolution, and the foundation of the Irish Free State. HIST 423 and HIST 523 are equivalent courses; students may not receive credit for both.

HIST 524. Modern Ireland 1798-Present (5). The history of Ireland from the revolt of 1798 through the present. Focus will be on the varieties of Irish nationalism, the process of state-building, and the ongoing troubles in the north. HIST 424 and HIST 524 are equivalent courses; students may not receive credit for both.

HIST 526. France 1789-1945 (5). French history through the lens of revolution. Discussions of the variety of French revolutions (1789, 1792, 1830, 1848, 1870) and concluding with the National Revolution of Vichy France. HIST 426 and HIST 526 are equivalent courses; students may not receive credit for both.

HIST 527. Modern Britain and the Empire since 1688 (5). History of Britain and the Empire since the Glorious Revolution. Topics include growth of the Empire, industrialization, political reform, world wars, decolonization, and post-war social changes. HIST 427 and HIST 527 are equivalent courses; students may not receive credit for both.

HIST 535. History of South Africa (5). This course examines the history of South Africa from the earliest time to the present. It looks at pre-colonial African states; colonialism; apartheid and the triumph of African nationalism under the ANC and Nelson Mandela. HIST 435 and HIST 535 are equivalent courses; students may not receive credit for both.

HIST 537. History of Islamic Traditions (5).

This course will cover the history of Islam and Muslim societies around the world since 1700 using a global perspective. The course will examine Islamic developments in Asia, Africa, Europe, and North America. HIST 437 and HIST 537 are equivalent courses; students may not receive credit for both.

HIST 538. Conquests and Compromises: American Indian History since 1492

(5). Discussion and lecture course on interactions between Native Americans and Europeans in North America since the arrival of Columbus. HIST 438 and HIST 538 are equivalent courses; students may not receive credit for both.

HIST 540. The American Revolution (5). Causes and consequences of the American Revolution, 1688-1789. HIST 440 and HIST 540 are equivalent courses; students may not receive credit for both.

HIST 543. The West in American History (3-5). Exploration, territorial acquisition, patterns of settlement, economic development, and the influence of the frontier on American institutions. HIST 443 and HIST 543 are equivalent courses; students may not receive credit for both.

HIST 544. Sectionalism, Civil War, and Reconstruction (3-5). Slavery, the Old South, sectionalism, the breakdown of the Union, and secession. A military, political, and social history of the North and South during the Civil War, and the aftermath of the war. HIST 444 and HIST 544 are equivalent courses; students may not receive credit for both.

HIST 549. History of Women and the West (5). Women in the western United States, with emphasis on the 19th- and 20th-centuries; myths and stereotypes; women's work; community roles; class, and racial/ethnic differences. HIST 449 and HIST 549 are equivalent courses; students may not receive credit for both.

HIST 550. Exploring U.S. Cultural History (5). Thematic approach to 19th century cultural transformations in the U.S. Selected topics; mesmerism, utopias, true womanhood, women's rights, slave spirituals, confidence men, gold rushes. HIST 450 and HIST 550 are equivalent courses; students may not receive credit for both.

HIST 551. 20th century U.S. 1896-1919 (3-5). Imperialism, progressivism, and World War I. HIST 451 and HIST 551 are equivalent courses; students may not receive credit for both.

HIST 552. 20th century U.S. 1919-1945 (3-5). Prosperity and depression; the New Deal and its implications; World War II, origins and conclusion. HIST 452 and HIST 552 are equivalent courses; students may not receive credit for both.

HIST 553. 20th century U.S. 1945 to the Present (3-5). Cold War, sedentary 50s, rebellious 60s, the Watergate era. HIST 453 and HIST 553 are equivalent courses; students may not receive credit for both.

HIST 554. American Environmental History (5). Environmental values and practices of the diverse populations of America. HIST 454 and HIST 554 are equivalent courses; students may not receive credit for both.

HIST 562. History of American Foreign Relations, 1900-1941 (3-5). From the Spanish-American War to Pearl Harbor. HIST 462 and HIST 562 are equivalent courses; students may not receive credit for both.

HIST 563. History of American Foreign Relations Since 1941 (3-5). From Pearl Harbor to the present. HIST 463 and HIST 563 are equivalent courses; students may not receive credit for both.

HIST 564. Latin American Revolutions (5). This course compares and contrasts the causes, courses, and consequences of the Mexican Revolution (1910-40), the Cuban Revolution (1959-present), the Chilean Revolution (1970-73), and the Nicaraguan Revolution (1979-89). HIST 464 and HIST 564 are equivalent courses; students may not receive credit for both.

HIST 565. History of the People's Republic of China (5). Evaluates the historical record of the Chinese Communists in power since the establishment of the People's Republic of China in 1949. HIST 465 and HIST 565 are equivalent courses; students may not receive credit for both.

HIST 569. History of Russian and Soviet Women (5). Examination of the social status and cultural representations of women in Russia and the Soviet Union from the 17th century to the present. HIST 469 and HIST 569 are equivalent courses; students may not receive credit for both.

HIST 572. German History since 1815 (3-5). A political, socio-economic, and intellectual study of Germany with special attention to the causes, progress, and aftermath of the National Socialist State. HIST 472 and HIST 572 are equivalent courses; students may not receive credit for both.

HIST 573. Russia to 1881 (3-5). The political, social, economic, and cultural development of Russia from ancient times to the assassination of Alexander II. HIST 473 and HIST 573 are equivalent courses; students may not receive credit for both.

HIST 574. Russia Since 1881 (3-5). The political, economic, social, and cultural history of Russia and the Soviet Union since 1881. HIST 474 and HIST 574 are equivalent courses; students may not receive credit for both.

HIST 576. History of Modern East Europe (5). Poland, Czech, Slovak Republics, Austria, Hungary, Romania, Yugoslavia, Bulgaria, Greece, Albania, with special attention to multi-ethnicity, economic underdevelopment and modernization, political dependence, and nationalism. HIST 476 and HIST 576 are equivalent courses; students may not receive credit for both.

HIST 578. Russian Far East (5). Russian Far East history from 16th century Cossack exploration to 21st century democracy.

Topics include the imperial "urge to the sea," the Trans-Siberian Railway, the Soviet Gulag system, and Pacific Rim relations. AST 478, HIST 478, and HIST 578 are equivalent courses; student may not receive credit for more than one.

HIST 583. Modern China (5). The history of China in the 19th- and 20th-centuries, including the nature of China's response to the West and the Chinese Revolution of the 20th century. Emphasis on internal social and economic change. HIST 483 and HIST 583 are equivalent courses; students may not receive credit for both.

HIST 584. Modern Japan (3-5). The recent historical development of Japan beginning with the collapse of the Tokugawa Shogunate and the resumption of foreign contacts in the mid-19th century. Emphasis is given to the modernization process with its concomitant political, social, economic, and intellectual changes. HIST 484 and HIST 584 are equivalent courses; students may not receive credit for both.

HIST 587. The Russian Revolutionary Movement (3-5). Origins and development of Russian radicalism through the Bolshevik Revolution of 1917. HIST 487 and HIST 587 are equivalent courses; students may not receive credit for both.

HIST 588. Mexico in the Modern Era (5). Analyzes the modern history of Mexico, from independence to the present day. HIST 488 and HIST 588 are equivalent courses; students may not receive credit for both.

HIST 590. Cooperative Education (1-8). An individualized, contracted field experience with business, industry, government, or social service agencies. This contractual arrangement involves a student learning plan, cooperating employer supervision, and faculty coordination. HIST 490 and HIST 490 are equivalent courses; students may not receive credit for both. May be repeated for credit. Grade will either be S or U. By permission.

HIST 591. Workshop (1-6). HIST 491 and HIST 591 are equivalent courses; students may not receive credit for both. Grade will either be S or U.

HIST 595. Graduate Research (1-10). For students doing preliminary or ongoing thesis/project research. May not be included in the course of study for the master's degree. May be repeated for credit. Grade will either be S or U. By permission.

HIST 596. Individual Study (1-6). For students who wish to do directed readings and study in secondary literature on specific topics that are not offered as existing courses. May be repeated for credit. By permission.

HIST 598. Special Topics (1-6).

HIST 599. Seminar (1-5).

HIST 700. Master's Thesis, Project Study, and/or Examination (1-6). Designed to credit and record supervised study for the master's thesis, non-thesis project, studio project, public recital, and/or examination. May be repeated up to 6 credits. Grade will either be S or U. By permission.

INDIVIDUAL STUDIES

Undergraduate Studies
Ellensburg
Barge Hall, room 305

509-963-3101

www.cwu.edu/~masters

See website for how these programs may be used for educational and career purposes

Master of Arts

Master of Education

Master of Science

Purpose: The purpose of the Individual Studies (IS) Program is to afford qualified applicants the opportunity to create sound master's degree programs of an interdisciplinary nature or focus on unique subject areas when the curricula of regular graduate degree programs do not meet the individuals' career objectives and/or needs. The approval of such programs is dependent upon:

- The qualifications of the applicant
- The institution's ability to provide a sufficient number of relevant graduate level courses
- A sufficient number of faculty qualified and willing to work with the student
- Adequate scholarly and/or creative resources.

CWU will offer IS programs only in fields where appropriate expertise and other resources exist as determined by the dean of Graduate Studies and Research in consultation with the graduate council.

Each IS program must be as academically sound as traditional master's degrees programs housed in regular academic departments. Thus, it must demonstrate the quality, breadth, and depth normally associated with master's degrees and must be as intellectually rigorous.

Approved IS programs are administered by an interdisciplinary committee appointed by, and with oversight from, the dean of Graduate Studies and Research. IS programs may be created under the master of arts, master of education, and master of science degree titles.

Application Process: Anyone contemplating the creation of an IS program should first meet with the dean of Graduate Studies and Research before initiating the application process to discuss possible program options. The responsibility for creating an acceptable IS rests entirely with the applicant. If admitted, a graduate student in this program is expected to be highly motivated. He or she must work closely with the program advisor(s) and provide the dean of Graduate Studies and Research with semi-annual program status reports. An applicant

to an IS master's degree program must be able to meet the minimum requirements for admission to graduate study at CWU, including a minimum of a 3.0 GPA in the last 90 quarter or 60 semester credit hours elected. The applicant must complete and submit a formal application, in accordance with the instructions in the application packet, including a non-refundable \$50 applicant fee. The GRE may be required at the discretion of the dean of Graduate Studies and Research.

Each applicant is encouraged to apply using the self-managed application process. This will insure efficient and rapid processing of the application. If he or she is unable to use the self-managed application system, he or she may file the application materials separately. The application file must be complete before the graduate school can act upon it. The applicant must follow all instructions included in the application packet. Materials submitted in support of an application cannot be returned nor will they be released for other purposes.

Program Description: In addition to the documents and materials required for the admissions process, each IS applicant must include a description of the IS program he or she wishes to create. The applicant should include a detailed explanation of the rationale for this program and explain why her or his goals cannot be met by means of pursuing an established master's degree at CWU. The applicant should indicate how the proposed program would meet her or his educational objectives and professional aims.

Learner outcomes are critical to the success of CWU degree programs. As a result, each IS master's candidate is expected to prepare an acceptable goals statement in which anticipated learner outcomes are specified. These will be measured at the completion of the program as a partial means of determining whether each student has met degree requirements.

Program of Study: A comprehensive, proposed course of study is also required. The requisite form for detailing this may be obtained from the graduate school. A justification for the selection of each election proposed should be included in the course of study. Please note that general graduate school regulations appearing in the CWU catalog must be observed, and all IS programs must include a master's thesis. In the process of designing the curriculum, applicants are expected to consult the publications of universities nation-wide to identify any programs similar in content and design to the one sought. Such information may provide useful information in constructing the program of study.

Number of Credit Hours: For an IS program of study to be approved by the dean of Graduate Studies and Research, it must include a minimum of 45 quarter hours of graduate-level credit, of which at least 25 credits must be numbered 501 or higher. In some cases more than the minimum of 45

credits will be required. The course of study must include six credits of 700 (Thesis) and may not normally include more than 10 credits of independent study. Prerequisite courses may also be required.

Graduate Committee: Each applicant seeking an IS program must propose a graduate committee to the dean of Graduate Studies and Research. Each committee member must be at least an associate member of the graduate faculty and the person whom the applicant wishes to chair the advisory committee must be a regular member of the graduate faculty. The applicant must work with the faculty to develop the proposed program of study. The proposed graduate committee members will meet with the dean of Graduate Studies and Research to discuss the applicant's program of study and may be asked to meet with the graduate council as well.

All proposed graduate committee members are expected to discuss their participation on this committee with their respective department chairs. Department chairs must agree to allow their faculty members to participate on the IS committee and all proposed committee members must certify their willingness to serve. The committee constitution will be reviewed by the dean of Graduate Studies and Research in conjunction with the graduate council. Following any needed discussions, the dean of Graduate Studies and Research in consultation with the graduate council, will determine the applicant's admissibility, along with the viability of the graduate committee, and communicate the decision to the applicant as quickly as possible.

Examinations and Assessment: An oral final examination is required on work completed in partial fulfillment of the IS master's degree requirements. This examination must include a defense of the thesis and an examination of studies completed. Some graduate committees may also require a written examination as well. The examination process is intended to assure that the student has met the objectives of her or his goal statement and that the learner outcomes have thus been achieved. If the student performs satisfactorily on the examination, the student's committee will write a summary statement of the student's accomplishments and competencies for inclusion in the student's permanent file.

Application Deadlines: The deadlines for submitting all application materials are as follows:

- February 1 for fall quarter
- April 1 for summer quarter
- October 1 for winter quarter
- January 1 for spring quarter

Applicants must meet these deadlines or risk jeopardizing their admission for the quarter requested.

Individual Studies Courses

IS 590. Cooperative Education (1-6). An individualized, contracted field experience with business, industry, government, or social service agencies. The contractual arrangement involves a student learning plan, cooperating employer supervision, and faculty and coordination. May be repeated for credit. Grade will either be S or U. By permission.

IS 596. Individual Study (1-6). Permission of the dean for Graduate Studies and Research.

IS 700. Master's Thesis/Examination (1-6). Designated to credit and record supervised study for the master's thesis, non-thesis project, studio project, public recital, and/or examination. May be repeated up to 6 credits. Grade will be either S or U. By permission.

INDUSTRIAL AND ENGINEERING TECHNOLOGY DEPARTMENT

College of Education and Professional Studies
Ellensburg (E)
Hogue Hall, room 107
CWU-Des Moines (DM)
CWU-Lynnwood (L)

509-963-1756 (E)
Fax: 509-963-1795
206-439-3800 (DM)
425-640-1574 (L)
www.cwu.edu/~iet

See website for how these programs may be used for educational and career purposes.

Faculty and Staff Chair

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Professors

William Bender, PhD, construction management
David Carns, MS, construction management
Craig Johnson, PhD, mechanical engineering technology
Taiqian Q. Yang, PhD, electronics

Associate Professors

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John (Jack) A. Gumaer, MS, electronics
Lad Holden, MT, electronics
Michael L. Whelan, PhD, construction management

Assistant Professors

Roger Beardsley, MS, mechanical engineering technology
Geoff Dean, PhD, industrial and engineering technology

John O'Neill, MPA, safety and health management
P. Warren Plugge, PhD, construction management

Emeritus Professors

D. Ken Calhoun, EdD
Robert Wiekling, PhD
Tim Yoxtheimer, MS

Lecturers

William Cattin, MS, industrial technology
Juan Robertson, PhD, MSET (DM)

Staff

Susan Van de Venter, assistant to the chair
Javier Santillana, instructional and classroom support technician

Program Objectives and Description

The Department of Industrial and Engineering Technology (IET) offers a master of science degree in engineering technology (MSET). The program is designed to prepare persons holding a bachelor of science degrees in the engineering technologies (ET), industrial technologies (IT), and similar or related degrees for career advancement. The MSET core curriculum is designed to teach students how to address technological challenges such as improving existing products, services, and work processes, and developing new ones. The context for instruction takes into account contemporary challenges in business and industry, such as innovating when technology is rapidly changing, adapting to the global economy, and protecting the environment. Students select elective courses in order to build upon their current technical capabilities or to develop knowledge and skills in a new area that complements their career objectives.

Admission Requirements

Incoming students are expected to meet all of the requirements of the graduate school, have a solid background in science and mathematics, and show evidence of scholarship. This requires that the candidate have a bachelor's degree from a recognized institution and have completed a course in pre-calculus (or its equivalent) and at least one college-level, laboratory-based science course. Any candidate who does not meet these requirements may be admitted to the program on a conditional basis, after which he or she must complete the requirements before being fully admitted to the program. If English is a secondary language, students must score 550 or more on the TOEFL examination. Transfer students will be considered using the same criteria, with consideration for equivalent graduate coursework completed elsewhere.

Engineering Technology, MS

General Requirements

IET 501 - Industrial and Academic Research Methods	4
IET 521 - Product Design and Development	4
IET 523 - Emerging Technologies	4
IET 525 - Systems Analysis and Simulation	4
IET 555 - Engineering Project Management	4
IET 700 - Thesis or Option	5

General Requirements Total Credits: 25

Department-approved Technical Electives

The student must select 20 credits from the following list to complete a program total of 45 credits. The student may propose to take alternative electives course(s) that are not shown on the list of approved technical electives. If the student takes any elective course for which he or she has not met the prerequisites, then fulfilling those prerequisites will add credit hours to his or her course of study, beyond the 45 credits required for graduation. All elective courses, including 400-level IET courses, that the student wants to include in the course of study are subject to the approval of the advisor and the department chair.

ECON 462 - Economics of Energy Resources and Environment	5
GEOG 443 - Energy Policy	5
IET 512 - Alternative Energy Systems	4
IET 522 - Programmable Logic Controller Applications	4
IET 524 - Quality Control	4
IET 526 - Engineering Project Cost Analysis	4
IET 530 - Fundamentals of Lasers	4
IET 532 - Generation and Transmission of Electrical Power	4
IET 552 - LEED in Sustainable Construction	4
IET 560 - Finite Element Analysis	4
IET 577 - Robotics	4
IET 582 - Plastics and Composites	4
IET 583 - Ceramics and Composites	4
IET 592 - Field Studies	4
IET 595 - Graduate Research	1-6
IET 596 - Individual Study	3
IET 599 - Seminar	1-5
400-level Courses taught in the industrial and engineering technology department	3-4

Elective Total Credits: 20

Program Total Credits: 45

Industrial and Engineering Technology Courses

IET 501. Industrial and Academic Research Methods (4). An introduction to the research methods and tools used for industrial research. Topics include problem definition, review of literature, types of research, research design, analysis of results, writing a research proposal, writing a research paper, and analytical tools used for applied research by engineers and technologists in industry.

IET 512. Alternative Energy Systems (4). Study of alternative energy technology and their societal issues. Similar to MET 412.

Credit for both granted only by department chair.

IET 521. Product Design and Development (4). Methodology for the design and development of industrial and commercial products from conceptual stage to saleable product. Three hours lecture and two hours laboratory per week. Prerequisites: MET 419.

IET 522. Programmable Logic Controller (PLC) Applications (4). A study of programmable logic controller concepts, components, systems, programming, and applications. Lecture and laboratory. Similar to IET 373. Credit for both granted only by department chair.

IET 523. Emerging Technologies (4). A comprehensive examination of recent technological innovations in materials, manufacturing, electronics, and instrumentation, with emphasis on design and application case studies. By permission.

IET 524. Quality Control (4). Provides foundation for understanding and applying statistical quality control techniques and product reliability procedures. Similar to IET 380. Credit for both granted only by department chair. Prerequisites: OMIS 221.

IET 525. Systems Analysis and Simulation (4). Theoretical and practical techniques for modeling and analyzing various systems including product designs, manufacturing facilities, and fluid/thermal systems. System testing and evaluation methodology will be investigated. Prerequisite: MET 327.

IET 526. Engineering Project Cost Analysis (4). Techniques of economic cost analysis and modeling applied to engineering projects. Similar to IET 301. Credit for both granted only by department chair.

IET 530. Fundamentals of Lasers (4). Overview of laser technology with emphasis on characteristics, safety, and application. Four hours lecture per week. Prerequisites: PHYS 113.

IET 532. Generation and Transmission of Electrical Power (4). A study of the generation and transmission of electrical energy. Similar to EET 432. Credit for both granted only by department chair. Prerequisite: EET 332.

IET 552. LEED in Sustainable Construction (4). The process using LEED as a measurement for sustainable construction. The course covers benefits and mechanisms of green building, cost analysis, and professional problem solving. Develop and present research on sustainability.

IET 555. Engineering Project Management (4). Project-based synthesis used in engineering project management. Topics; bidding, contract management, scheduling, cost estimating and control, logistics, conflict management, team building, negotiating, and risk assessment. IET 455 and IET 555 are equivalent courses; student may not receive credit for both. Instructor consent should be based on student industrial experience and career goals. By permission.

IET 560. Finite Element Analysis (4). Computerized modeling of structural, vibrational, and thermal design problems. Lecture and laboratory. Similar to MET 420. Credit for both granted only by department chair. Prerequisites: IET 160 and MET 426.

IET 577. Robotics (4). Microprocessor applications in robotics, automated systems, and digital control. Lecture and laboratory. Similar to EET 477. Credit for both granted only by department chair. Prerequisites: EET 375 and EET 342.

IET 582. Plastics and Composites (4). Composition, characteristics and classifications of plastics and composite materials incorporating design, industrial applications, processing, and fabrication. Similar to MET 382. Credit for both granted only by department chair. Prerequisites: CHEM 111/111L or CHEM 181/181L.

IET 583. Ceramics and Composites (4). Composition characterization and classification of ceramics and related composite materials incorporating industrial applications, processing, and fabrication. Similar to MET 483. Credit for both granted only by department chair. Prerequisites: CHEM 181 or CHEM 111.

IET 589. Master's Capstone (3-4). This seminar provides a review of the required courses and preparation for and administration of the comprehensive exam taken by MSET students. The review will also contribute to the program curriculum development. Prerequisites: within 10 credits of graduation or permission of the instructor and admission to the Master of Science in Engineering Technology Program.

IET 592. Field Studies (1-10). No more than 10 credits may be taken toward the master's degree. May be repeated for credit. By permission.

IET 595. Graduate Research (1-6). Conduct research or use for program evaluation activity. Maximum of six credits may be included on the course of study for the master's degree. By permission.

IET 596. Individual Study (1-6).

IET 598. Special Topics (1-6).

IET 599. Seminar (1-5).

IET 700. Thesis or Option (6). Designed to credit and record supervised study for the master's thesis, non-thesis project, or examination. May be repeated for up to six credits. Grade will either be S or U. By permission.



LANGUAGE, LITERACY, AND SPECIAL EDUCATION DEPARTMENT

College of Education and Professional Studies
Ellensburg
Black Hall, room 205

509-963-2049
Fax: 509-963-1162

The Department of Language, Literacy, and Special Education prepares socially responsible practitioner scholars to work and learn within diverse contexts; fostering language, literacy, and learning for all.

Faculty and Staff Chair

Carol Butterfield, PhD
Dan Fennerty, EdD

Professors

Carol Butterfield, PhD, elementary education, reading, bilingual education, TESL
Susan Donahoe PhD, elementary education, and literacy
Dan Fennerty, EdD, special education
Connie Lambert, PhD, special education

Associate Professors

Janet Finke, PhD, literacy
Terrance McCain, PhD, bilingual education, TESL
Andrea C. Sledge, PhD, literacy

Assistant Professors

Yukari Amos, PhD, bilingual education
YiShan Lea, EdD, bilingual education, TESL
Cristina Santamaria, PhD, special education
Janet Spybrook, EdD, special education
Sharryn Walker, PhD, literacy
Sandra Wentworth, PhD, special education

Staff

Nancy Schnebly

General Information

The master of education degree programs are designed primarily for elementary and secondary school teachers and school service personnel. Since the program may also prepare the student for community college teaching and for advanced study, the student should seek advice from the program advisors. For advice regarding specializations, contact the department.

Admission Requirements

In addition to general requirements for admission to master's programs, students desiring admission to programs in education must meet departmental requirements. Members of the appropriate program will

review the student's application materials from the Office of Admissions and, if deemed necessary, may meet with the student before a recommendation for admission can be made.

Required Educational Foundations and Research Courses

EDF 510 is required of all students earning the MEd degree. The candidate further must choose at least six credits from the following: EDF 501, Educational Foundations, EDF 502, History of Education, EDF 503, Philosophy of Education, EDF 504, Advanced Educational Statistics, EDF 505, Educational Measurement for Teachers, EDF 506, Education Futurism, EDF 507, Studies and Problems in Intercultural Education, EDF 508, Comparative Education, EDF 567, Educational Change, PSY 552, Advanced Human Growth and Development, PSY 559, Advanced Educational Psychology (only one of PSY 552 or PSY 559 may be included to meet the foundations requirement), SOC 525, Society and Education, as approved by the student's graduate advisor or committee chair. Related courses may be substituted with permission of the student's graduate advisor or committee chair, the chair of the appropriate department, and the dean of Graduate Studies and Research.

Master of Education: Reading Specialist

The following college-level courses should be taken prior to enrollment in the specialization courses and may not be counted as part of the required credits in the reading specialist program:

Basic Reading Course
Basic Language Arts Course
Basic Children's Literature Course

Prerequisite: A minimum of one year of successful, contracted teaching experience in a K-12 classroom setting is required for admission to the Reading Specialist Program. One of the three required recommendation forms for admission to the Reading Specialist Program must come from the applicant's current or most recent principal or designee.

Program: The student will complete at least 45 credits as outlined in an approved course of study filed with the Office of Graduate Studies and Research. The development of a course of study most appropriate to the professional goals and purposes of each individual student must be completed and approved by a program advisor or committee chair upon the completion of 15 credits.

Required Courses

Education Foundations and Research
Courses 10
*EDCS 424 - Reading in the Content
Fields 3

EDRD 521 - Reading in the Elementary
School 4
EDRD 523 - Survey of Research in Reading . 3
EDRD 525 - Psychology of Reading 3
EDRD 526 - Diagnosis of Reading
Difficulties 3
EDRD 528 - Remediation of Reading
Difficulties 3
EDRD 592 - Practicum: Diagnosis and
Remediation of Reading Difficulties 3
EDRD 700 - Master's Thesis, Project Study,
and/or Examination 6
Advisor-approved Electives selected from, but
not limited to the list below 7
EDRD 418 - Reading and Linguistics (3)
EDRD 419 - Storytelling Techniques (3)
EDBL 440 - Reading English as a Second
Language (3)
EDAD 584 - School Supervision (4)
EDAD 599 - Seminar (1-5)
EDEL 531 - Teaching Elementary
School Language Arts, Advanced (3)
EDRD 520 - Advanced Teaching of
Reading: Methods and Materials (3)

Program Total Credits: 45

*If this course is completed prior to admission to the graduate program, see an advisor for an appropriate course substitution.

Master of Education: Special Education

The master of education with specialization in special education is designed to allow students to pursue graduate-level study in the various areas of special education.

Prerequisites: Students must have an institutional endorsement in special education. Students without an institutional endorsement will be required to complete the endorsement prior to the final exam for their master's degree. Anyone wanting to complete a master's degree without a special education teaching certificate must have special education faculty permission.

Program: Students will complete at least 45 credits of approved graduate level coursework. The course of study will be developed in consultation with their major advisor from special education and filed with the Office of Graduate Studies and Research.

Required Courses

Education Foundation and Research
Courses 10
EDSE 501 - Orientation, Foundations, and
Issues 2
EDSE 503 - High Prevalence Categories of
Exceptionality 3
EDSE 512 - Educational Rights of Individuals
with Disabilities 3
EDSE 521 - Functional Behavioral and
Instructional Assessment 3
EDSE 522 - Collaboration/Consultation 3
EDSE 523 - Curriculum for Students with
Special Needs 3

EDSE 585 - Administration and Supervision of Programs for Individuals with Disabilities	3
EDSE 684 - Internship in Professional Affiliated Disciplines	2-12
EDSE 700 - Master's Thesis, Project Study, and/or Examination	6
Area of Concentration (by Advisement)	
EDSE 583 - Seminar: Research Special Education	2
EDSE 597 - Graduate Research in Special Education	4
Program Total Credits:	46

Post-baccalaureate University Certificate: Teaching and Linguistic Diversity

Students entering the public school setting speaking little or no English are the fastest-growing segment of the school population. Most mainstream teachers have received little or no special training in preparing them for these students. This program will provide the opportunity for practicing teachers to receive this needed training. This training will take place through the development and implementation of four courses. Upon completion of the program, students will be able to explain how programs have come to exist as they are found today, document the theories upon which sound educational practices are based, develop and implement quality instruction, organize and use appropriate assessment procedures, and use paraprofessional and community members as quality assets in the classroom. While the program itself does not constitute a state of Washington endorsement, all courses may be applied to the completion of endorsement requirements at Central.

Required Courses

EDBL 440 - Reading English as a Second Language	3
EDBL 514 - Introduction to Linguistic Diversity in Education	3
EDBL 530 - Sheltering in Mainstream I: Methods	3
EDBL 531 - Sheltering in Mainstream II: Assessment and Resources	3
Total Credits:	12

Bilingual Education Courses

- EDBL 514. Introduction to Linguistic Diversity in Education** (3). This course provides mainstream classroom teachers the needed background theory to better the educational experience of linguistically diverse students.
- EDBL 518. Studies and Problems in Educational Linguistics** (2). Identification and study of problems related to educational linguistics and second-language instruction. Prerequisite: EDBL 433.
- EDBL 530. Sheltering in Mainstream I: Methods** (3). This course provides mainstream classroom teachers the needed background information and methodology

to better the educational experience of ESL students through the use of sheltered instruction.

EDBL 531. Sheltering in Mainstream II: Assessment and Resources (3). This course provides mainstream classroom teachers the needed background information and methodology to better the educational experience of ESL students by using classroom-based assessment and other resources.

EDBL 556. Bilingual Education Curriculum (3). Planning, implementation, and evaluation of the bilingual education program curriculum for the elementary school. Prerequisite: EDBL 435.

EDBL 590. Cooperative Education (1-8). An individualized, contracted field experience with business, industry, government, or social service agencies. The contractual arrangement involves a student learning plan, cooperating employer supervision, and faculty coordination. May be repeated for credit. Grade will either be S or U. By permission.

EDBL 591. Workshop (1-6). No more than two workshops for a combined maximum of 8 credits can be applied toward a master's program. May be repeated for credit.

EDBL 596. Individual Study (1-6).

EDBL 597. Graduate Research (1-10). Individual student research under the direction of a faculty member. Maximum of 10 credits may be included on course of study for the master's degree.

EDBL 598. Special Topics (1-6).

EDBL 599. Seminar (1-5).

EDBL 700. Master's Thesis, Project Study, and/or Examination (1-6). Designed to credit and record supervised study for the master's thesis, non-thesis project, studio project, public recital, and/or examination. May be repeated up to 6 credits. Grade will either be S or U. Prerequisite: EDF 510.

Reading Education Courses

EDRD 520. Advanced Teaching of Reading: Methods and Materials (3). An in-depth, research-based analysis of reading methods and materials used in elementary and secondary settings. Prerequisite: a reading methods course at the undergraduate level and teaching experience.

EDRD 521. Reading in the Elementary School (4). Contemporary influences in reading instruction in American elementary schools.

EDRD 523. Survey of Research in Reading (3). Identification and in-depth study of problems related to reading instruction. Recent reading research is pursued with emphasis on classroom application. Prerequisite: reading methods course and teaching experience.

EDRD 525. Psychology of Reading (3). Principles of learning and readiness, perception, psychological, and physiological aspects of reading. EDRD and PSY 525 are equivalent courses; students may not receive credit for both.

Prerequisites: a reading methods course, a basic psychology of learning course.

EDRD 526. Diagnosis of Reading Difficulties (3). Designed to inform practicing teachers about materials and procedures for diagnosing and interpreting reading problems of students. Prerequisites: an undergraduate reading methods course and teaching experience.

EDRD 528. Remediation of Reading Difficulties (3). Techniques and materials for remediating children's reading difficulties. Should be taken concurrently with EDRD 592. Prerequisite: EDRD 526.

EDRD 590. Cooperative Education (1-8). An individualized, contracted field experience with business, industry, government, or social service agencies. The contractual arrangement involves a student learning plan, cooperating employer supervision, and faculty coordination. May be repeated for credit. Grade will either be S or U. By permission.

EDRD 591. Workshop (1-6). No more than two workshops for a combined maximum of 8 credits can be applied toward a master's program. May be repeated for credit.

EDRD 592. Practicum: Diagnosis and Remediation of Reading Difficulties (3). Supervised experience working with one or more students. Includes the preparation of a case study. Should be taken concurrently with EDRD 528. Grade will be either S or U. Prerequisite: EDRD 526.

EDRD 596. Individual Study (1-6).

EDRD 597. Graduate Research (1-10).

Individual student research under the direction of a faculty member. Maximum of 10 credits may be included on course of study for the master's degree.

EDRD 598. Special Topics (1-6).

EDRD 599. Seminar (1-5).

EDRD 700. Master's Thesis, Project Study, and/or Examination (1-6). Designed to credit and record supervised study for the master's thesis, non-thesis project, studio project, public recital, and/or examination. May be repeated up to 6 credits. Grade will either be S or U. Prerequisite: EDF 510 and permission of chair of student's graduate faculty supervisory committee.

Special Education Courses

EDSE 501. Orientation, Foundations, and Issues (2). Orientation of the graduate student to the Special Education Master's Degree Program. Current issues in the identification, assessment, instruction, and evaluation of students with disabilities will be explored through readings, discussions, and presentations. Prerequisite: teaching experience.

EDSE 502. Survey of Exceptionalities (3). Designed to introduce the education professionals to areas of exceptionality including definitions, identification, prevalence causes, assessment characteristics, educational considerations/interventions, and lifespan considerations.

The role of special education in education-related services and programming is also addressed. Prerequisites: graduate standing.

EDSE 503. High-prevalence Categories of Exceptionality (3). Etiology, social issues, and management strategies for students with mental retardation, learning disabilities, and behavioral disorders. Prerequisite: EDSE 501.

EDSE 510. Instructional Management Principles (3). Applied Behavior Analysis (ABA) principles will be presented. Their interpretation in a range of research will be presented.

EDSE 512. Educational Rights of Individuals with Disabilities (3). Designed to prepare graduate students to use legal decisions to assist individuals with disabilities and their families in creating an appropriate educational environment. Prerequisite: EDSE 501.

EDSE 521. Functional Behavioral and Instructional Assessment (3). Current effective assessment processes will be defined, developed, and defended. Included will be goal establishment, rationale for assessment processes utilized, and clarification of administrative procedures. Prerequisite: EDSE 501.

EDSE 522. Collaboration/Consultation (3). Designed as a reflective process for the teacher to identify specific strengths in the areas of inter/intra personal skills. Prerequisite: EDSE 501, EDSE 521, and EDSE 523.

EDSE 523. Curriculum for Students with Special Needs (3). Focuses on selecting and implementing curricular adaptations to facilitate the participation of students with special needs in the regular classroom. Prerequisites: EDSE 501 and EDSE 521.

EDSE 581. Current Issues in Special Education (1). May be repeated for credit. Prerequisite: graduate standing.

EDSE 583. Seminar: Research Special Education (2). Advanced study of an approved special education issue or topic under the guidance of a professor, including original research. Exchanging results by informal lectures, reports, and discussions. May be repeated for credit under different topics. Prerequisites: EDF 510 and EDSE 597.

EDSE 585. Administration and Supervision of Programs for Individuals with Disabilities (3). The course will focus on the administrative process of

designing, developing, preparing for implementation, and evaluating the procedural and substantive safeguards related to administering and supervising programs for individuals with disabilities. Prerequisite: EDSE 501.

EDSE 590. Cooperative Education (1-8). An individualized, contracted field experience with business, industry, government, or social service agencies. The contractual arrangement involves a student learning plan, cooperating employer supervision, and faculty coordination. May be repeated for credit. Grade will either be S or U. Prior approval required.

EDSE 591. Workshop (1-6). No more than two workshops for a combined maximum of 8 credits can be applied toward a master's program.

EDSE 596. Individual Study (1-6).

EDSE 597. Graduate Research in Special Education (4). Specialty-area research and research report preparation. May be repeated for credit. Prerequisites: EDSE 501, EDSE 503, and EDF 510.

EDSE 598. Special Topics (1-6).

EDSE 599. Seminar (1-5).

EDSE 682. Internship in Special Education School Administration (4-16). Meets the internship requirements outlined by the State Board of Education for candidates seeking director of special education certification. Permission to register after admittance by the administrator preparation board. Credits earned in an administrative internship will not exceed a total of 16. No more than 4 credits are applicable to the credit requirements for the master's degree. May be repeated for credit. Grade will either be S or U.

EDSE 683. Pre-autumn Internship in Special Education School Administration (4). Emphasis is on the responsibilities of special education prior to and during the opening of the school year. Combines with EDSE 682 for 16 total credits in administrative internship. Grade will either be S or U. By permission.

EDSE 684. Internship in Professional Affiliated Disciplines (2-12). Students will complete an internship in an affiliated area/discipline of special education, furthering understanding of practices, policies, and supports available and appropriate for individuals with disabilities and their families. Approval for the internship, specific internship goals, and activities will be arranged with the graduate committee chair and representative from the participating agency. Grade will either be S or U. Prerequisites: EDSE 501, EDSE 503, and EDF 510.

EDSE 700. Master's Thesis, Project Study, and/or Examination (1-6). Designed to credit and record supervised study for the master's thesis, non-thesis project, studio project, public recital, and/or examination. May be repeated up to 6 credits. Grade will either be S or U. Prerequisite: EDF 510.

LAW AND JUSTICE DEPARTMENT

College of the Sciences
Kent Campus
GRCC Kent campus at Kent Station
417 Ramsay Way, Suite 112
Kent, WA 98032

253-856-9595 x 5350

Fax: 253-333-4972

www.cwu.edu/kent

See website for how this program may be used for educational and career purposes.

Faculty and Staff

Chair

Charles Reasons, PhD, JD

Professors

J. Michael Olivero, PhD, corrections, criminology

Charles Reasons, PhD, JD, criminology, criminal justice, law, comparative justice

Key Sun, PhD, correctional counseling, comparative criminal justice, psychological criminology

Associate Professors

Sarah Britto, PhD, criminology, media and fear of crime, restorative justice

Rodrigo Murataya, PhD, criminal investigation, police-community relations, police personnel administration

Mary Ellen Reimund, LLM, criminal law, alternative dispute resolution, restorative justice

Assistant Professors

Teresa Francis, LLM, criminal law, correctional law

Krystal Noga-Styron, JD, criminal law, crime and the media

Cody Stoddard, ABD, policing, courts, criminological theory, quantitative methods

Lecturers

Cathy Busha, JD, family law, legal research, legal writing, paralegal

Robert Moore, MA, corrections, correctional counseling

Staff

Darlene Reinbold, secretary senior

Lauren Lutz, CWU-Kent Site Director

Program Description

The MS degree in law and justice is designed to serve two distinct groups (1) those in law and justice field with professional experience and (2) those without professional experience who aspire to a law and justice career. The Advanced Professional specialization (45 credits) entails a research project and final research paper (project study). This specialization is aimed at those already in law and justice careers who want to do hands-on research, possibly with their own agency data. The Basic Career Specialization (60 credits), does not entail a major research project; however, it does entail 5 credits of



internship and a final portfolio/paper on their internship experience. This specialization is aimed at those not currently in law and justice careers who want to gain valuable learning experience and prepare for a career. To meet the needs of these divergent groups, a core set of classes will be required (25 credits), focusing upon theory, research methods, and legal liability, followed by courses tailored to the needs of these two distinct groups.

Admission

Applicants for admission to the Master of Law and Justice Program must:

1. Apply to CWU as a graduate student;
2. Have a bachelor's degree in the social sciences from a recognized four-year college or university in the U.S. or the equivalent from an institution abroad, or a bachelor's degree and professional experience;
3. At least a 3.0 GPA in all coursework attempted during the last 90-quarter (60 semesters) hours of study;
4. Submit three professional letters of recommendation; and
5. Submit personal statement of objectives.

Law and Justice Core Requirements

LAJ 511 Theory and Practice	5
LAJ 535 Research Methods	5
LAJ 575 Legal Liability of Criminal Justice Professionals	5
LAJ 689 Master's Capstone	5
LAJ 700 Master's Thesis, Project Study and/or Portfolio	5
Total Core Credits:	25

Choose one specialization:

Advanced Professional Specialization

Required Core	25
Select 10 credits from the following:	10
LAJ 515 - Personnel Issues in Criminal Justice (5)	
LAJ 520 - Constitutional Issues in Criminal Justice (5)	
LAJ 525 - Race, Class, Gender, and Administration of Justice (5)	
LAJ 530 - History of Criminal Law (5)	
LAJ 540 - Law and Social Control (5)	
LAJ 545 - Ethics, Diversity, and Conflict in Criminal Justice (4)	
LAJ 598* - Special Topics (5)	
Approved 400-level or above elective courses	10

Total Credits: 45

Basic Career Specialization

Required Core	25
LAJ 690 - Internship	5
Select 20 credits from the following:	20
LAJ 515 - Personnel Issues in Criminal Justice (5)	
LAJ 520 - Constitutional Issues in Criminal Justice (5)	
LAJ 525 - Race, Class, Gender, and Administration of Justice (5)	
LAJ 530 - History of Criminal Law (5)	
LAJ 540 - Law and Social Control (5)	

LAJ 545 - Ethics, Diversity, and Conflict in Criminal Justice (4)	
LAJ 598* - Special Topics (5)	
Approved 400-level or above elective courses	10

Total Credits: 60

(Note: * May be repeated under different topics (e.g., terrorism, domestic violence, restorative justice) to a maximum of 10 credits.)

Law and Justice Courses

(Note: Prerequisites include admission to the Master of Law and Justice Program or permission of instructor.)

LAJ 511. Theory and Practice (5). Students study the complex relationships between theoretical explanations of criminal behavior and criminal justice policies. Discuss links between different beliefs about definitions and explanations of criminal behavior, methods of enforcement, justifications for social punishment, and control of criminals, and their culmination in different social policies and practices. Explore the social, political, cultural, and economic underpinnings of criminal justice theory, ideology, and policy. Prerequisite: admissions to the MS in Law and Justice Program.

LAJ 515. Personnel Issues in Criminal Justice (5). Addresses issues such as recruitment, retention, supervision, evaluation, workplace human rights, and disciplinary issues. Prerequisite: admissions to the MS in Law and Justice Program.

LAJ 520. Constitutional Issues in Criminal Justice (5). Examines constitutional issues emerging within the context of the criminal justice system, law enforcement, prosecutions, defense, judiciary, corrections, and community supervision. United States Supreme Court decisions reversing and modifying previous case law and effecting criminal justice practices and policy will be presented and discussed. Prerequisite: admissions to the MS in Law and Justice Program.

LAJ 525. Race, Class, Gender, and the Administration of Justice (5). Study the effects of race, class, and gender on the decision making processes of the criminal justice system. Examines the historical and legal foundations of racial, class, and sexual injustice, patterns of crime and victimization among minority communities, disproportionate representation of racial minorities, and differential processing of members of minority groups. Explores strategies to eliminate racial, class, and sexual bias. Prerequisite: admissions to the MS in Law and Justice Program.

LAJ 530. History of Criminal Justice (5). Focus on societal responses to crime and disorder in the United States from the colonial period through the 20th century. Emphasis will be placed on the study of the social forces that influenced the development of the criminal law and its institution of social control. Prerequisite: admissions to the MS in Law and Justice Program.

LAJ 535. Research Methods (5). An overview of issues in scientific research, including theory, hypothesis, population, sample, variables, reliability, and validity. The emphasis is on developing students' ability to perform research designs, data collection, data processing and analysis in the field of criminal justice. Various research techniques will be covered, including writing research reports and proposals, and the use of computers in criminal justice research. Prerequisite: admissions to the MS in Law and Justice Program.

LAJ 540. Law and Social Control (5). The nature of social control as it is vested in the objectives, procedures, and authority of law and social institutions. Special emphasis is given to understanding the social-legal implications of social control and the limits of criminal law as a method of social control. A cross-cultural perspective on the relationship between law and social control by introducing another industrialized country. Prerequisite: admissions to the MS in Law and Justice Program.

LAJ 545. Ethical Issues (5). Criminal justice professional must regularly make decisions intended to prevent or redress the most serious social harms. Provides an overview of basic ethical concepts and theories, discusses macro-level ethical issues and problems in the criminal justice processes, and examines specific ethical problems of the various components of the criminal justice process. Prerequisite: admissions to the MS in Law and Justice Program.

LAJ 575. Legal Liability of Criminal Justice Professionals (5). Examines constitutional issues emerging within the context of the criminal justice system, law enforcement, prosecution, defense, judiciary, corrections, and community supervision. United States Supreme Court decisions reversing and modifying previous case law and effecting criminal justice practice and policy will be presented and discussed. Prerequisite: admissions to the MS in Law and Justice Program.

LAJ 598. Special Topics (1-5). May be repeated for credit under different titles. Prerequisite: admissions to the MS in Law and Justice Program.

LAJ 689. Master's Capstone (5). An end-of-program course that includes a basic review of core courses, presentation of thesis, project study, or portfolio and program assessment. Grade will either be S or U. Prerequisite: admission to the MS Law and Justice Program, completion of core courses, and student must be within 10 credits of graduation or have permission of the chair.

LAJ 690. Internship (1 - 6). May be repeated for credit. Grade will either be S or U. By permission.

LAJ 700. Master's Thesis, Project, Study, or Portfolio (1 - 5). Designed to credit and record supervised study for the master's thesis, non-thesis project, studio project, public recital, and/or examination. May be repeated for credit. Grade will either be S or U. By permission.

MATHEMATICS DEPARTMENT

College of the Sciences
Ellensburg
Bouillon Hall, room 108

509-963-2103

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www.cwu.edu/~cwumath

See website for how mathematics may be
used for educational and career purposes.

Faculty and Staff

Chair

Aaron Montgomery, PhD

Professors

Stuart F. Boersma, PhD, differential geometry,
general relativity

Timothy Englund, PhD, group theory,
representation theory, statistics

Stephen P. Glasby, PhD, computational
algebra, representation theory

James D. Harper, PhD, harmonic analysis

Cen Tsong Lin, PhD, probability and
mathematical statistics, actuarial science

Mark Oursland, PhD, mathematics education

Associate Professors

Yvonne Chueh, PhD, actuarial science,
statistics

W. Dan Curtis, PhD, applied mathematics

Jonathan Fassett, PhD, topology, dynamical
systems

Michael Lundin, PhD, mathematics education

Aaron Montgomery, PhD, topology, algebra

Teri Willard, PhD, mathematics education

Staff

Debbie Thomas, secretary

Master's of Arts for Teachers, Mathematics

Program Coordinator

Mike Lundin

Bouillon Hall, room 108D

The master of arts for Mathematics Teaching Program has been structured mainly for middle school and high school mathematics teachers. It also may prepare a student for community college teaching and for advanced study in mathematics education. Sequencing of the required coursework is minimal and makes it possible in most cases to complete all the requirements for the degree in three consecutive summer sessions.

Admission Requirements: In addition to general regulations for admission to master's programs, the department prefers that a student has earned a baccalaureate degree with a major in mathematics or equivalent from an accredited college or university. A student with a baccalaureate degree with a major other than mathematics may be admitted to the graduate program upon

the recommendation and permission of the chair of the mathematics department. Any deficiencies for regular admission must be removed during the first year of graduate study.

Applicants should have one year of teaching experience certified by an appropriate school official.

Program: The student shall complete at least 46 credits as outlined in an approved course of study filed with the Office of Graduate Studies and Research.

Required Courses

Committee-approved electives	6-9
MATH 505 - Proof Writing	1
MATH 506 - Technology for Teaching Mathematics	1
MATH 510 - Games of Chance	3
MATH 522 - Modern Programs in Mathematics	2
MATH 523 - Math Methods for Jr. High School Credits: (2)	
MATH 524 - Math Methods for High School	2
MATH 526 - Research Methods in Mathematics Education	4
MATH 527 - Advanced Statistical Methods	4
MATH 550 - Transformational Geometry	3
MATH 562 - Modern Algebra for Teachers	3
MATH 566 - Matrices and Their Applications	3
MATH 570 - Calculus for Secondary Teachers	3
MATH 572 - Elementary Real Analysis	3
MATH 700 - Master's Thesis, Project Study, and/or Examination	3-6

Total Credits: 46

Project, Thesis

The choice among a written report, field study, or other project, or a formal research problem in mathematics or mathematics education which results in a thesis based upon the student's goals, in close consultation with the student's graduate committee.

Mathematics Courses

MATH 505. Proof Writing (1). Review the essentials of mathematical proofs and how to write proofs for mathematical understanding. May be repeated up to 3 credits.

MATH 506. Technology for Teaching Mathematics (1). Methods of appropriate use of technology for teaching mathematics. May be repeated up to 3 credits.

MATH 510. Games of Chance (3). Requiring only the fundamental ideas of basic probability, this course applies and investigates the popular casino games of chance, gambling systems and strategies, the "law of averages," cheating, and the "Gambler's Ruin." Offered in summers only.

MATH 515. Probability and Statistics for Elementary School Teachers (2). Concepts and methods of probability and statistics as

used in the elementary classroom. Offered in summers only.

MATH 522. Modern Programs in Mathematics (2). Offered in summers only. Prerequisite: one year of teaching experience in mathematics.

MATH 523. Math Methods for Jr. High School (2). Problems and methods associated with the teaching of mathematics in the junior high or middle school. Offered in summers only. Prerequisite: one year of teaching experience in mathematics.

MATH 524. Math Methods for High School (2). Problems and methods associated with the teaching of mathematics in high school. Offered in summers only. Prerequisite: one year of teaching experience in mathematics.

MATH 526. Research Design in Mathematics Education (4). This course is an introduction to current research practices in mathematical education. It focuses on evaluating the designs of existent research as well as developing designs for student research leading to student projects and theses. Prerequisite: MATH 311.

MATH 527. Advanced Statistical Analysis (4). This course is an introduction to statistical methods used in current research practices in mathematics education. This course focuses on interpreting statistics presented in extant research as well as using computer software to generate statistics. Prerequisite: MATH 526.

MATH 530. Mathematical Recreations (3). An examination of selected examples of puzzles, paradoxes, brain teasers, and parlor games, and a brief investigation of the mathematical principles on which they are based. Primarily for the experienced junior and senior high school mathematics teacher seeking motivational materials. Offered in summers only.

MATH 532. Discrete Dynamical Systems (4). Introduction to discrete dynamical systems for K-12 mathematics educators, fixed points, periodic points, period doubling route to chaos, Julia sets, and the Mandelbrot set. Students will explore ways in which dynamical systems can be included in the K-12 mathematics curriculum.

MATH 535. Adventures Among the Numbers (3). Tricks, puzzles, games, and patterns involving the ordinary whole numbers of arithmetic; suitable for stimulating interest in the basic properties of numbers and the operations of arithmetic. Intended primarily for teachers in the higher elementary grades as well as secondary school teachers. Offered in summers only. Prerequisite: MATH 430 or permission.

MATH 550. Transformational Geometry (3). A study of the group of transformations of the plane: reflections, rotations, translations, glide reflections. As time permits, the properties of dilation's and affinities also will be discussed. Offered in summers only. Prerequisite: MATH 455.

MATH 553. Intuitive Geometry for Teachers of Grades 4-8 (3). Prerequisite: one year of teaching experience.

MATH 562. Modern Algebra for Teachers (3). Reexamination of the fundamental algebraic structures: groups, rings, integral domains, and fields, with examples and applications. Offered in summers only. Prerequisites: MATH 360 and one year of teaching experience.

MATH 565. Applied Numerical Methods I (5). Course covers the following list of topics: numerical stability, iterative methods, canonical forms of matrices, singular value decomposition, computation of eigenvalues and eigenvectors, dominant eigenvalue. Prerequisite: MATH 173, MATH 265, and MATH 330.

MATH 566. Matrices and Their Applications (3). Matrix algebra including finite Markov chains with applications to business, psychology, genetics, and learning models. Sociometric applications to conflict and dominance. Offered in summers only. Prerequisite: MATH 153.

MATH 567. Applied Numerical Methods II (5). Course covers the following list of topics: dominant eigenvalue, least square approximation and projections, discretization, well-posed problems, numerical solutions to ordinary differential equations (ODE's) interpolation, linear programming, and the simplex method. Prerequisite: MATH 173, MATH 265, and MATH 330.

MATH 570. Calculus for Secondary Teachers (3). A re-examination of the processes of differentiation and integration emphasizing their application to the natural, behavioral, social, and managerial sciences. Offered in summers only. Prerequisite: MATH 173 or equivalent and one year of teaching experience.

MATH 572. Elementary Real Analysis (3). Examines fundamental concepts of sets, sequences, limits, series, functions, continuity, and differentiability. Offered in summers only. Prerequisite: MATH 173 or equivalent and one year of teaching experience.

MATH 591. Workshop (1-6). No more than two workshops for a combined maximum of eight credits can be applied toward a master's program.

MATH 595. Graduate Research (1-10). May be repeated for credit. A maximum of five credits may count toward degree requirements. Grade will either be S or U. By permission.

MATH 596. Individual Study (1-6).

MATH 598. Special Topics (1-6).

MATH 599. Seminar (1-5).

MATH 700. Master's Thesis, Project Study, and/or Examination (1-6). Designed to credit and record supervised study for the master's thesis, non-thesis project, studio project, public recital, and/or examination. May be repeated up to six credits. Grade will either be S or U. By permission.

MUSIC DEPARTMENT

College of Arts and Humanities
Ellensburg
Music Building, room 144

509-963-1216

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www.cwu.edu/~music

See website for how these programs may be used for educational and career purposes.

Chair

Todd Shiver, DMA

Associate Chair

Chris Bruya, MM, jazz studies

Professors

Joseph Brooks, MM, clarinet, saxophone, woodwind methods
Larry D. Gookin, MM, bands, low brass, music education, conducting
Carrie Rehkopf-Michel, MM, violin, chamber music, Kairos String Quartet
John Michel, MM, cello, chamber music, pedagogy, Kairos String Quartet
Hal Ott, DM, flute, literature
John F. Pickett, DM, piano, literature, pedagogy
Vijay Singh, MAT, jazz studies, choir, voice
Jeffrey Snedeker, DMA, horn, brass methods, music history

Associate Professors

Mark Goodenberger, MM, percussion
John Harbaugh, MME, trumpet, jazz studies
Daniel Lipori, DMA, music history, bassoon, double reed methods
Bret Smith, PhD, music education, string pedagogy

Assistant Professors

Gayla Blaisdell, PhD, voice, opera
Nikolas Caoile, DMA, orchestra, conducting
Mark Lane, MM, music education, band
Elaine Ross, PhD, theory, composition
Gary Weidenaar, DMA, choir, conducting, music education

Lecturers

Tim Betts, MM, viola, theory, Kairos String Quartet
Tor Blaisdell, MM, voice
James Durkee, MM, guitar, music literature
Brent Hages, BM, oboe
Jon Hamar, MM, string bass
Sidney Nesselroad, DMA, voice
Heather Netz, MM, violin, music appreciation, Kairos String Quartet
John Neurohr, DMA, trombone, theory
Curtis Peacock, MM, tuba, euphonium, history of jazz
Barbara Pickett, MM, piano, class piano
Maria Roditeleva-Wibe, PhD, music history, theory, world music
Florie Rothenberg, DMA, clarinet
Melissa Schiel, DMA, voice
Leslie Schneider, MM, music education
Emelie Spencer, MM, voice, theory

Staff

Marcie Brown, program assistant
Star Heger, fiscal specialist
Allen Larsen, hall manager, audio technician, web manager
Harry Whitaker, piano technician
Tinja Wyman, office supervisor

Master of Music

The master of music curriculum is designed to provide opportunity for depth of study in an area of specialization, to increase professional competence in teaching and performance, and to prepare for continued, self-directed study or advanced graduate study.

Program: All candidates shall complete at least 45 credits as delineated in an approved course of study filed with the Office of Graduate Studies and Research. The major fields are:

1. Composition
2. Conducting
3. Performance
4. Performance-pedagogy
5. Music education

At least one-third of the total credit requirements must be in the major field, including six credits of thesis, one-third in other music courses, including three credits of ensemble and three credits of MUS 521 (Methods of Musical Research), and one-third may be elective courses in supportive areas from any discipline. At least 25 credits applied toward the degree must be at the 500 level or above. Students are expected to plan their program with a graduate advisor and committee.

After meeting minimum criteria for admission into a specific master's degree for each major, candidates must take diagnostic examinations in music history and music theory at the beginning of their first quarter of graduate study. In addition, non-performance majors must also demonstrate a level of musicianship equal to what would be considered appropriate for 300-level study. Students may demonstrate this level of musicianship in several ways, appropriate to the desired degree program or deemed appropriate by the evaluating committee after consultation with the student. Examples include a performance audition in an applied area or conducting (live or taped), a videotape or audiotape of a performance directed by the applicant, or a videotape of a music lesson or class taught by the applicant. Deficiencies in any of the above will be delineated to the student by the faculty along with recommendations for remediation. These recommendations may take the form of, but are not limited to, coursework, selected readings, and applied study. It is the candidate's responsibility to demonstrate the successful satisfaction of any deficiency. No master of music degree will be awarded until these appraisals have been passed. The music department recommends that the candidate

attempt to satisfy these entrance appraisals at the earliest opportunity.

Admission Requirements: In addition to general regulations for admission to the master's program, the following requirements apply to the master of music degree:

1. Candidates must have a bachelor's degree from an accredited college with a major in music or its equivalent.
2. Acceptance into a specific major field will require an evaluation of a candidate's ability conducted by a committee of three faculty members, two of whom will be from the particular major field. Normally one of these two will serve as the candidate's graduate advisor, and the committee as a whole may serve as the candidate's graduate committee. Admission into the institution does not assure admission into a music program. Therefore, candidates should complete the specific requirements for major fields before arrival on campus, but no later than the end of the first quarter.
3. For admission requirements to each field, see section one in each field entry under specific requirements for major fields.

General Requirements

Courses in major field, including

MUS 700 - Thesis15-21

Other studies in music, including

three credits in ensemble courses12-15

Elective courses in supportive areas6-15

MUS 521 - Methods of Musical Research ... 3

Total Credits: 45

Specific Requirements for Major Fields:

A. Composition

1. Admission to this program will be based upon an evaluation of appropriate compositions submitted by the student.
2. Courses in the major field: select from
MUS 444 - Canon and Fugue (3)
MUS 522 - Advanced Orchestration (3)
MUS 523 - Advanced Composition (3)
MUS 545 - Modern Counterpoint (3)
MUS 584 - Choral Composition and Arranging I (3)
MUS 599 - Seminar Credits: (1-5)
MUS 613 - Graduate Seminar in Music: Music Theory/Composition (1-3)
3. Other studies in music should include a minimum of 3 credits in history or literature and 3 credits in theory.
4. The thesis (MUS 700, 6 credits) will be an original composition of a level appropriate as a final project and a covering paper. Normally this paper will be based on the thesis composition. MUS 700 - Master's Thesis, Project Study and/or Examination (1-6)

B. Conducting

1. Admission to this program will require faculty evaluation of evidence of an

appropriate level of musicianship, satisfied in one of the following ways:

- a) A performance or conducting audition
 - b) A videotape of a performance directed by the applicant
 - c) Other evidence deemed appropriate in consultation with the evaluating committee
2. This program will require a one-year residency prior to graduation. Candidates will work under the direct supervision of one of the three conductors of the major performance ensembles (Orchestra, Wind Ensemble, Choir) during each quarter in residence. The students will be encouraged to work in all three areas whenever possible.
 3. Courses in the major field: Select from
MUS 440 - Analytical Techniques II (3)
MUS 540 - Choral Interpretation and Techniques (3)
MUS 541 - Advanced Conducting (3)
MUS 585 - Band Arranging II (3)
MUS 599 - Seminar (1-5)
MUS 615 - Graduate Seminar in Music: Conducting (1-3)
 4. Other studies in music should include a minimum of 3 credits in history or literature and 3 credits in theory.
 5. As a thesis (MUS 700, 6 credits) the student will conduct a public performance and submit a covering paper. Normally this paper will be based on the works conducted. MUS 700 - Master's Thesis, Project Study and/or Examination (1-6)

C. Performance

1. Admission to this program will be based upon an evaluation of an audition equivalent in scope to at least one-half of a full baccalaureate recital.
2. Courses in the major field:
A minimum of 12 credits of major applied instruction, MUS 664, in addition to the six credits of thesis study. Vocal performance majors must also have MUS 536 plus one year each of college level French and German. Other selections:
MUS 561 - Opera Workshop (1-2)
MUS 592 - Accompanying Practicum (1-3)
MUS 614 - Graduate Seminar in Music: Performance (1-3)
3. Other studies in music should include a minimum of 3 credits in history or literature and 3 credits in theory.
4. As a thesis (MUS 700, 6 credits) the student will present a full public recital and submit a covering paper. Normally this paper will be based on the works presented on the recital. MUS 700 - Master's Thesis, Project Study and/or Examination (1-6)

D. Performance-Pedagogy

1. Admission to this program will be based upon an evaluation of an audition equivalent in scope to at least

one-half of a full baccalaureate recital, and evaluation of a paper written for an undergraduate class in the field of music instruction.

2. Courses in the major field:
A minimum of 12 credits of individual instruction, MUS 664, in addition to the 6 credits of thesis study; 3 credits in MUS 425. Other courses as advised. Additional requirements for vocal majors as in the performance major.
MUS 425 - Studio Pedagogy (3)
MUS 664 - Major Applied Area (Individual Instruction) (1, 2, 4)
3. Other studies in music should include a minimum of 3 credits in history or literature and 3 credits in theory.
4. As a thesis (MUS 700, 6 credits) the student will present either:
 - a) A demonstration project, research paper, or a covering paper based on the project, and one-half of a public recital OR
 - b) A demonstration project, one-half of a public recital and a covering paper based on the works presented on the recital OR
 - c) A research paper and one-half of a public recital
MUS 700 - Master's Thesis, Project Study and/or Examination (1-6)

E. Music Education

1. Admission to this program will be based upon:
 - a) Evaluation of an undergraduate paper in the field of music education
 - b) The completion of a least one year of successful public school music instruction (under a special request made by the entering student, this requirement may be waived by the music education committee)
 - c) Evidence of an appropriate level of musicianship, satisfied in one of the following ways:
 - 1) A performance audition
 - 2) A videotape or audiotape of a performance directed by the applicant
 - 3) A videotape of a music lesson or class taught by the applicant
 - 4) Other evidence deemed appropriate in consultation with the evaluating committee
2. Courses in the major field should include those that enable students to understand and evaluate research in music education: select from
MUS 425 - Studio Pedagogy (3)
MUS 520 - Methods of Teaching Theory (3)
MUS 582 - Instrumental Administration Techniques (3)
MUS 583 - Supervision of Public School Music (3)
MUS 599 - Seminar (1-5)
MUS 611 - Graduate Seminar in Music: Music Education (1-3)

- Other studies in music should include a minimum of 3 credits in history or literature and 3 credits in theory.
 - As a thesis (MUS 700, 6 credits), the student will present either
 - A research thesis
 - OR
 - A demonstration, analytical, or creative project, and a covering paper based on the project
- MUS 700 - Master's Thesis, Project Study and/or Examination (1-6)

Final Examination

All students must pass a comprehensive final examination, oral, or written, and oral, based on their coursework and the thesis. Before the final examination can be scheduled, students must have:

- Satisfied any recommendations made to correct deficiencies revealed by the diagnostic exams
- Completed and submitted the written portion of the thesis

According to university policy, an application for the final examination, approved by the student's graduate committee, must be filed in the graduate office at least three weeks in advance of the examination. This application has several specific parts to it, so early acquisition and completion of this form is strongly recommended. Consult the graduate office for any and all appropriate deadline dates.

For more details about graduate studies in music, see the Department of Music's Handbook for Graduate Studies, available online at the department website: www.cwu.edu/~music.

Graduate Cognate in Music

A graduate cognate in music lends more coherence to the cluster of courses students take beyond those required for the degree and offers more meaningful recognition for extra courses taken beyond the degree requirements.

Admission

Students who have been accepted into a graduate major in music may apply for admission to a graduate cognate in music after they arrive on campus. Admission to a cognate requires the following, in order:

- Acceptance for admission to CWU graduate program
- Acceptance for admission to a major graduate program in music (by audition/interview)
- Acceptance for admission to the graduate cognate by separate audition/interview. This interview/admission will normally be conducted during the first quarter of enrollment or later. It is not part of the primary admission process so as to avoid confusion of initial advising and enrollment. Acceptance for admission is also dependent on space available in the area, to be determined by faculty in that area.

Guidelines

- Students are allowed one graduate cognate in music.
- Students accepted into a cognate will have an assigned advisor, but will not need to form a graduate committee for the cognate final project or recital. This advisor will be responsible for evaluating the culminating recital or project and will also be a member of the student's graduate committee.
- Courses counted for the cognate must also be indicated on the course of study form, separate from general, specific and elective curricular requirements.
- Material and coursework covered in the cognate would be eligible for inclusion in the final examination, as approved by student's major graduate committee chair.

Content

Students must take a minimum of 12 credits of courses approved by the cognate advisor in consultation with the major advisor, normally taken from those that apply to the corresponding major area, plus 1 credit of MUS 600, Graduate Cognate Project in the quarter the required culminating work is presented, above the 45 credits required for the master's degree (totaling a minimum of 58 for the degree with major and cognate).

Subject Areas

Composition
Conducting
Performance
Performance-Pedagogy
Music Education
Music Theory
Music History

Individual Subject Area Requirements:

Composition

Students receive guided study in their own musical composition, culminating in the presentation of a musical composition or project in the field of composition.

MUS 523 - Advanced Composition 3
MUS 600 - Graduate Cognate Project 1
Approved Composition/Theory 6

Normally, courses would be chosen from:

MUS 444 - Canon and Fugue (3)
MUS 522 - Advanced Orchestration (3)
MUS 523 - Advanced Composition (3)
MUS 547 - Electronic Music
Composition (3)
MUS 584 - Choral Composition and Arranging I (3)
MUS 610 - Graduate Seminar in Music: Composer (1-3)
MUS 613 - Graduate Seminar in Music: Music Theory/Composition (1-3)

Conducting

Students are provided opportunities to hone their conducting skills, culminating in a project or public performance demonstrating progress in the student's conducting experience.

Orchestration or arranging courses 3
MUS 600 - Graduate Cognate Project 1
Approved Conducting classes 9

Student must take 3 credits of MUS 541. Normally, courses would be chosen from:
MUS 440 - Analytical Techniques II (3)
MUS 522 - Advanced Orchestration (3)
MUS 540 - Choral Interpretation and Techniques (3)
MUS 541 - Advanced Conducting (3)
MUS 584 - Choral Composition and Arranging I (3)
MUS 615 - Graduate Seminar in Music: Conducting (1-3)

Performance

Students receive opportunities through applied study and performance experience to improve their performance skills on a primary instrument or voice, culminating in a public performance.

MUS 426 - Studio Literature 3
Ensemble 1
(Note: this credit is in addition to 3 credits required in all master's degrees)

MUS 600 - Graduate Cognate Project 1
MUS 664 - Major Applied Area (Individual Instruction) Credits: (1, 2, 4) 8

Performance-Pedagogy

Students receive opportunities to improve performance skills with additional emphasis on the pedagogy of the primary instrument or voice, culminating in an appropriate performance, project, or combination in lecture/demonstration.

MUS 425 - Studio Pedagogy 3
Ensemble 1
(Note: this credit is in addition to 3 credits required in all master's degrees)

MUS 600 - Graduate Cognate Project 1
MUS 664 - Major Applied Area (Individual Instruction) Credits: (1, 2, 4) 8

Music Education

Students are provided opportunities to study and conduct research in the field of music education in greater depth, culminating in an appropriate written document or project.

MUS 600 - Graduate Cognate Project 1
Approved Music Education classes 12
Normally, courses would be chosen from:
MUS 560 - Instructional Development in Music Education (3)
MUS 582 - Instrumental Administration Techniques (3)
MUS 611 - Graduate Seminar in Music: Music Education Credits: (1-3)

Music Theory

Students are provided opportunities to study and conduct research in the field of music theory in greater depth, culminating in an appropriate written document or project.

MUS 600 - Graduate Cognate Project 1
Approved Music Theory classes 12
Note: These credits are in addition to 3 credits required in all master's degrees.

Normally, courses would be chosen from:
MUS 444 - Canon and Fugue (3)

- MUS 520 - Methods of Teaching Theory (3)
 MUS 522 - Advanced Orchestration (3)
 MUS 547 - Electronic Music Composition (3)
 MUS 584 - Choral Composition and Arranging I (3)
 MUS 610 - Graduate Seminar in Music: Composer Credits: (1-3)
 MUS 613 - Graduate Seminar in Music: Music Theory / Composition (1-3)

Music History

Students are provided opportunities to study and conduct research in the field of music history in greater depth, culminating in an appropriate written document or project.

- MUS 600 - Graduate Cognate Project 1
 Approved Music History classes 12
 Normally courses would be chosen from:
 MUS 570 - History of Vocal Art (3)
 MUS 571 - History of Orchestra Music (3)
 MUS 572 - Music in the 20th Century (3)
 MUS 573 - History of Opera (3)
 MUS 575 - History of Chamber Music (3)
 MUS 576 - History of Choral Music (3)
 MUS 579 - Aesthetics of Music (3)
 MUS 610 - Graduate Seminar in Music: Composer (1-3)
 MUS 612 - Graduate Seminar in Music: Music History / Literature (1-3)

Music Courses

- MUS 510. Vocal Jazz Choir** (1). An ensemble specializing in performance of repertoire from jazz choir tradition established in the Northwest and beyond. Limited to SATB singers and rhythm section instruments. May be repeated for up to 6 credits. For graduate students. Must attend all



scheduled rehearsals and performances. May be repeated for credit. By permission.

- MUS 513. Flute Choir** (1). Two hours of rehearsal per week plus all scheduled rehearsals and performances. For graduate students. May be repeated for credit. Prerequisites: previous experience in flute performance.

MUS 514. Brass Choir (1). For graduate students. See MUS 214 for description. May be repeated for credit. By permission.

MUS 515. Chamber Orchestra (1). By permission of instructor. For graduate students. See MUS 215 for description. May be repeated for credit.

MUS 517. Chamber Music Ensemble (1). One hour coaching plus two hours rehearsal per week plus all scheduled rehearsals and performances. Instruction available in performance areas A, C-E, H, L. May be repeated for credit. By permission.

MUS 520. Methods of Teaching Theory (3). Permission of instructor.

MUS 521. Methods of Musical Research (3). Learning to formulate a logical approach to the process of identification, location, and evaluation of materials available to the music researcher and developing expertise in technical writing about music.

MUS 522. Advanced Orchestration (3). Study of various scores and treatises. Individual projects. May be repeated for credit. Prerequisite: MUS 422C.

MUS 523. Advanced Composition (3). Selected topics in composition. May be repeated for credit. Prerequisite: MUS 420.

MUS 529. Percussion Ensemble (1). For graduate students. See MUS 229 for description. May be repeated for credit. By permission.

MUS 532. Big Band (1). Must attend all scheduled rehearsals and performances. For graduate students. See MUS 232 for description. May be repeated for credit. By permission.

MUS 535. Laboratory Choir (1). For graduate students. Two hours of rehearsal per week plus all scheduled rehearsals and performances. May be repeated for credit. By permission.

MUS 536. Diction in Singing Foreign Languages (3). Italian, French, and German. By permission.

MUS 541. Advanced Conducting (3). Emphasis upon the conducting of advanced literature in the major performance media. May be repeated for credit. Prerequisite: MUS 342.

MUS 558. Survey of Solo Vocal Literature (3). All periods, performance or listening. Background, stylistic traits, and performance concepts of the Art Song. By permission.

MUS 561. Opera Workshop (1-2). A class leading to the performance of scenes or single acts from opera. By permission. May be repeated for credit.

MUS 562. Opera Production (1-3). A class leading to performance of a complete opera. MUS 462 and MUS 562 are equivalent

courses; students may not receive credit for both. May be repeated for credit.

MUS 564. Major Applied Study (1, 2, 4). One half-hour lesson per week for 2 credits; one hour lesson per week for 4 credits; 1 credit if offered one term only during summer session. All students enrolled in lessons will register for the weekly recital hour. Instruction available in performance areas A-H. Open to non-performance and non-performance pedagogy majors. May be repeated for credit. By permission.

MUS 566. Wind Ensemble (1-2). Open to students with demonstrated proficiency on band instruments by audition or permission of the instructor. Five hours rehearsal per week plus all scheduled rehearsals and performances. For graduate students. Two credits normally offered during academic year and 1 credit if offered one term only during summer session. For graduate students. May be repeated for credit.

MUS 567. University Choir (1-2). See MUS 267 for description. 2 credits normally offered during academic year and 1 credit if offered one term only during summer session. For graduate students. May be repeated for credit.

MUS 568. Chamber Choir (2). See MUS 268 for complete description. May be repeated for credit.

MUS 571. History of Orchestra Music (3). Forms and styles from the 17th to 20th centuries.

MUS 572. Music in the 20th Century (3). Forms and styles relevant to 20th century music.

MUS 573. History of Opera (3).

MUS 575. History of Chamber Music (3). Forms and styles from the late 16th century to the present.

MUS 576. History of Choral Music (3). Forms and styles from medieval to modern.

MUS 577. Orchestra (1-2). Open to all students proficient on orchestral instruments by permission of director. Five hours rehearsal per week plus all scheduled rehearsals and performances. 2 credits normally offered during academic year and 1 credit if offered one term only during summer session. For graduate students. May be repeated for credit.

MUS 579. Aesthetics of Music (3). Examination of various perspectives in the meaning and value of music.

MUS 587. Marching and Concert Band (1-2). Fall quarter only. See MUS 287 for description. For graduate students. May be repeated for credit.

MUS 588. Symphonic Band (2). See MUS 288 for description. For graduate students. May be repeated for credit.

MUS 592. Accompanying Practicum (1-3). By assignment of instructor. Minimum three hours rehearsal weekly per credit plus performances. For graduate students. May be repeated for credit.

MUS 595. Graduate Research (2). For students doing preliminary or continuing thesis/project research. May be repeated

once for credit. May not be included in the course of study or counted toward the master's degree. May be repeated for credit. Grade will either be S or U. By permission.

MUS 596. Individual Study (1-6).

MUS 598. Special Topics (1-6).

MUS 599. Seminar (1-5).

MUS 600. Graduate Cognate Project (1).

Students in approved graduate cognates in music must register for this course in the quarter they complete an approved culminating project. See specific cognate descriptions for details. Grade will either be S or U.

MUS 610. Graduate Seminar in Music:

Composer (1-3). Study of a particular composer's life and works. Offered according to needs of students and faculty availability. May be repeated up to 3 credits. Prerequisite: graduate standing.

MUS 611. Graduate Seminar in Music:

Music Education (1-3). Seminar in music education, offered according to needs of students and faculty availability. May be repeated up to 3 credits. Prerequisites: graduate standing.

MUS 612. Graduate Seminar in Music:

Music History/Literature (1-3). Seminar in music history and literature, offered according to needs of students and faculty availability. May be repeated up to 3 credits. Prerequisites: graduate standing and permission of instructor.

MUS 613. Graduate Seminar in Music:

Music Theory/Composition (1-3). Seminar in music theory and/or composition, offered according to needs of students and faculty availability. May be repeated for up to 3 credits. Prerequisites: graduate standing.

MUS 614. Graduate Seminar in Music:

Performance (1-3). Seminar in performance studies, offered according to needs of students and faculty availability. May not be substituted for applied study. May be repeated up to 3 credits. Prerequisites: graduate standing.

MUS 615. Graduate Seminar in Music:

Conducting (1-3). Seminar in conducting, offered according to needs of students and faculty availability. May be repeated up to 3 credits. Prerequisites: graduate standing.

MUS 664. Major Applied Area (Individual Instruction) (1, 2, 4). One half-hour lesson

per week for 2 credits; one hour lesson per week for 4 credits; 1 credit if offered one term only during summer session. All students enrolled in performance will register for the weekly recital hour. Instruction available in performance areas A-H. Intended for performance and performance-pedagogy majors. May be repeated for credit. By permission.

MUS 700. Master's Thesis, Project Study, and/or Examination (1-6). Designed to credit and record supervised study for the master's thesis, non-thesis project, studio project, public recital, and/or examination. May be repeated up to 6 credits. Grade will either be S or U. By permission.

NUTRITION, EXERCISE, AND HEALTH SCIENCES DEPARTMENT

College of Education and Professional Studies
Ellensburg

Dorothy Purser Hall, room 101

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www.cwu.edu/~nehs

See website for how these programs may be used for educational and career purposes.

Faculty and Staff

Chair

Vincent M. Nethery, PhD

Graduate Program Director

Leonardo J. D'Acquisto, EdD

Professors

Ethan R. Bergman, PhD, RD, dietetics, sports nutrition

Leonardo J. D'Acquisto, EdD, sport

physiology, kinesiology, human anatomy

David L. Gee, PhD, nutrition & metabolism,

nutrition and chronic diseases, sports

nutrition

Robert McGowan, PhD, clinical and exercise-

sport psychology

Vincent M. Nethery, PhD, clinical physiology,

sport physiology, environmental

physiology, human anatomy.

Associate Professors

Timothy R. Burnham, PhD, clinical physiology, sport physiology, human anatomy

Susan Hawk, PhD, RD, dietetics, clinical nutrition

Keith Monosky, MPM, EMT-P, emergency

medical services management, health policy

Harry Papadopoulos, PhD, clinical

physiology, sport physiology, physical

activity interventions

Assistant Professors

Susan Adams, MS, RD, food service management

Virginia Bennett, PhD, RD, cultural nutrition, developmental nutrition

Linda Cashman, MS, RD, dietetics

Kelly Kerr-Pritchett, PhD, RD sports nutrition, clinical nutrition, eating disorders

Robert Pritchett, PhD, sport physiology, environmental physiology

Emeritus Professor

Robert McGowan, PhD, clinical and exercise sport psychology

Staff

Rhonda Busch-Gehlen, assistant to the chair

Lucinda Engel, instructional classroom support technician food science

Edith Fowler, office manager

Lori Hauser, EMS-Paramedicine, office assistant

Department Information

The graduate programs in Nutrition, Exercise, and Health Sciences are designed to provide knowledge and expertise for students intending to pursue higher-level graduate study in doctoral or professional programs, seeking a terminal degree for entry-level positions in a variety of private and public settings, as well as for positions at community colleges and other tertiary levels. Human functioning is the overriding theme of all curricula offerings. The master of science degrees offered by NEHS require completion of a minimum of 45 credits as outlined in an approved course of study filed with the Office of Graduate Studies and Research. The course of study is structured in consultation with the student's academic advisor and is approved by the department graduate program director. The specifics on the course of study depend on the degree program, and include both required and department-approved elective courses.

Admission

Applicants must first meet the general requirements for graduate study as determined by the Office of Graduate Studies and Research, and then the specific requirements of their selected program within the Department of Nutrition, Exercise, and Health Sciences (see individual programs). Conditional or probationary admission may be granted in certain circumstances.

Master of Science – Exercise Science

The master of science degree in Exercise Science prepares students for further study at the doctoral or professional level, careers in higher education, clinical settings, and sport sciences. Prospective candidates holding a degree in a relevant major, including exercise science, biology, chemistry, nutrition, or health sciences, are encouraged to apply. Courses encompassing anatomy, physiology, exercise physiology, kinesiology, mechanics, biology, chemistry, statistics, and nutrition are strongly recommended at the undergraduate level. The Graduate Record Examination (GRE) and a scientific writing example, per department requirements, are required.

Required Courses

EXSC 551 - Advanced Physiology of Exercise	
I: Metabolism and Skeletal Muscle	4
EXSC 552 - Advanced Physiology of Exercise	
II: Pulmonary and Cardiovascular Systems	4
EXSC 553 - Laboratory Techniques in Stress Physiology	5
EXSC 557 - Research Methods and Design in Exercise and Nutritional Science	4

EXSC 560 - Inferential Statistics in Exercise and Nutritional Sciences	4
EXSC 564 - Gross Human Anatomy	2
EXSC 700 - Master's Thesis, Project Study and/or Examination	6

Electives

(12 credits minimum from following courses)

EXSC 555 - Environmental Stress and Human Performance	3
EXSC 556 - Ergogenic Aids and Human Performance	3
EXSC 559 - Applied Kinesiology	3
EXSC 562 - Clinical Exercise Physiology	3
EXSC 595 - Graduate Research	1-6
(Other electives by advisement)	

Total Credits: 45

Master of Science Nutrition

The master of science degree in nutrition provides opportunities for students to concentrate at the master's level in the study of nutrition. The goal of the program is to prepare students to enter the workforce as specialists in nutrition or to prepare them to continue their graduate education at the doctoral level. The program offers small classes, the opportunity to work closely with faculty, an excellent learning environment, and an opportunity to conduct original research. Graduate students in nutrition have had their master's thesis consistently presented at national conferences including those of the American Dietetic Association and the American College of Sports Medicine.

Admission into the MS in nutrition is selective. Applicants are expected to have an undergraduate degree in nutrition or related fields. However, students with undergraduate degrees in biology and health science areas are encouraged to apply but can expect to take a number of undergraduate courses as part of their course load. All applicants to the MS in nutrition are required to take the Graduate Record Examination (GRE).

Required Courses

EXSC 557 - Research Methods and Design in Exercise and Nutritional Sciences	4
EXSC 560 - Inferential Statistics in Exercise and Nutritional Sciences	4
NUTR 543 - Advanced Nutrition and Biochemistry	3
NUTR 545 - Advanced Studies in Developmental Nutrition	4
NUTR 547 - Nutrition Update	3
NUTR 700- Master's Theses (or option)	6
Department-approved Electives	21

Total Credits: 45

Exercise Science Courses

EXSC 551. Advanced Physiology of Exercise I: Metabolism and Skeletal Muscle (4). Application of physiological principles to the regulation of cellular and organic processes during exercise. Regulation, control, and adaptation of metabolic pathways. Response and adaptation of

skeletal muscle to both acute and chronic exercise. Prerequisite: admission to the NEHS graduate program.

EXSC 552. Advanced Physiology of Exercise II: Pulmonary Cardiovascular Systems (4). Responses and adaptations of cardiovascular and pulmonary systems to acute and chronic exercise. Neural and humoral mechanisms of control during exercise. Prerequisite: EXSC 551.

EXSC 553. Laboratory Techniques in Stress Physiology (5). Techniques for the assessment of human physiological characteristics during rest and exercise stress. Two hours lecture and two hours lab per week. Prerequisites: EXSC 551 and 552.

EXSC 555. Environmental Stress and Human Performance (3). Influence of a variety of environmental factors on human performance. Adaptations to environmental stressors through constant exposure. Prerequisites: EXSC 551 and 552.

EXSC 556. Ergogenic Aids and Human Performance (3). Use of physical, physiological, pharmacological, and psychological aids to improve human performance. Prerequisites: EXSC 551 and 552.

EXSC 557. Research Methods and Design in Exercise and Nutritional Science (4). Concepts of the scientific research process including selection of a research topic, literature review, project methods and design, hypothesis testing, and research proposals for exercise and nutritional science will be studied. Prerequisite: EXSC 560.

EXSC 559. Applied Kinesiology (3). Study of human movement from a multidisciplinary perspective. Disciplines may include anthropology, sociology, psychology, economics, medicine, exercise physiology, biomechanics, nutrition, motor learning, motor development, and physical education. Prerequisites: EXSC 551 and EXSC 552.

EXSC 560. Inferential Statistics in Exercise and Nutritional Sciences (4). Concepts of quantitative procedures including correlation, regression, t-tests, and ANOVA's up to two-way will be studied with results statements generated using data sets drawn from research in these disciplines. EXSC 560 and HPE 560 are equivalent course, students may not receive credit for both.

EXSC 562. Clinical Exercise Physiology (3). This course introduces students to exercise principles and applications as they relate to individuals with chronic diseases and disabilities. Prerequisites: EXSC 551 or EXSC 552.

EXSC 564. Gross Human Anatomy: Cadaver Dissection (1). Gross anatomy dissection of cadaver. One lab session weekly. Can be repeated for up to 2 credits during the same quarter. May be repeated for credit.

EXSC 590. Cooperative Education (1-6). An individualized, contracted field experience with business, industry, government, or

social service agencies. The contractual arrangement involves a student learning plan, cooperating employer supervision, and faculty coordination. Grade will either be S or U. By permission.

EXSC 595. Graduate Research (1-6).

Development and investigation of an approved laboratory or field research problem. Maximum of 6 credits may be included in course of study for the master's degree.

EXSC 596. Individual Study (1-6).

EXSC 598. Special Topics (1-5).

EXSC 599. Seminar (1-5).

EXSC 700. Master's Thesis, Project Study, and/or Examination (1-6). Designed to credit and record supervised study for the master's thesis, non-thesis project, and/or examination. May be repeated up to 6 credits. Grade will either be S or U. By permission.

Health, Human Performance, and Nutrition Courses

HHPN 598. Special Topics (1-5).

HHPN 599. Seminar (1-5).

Nutrition Courses

NUTR 541. Applications in Dietetics (5).

Concepts in clinical and community nutrition as well as food service management and administration. Interviewing and communication; assessing clients for nutritional risk; production and procurement practices; management functions and computer and research applications.

NUTR 543. Advanced Nutritional Biochemistry (3).

Advanced study of the effects of macro and micro-nutrients on human metabolism. Prerequisite: NUTR 443.

NUTR 545. Advanced Studies in Developmental Nutrition (4).

Review of effects of nutrition on growth and development. Nutritional assessment and evaluation of individuals and programs. Current issues in nutrition policies and programs with emphasis on early childhood. Prerequisite: NUTR 345

NUTR 547. Nutrition Update (3). Recent advances in nutrition research. Advanced study of selected nutrition problems. With permission, may repeat every other year. Prerequisite: NUTR 245.

NUTR 595. Graduate Research (1-10).

Development and investigation of an approved laboratory or field research problem. May be repeated. Maximum of 6 credits may be included in MS course of study. Grade will either be S or U. By permission.

NUTR 596. Individual Study (1-6).

NUTR 598. Special Topics (1-5).

NUTR 700. Master's Thesis (1-6). Designed to credit and record supervised study for the master's thesis. May be repeated for credit. Grade will either be S or U. By permission.

PHILOSOPHY AND RELIGIOUS STUDIES DEPARTMENT

College of Arts and Humanities
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Language and Literature Building, room 337

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www.cwu.edu/~philo/index.html

See website for how these programs may be used for educational and career purposes.

Faculty and Staff Chair

Heidi M. Szpek, PhD

Professor

Chenyang Li, PhD, (on leave) Asian philosophy, comparative philosophy, ethics, social and political philosophy

Associate Professors

Cynthia Coe, PhD, 20th century continental philosophy, feminist philosophy, director of women studies

Jeffrey Dippmann, PhD, world religions, Chinese Buddhism and Daoism

Heidi Szpek, PhD, Hebrew Bible, Western religious traditions, Judaism, Holocaust studies, World Religions

Assistant Professors

Matthew Altman, PhD, early modern philosophy (Kant), 19th century philosophy, ethics and applied ethics, social and political philosophy, philosophy of art, director William O. Douglas Honors College

Gary Bartlett, PhD, philosophy of mind, cognitive science, epistemology

Emeritus Professors

Raeburne S. Heimbeck, PhD

Webster F. Hood, PhD

Chester Z. Keller, PhD

Staff

Jan Farrell, secretary senior

Department Information

The Department of Philosophy and Religious Studies does not offer graduate degrees.

Philosophy Courses

PHIL 503. Philosophy of Education (3).

Various philosophic positions which lead to an understanding of the educational enterprise. PHIL 503 and EDF 503 are equivalent courses; student may not receive credit for both.

PHIL 596. Individual Studies (1-6).

Prerequisites: Graduate students or seniors, GPA of 3.0 in philosophy, and a cumulative GPA of 3.0 plus approval of the instructor and chair of the department.

PHIL 598. Special Topics (1-6).

Religious Studies Course

RELS 596. Individual Studies (1-6).

Prerequisites: Graduate students or seniors, GPA of 3.0 in philosophy and a cumulative GPA of 3.0 plus approval of the instructor and chair of the department.

PHYSICAL EDUCATION, SCHOOL AND PUBLIC HEALTH DEPARTMENT

College of Education and Professional Studies
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See website for how these programs may be used for educational and career purposes.

Faculty and Staff Chair

Kenneth Briggs, EdD

Director of Graduate Studies

Kirk Mathias, EdD

509-963-1051

Professors

Kenneth Briggs, EdD, health education

Stephen C. Jefferies, PhD, physical education sabbatical

Melody S. Madlem, PhD, CHES health education

Kirk Mathias, EdD, physical education

Associate Professor

Heidi Henschel Pellett, EdD, physical education

Assistant Professors

Vanessa Harbour, PhD, health education

Jennifer Lehmbek, MPH, PhD, health education

Rebecca Pearson, MPH, PhD, health education

Mark Perez, PhD, education

Stefan Ward, PhD, physical education

Therese Young, MA, dance, physical education

Richard Unruh, EdD, athletic administration

Emeritus Professors

Gary Frederick, EdD, physical education, athletic administration

Andrew P. Jenkins, PhD, health education

Robert McGowan, PhD, physical education, athletic administration

Staff

Rhonda Busch-Gehlen, assistant to the chair

Edith Fowler, PESPH department manager

Master of Science Health and Physical Education

The master of science in health and physical education offers an on-line program focused on the types of knowledge and skills that will enhance one's effectiveness as a teacher of physical education and health education. In addition to general university requirements for admission to the graduate school, full admission to the graduate program in health and physical education requires an undergraduate degree with a major in the student's desired area of study.

The student shall complete at least 45 credits as outlined in an approved course of study filed with the office of Graduate Studies and Research. The course of study is structured in consultation with the student's academic advisor and is approved by the department director of graduate studies. Conditional or probationary admission may be granted to applicants not meeting all of the admission criteria.

Required Courses

HPE 510 - Issues in Health and Physical Education	3
HPE 557 - Research Methods and Design in Health and Physical Education	4
HPE 560 - Statistical Applications in Health and Physical Education	4
HPE 700 - Master's Thesis, Project Study and/or Examination	6

Electives

Department-approved Electives 28

Total Credits: 45

Athletic Administration Specialization, MS Health and Physical Education

The athletic administration specialization is focused on the development of skills and knowledge related to the administration of athletics especially in public school settings. It is intended for individuals who coach or are interested in exploring possibilities for becoming school athletic directors. The program expands on topics included in the instructional curriculum of the National Interscholastic Athletic Administrators Association (NIAAA). Opportunities exist to gain additional NIAAA certification as part of this program.

Individuals wishing to specialize in athletic administration should contact the Department of Physical Education, School and Public Health for program availability.

Required Courses

HPE 510 - Issues in Health and Physical Education	3
HPE 557 - Research Methods and Design in Health and Physical Education	4
HPE 560 - Statistical Applications in Health and Physical Education	4

HPE 700 - Master's Thesis, Project Study,
and/or Examination 6

Electives

Department-approved Electives 28

Total Credits: 45

Health Education Courses

HED 590. Cooperative Education (1-6). An individualized contracted field experience with business, industry, government, or social service agencies. The contractual arrangement involves a student learning plan, cooperating employer supervision, and faculty coordination. May be repeated for credit. Grade will either be S or U. By permission.

HED 591. Workshop (1-6).

HED 596. Individual Study (1-6).

HED 598. Special Topics (1-6).

HED 599. Seminar (1-5).

Health and Physical Education Courses

HPE 510. Issues in Health and Physical Education (3). Examination of current issues, problems, and challenges affecting health and physical education professions.

HPE 546. Advanced Administration of Athletics (3). Principles and practices of athletic administration: budgeting, resource control, personnel development, alumni relations. By permission.

HPE 547. Healthy Living for Athletes, Coaches, and Administrators (3). Provides insights and ameliorations for the effects of the stressful lifestyle of athletes, coaches, and athletic department administrators. Students will develop a handbook of information, stress identifier exercises, and lifestyle adjustment techniques. May be repeated up to 6 credits.

HPE 557. Research Methods and Design in Health and Physical Education (4). Introduction to the process of planning and understanding research.

HPE 560. Statistical Applications in Health and Physical Education (4). Application of statistics to research in health and physical education. Analysis of data sets drawn from research in these disciplines. HPE 560 and EXSC 560 are equivalent courses; students may not receive credit for both.

HPE 570. Legal Liability and Risk Management (3). Lecture and discussion course on general legal terminology, personal and tort law, and methods used to implement organizational risk management programs. RT 484 and PE 484 are equivalent courses; students may not receive credit for more than one.

HPE 575. Principles of Administration in Health and Physical Education (3).

HPE 577. Physical Education Curriculum Design (3). Design and creation of a physical education curriculum that meets state and national standards.

HPE 578. Physical Education Program Promotion (3). Understanding the various strategies currently being used by physical education teachers to promote their programs and developing a school-based promotional plan.

HPE 579. Supervision of Student Teachers in Physical Education (3). Introduction to the history of supervision, a breakdown of the process, and opportunities to practice supervision conferencing.

HPE 580. Physical Education Grant Writing and Fundraising (3). This course is designed to assist students in obtaining the skills and knowledge necessary for writing funding proposals in physical education and related fields.

HPE 581. Technological Applications in Health and Physical Education (3). Introduction to technological applications in HHPN and strategies for delivery of CWU online MS degree program in HHPN. Prerequisite: admission to HHPN graduate program.

HPE 583. Leadership and Decision Making in Interscholastic Sports (3). Students will examine the characteristics and skills of effective leaders and investigate the various roles and responsibilities of the athletic director. Students will define and apply knowledge of management, supervision, and decision-making skills and strategies used by effective leaders in athletics. Prerequisite: admission to the master of science in PESPH.

HPE 584. Mentoring of Coaches and Athletes (3). The mentoring course provides students with the knowledge, skills, and personal behaviors, and relationships that affect the athletic director's ability to mentor coaches and student-athletes. Students will review the concepts of leadership and apply them to mentoring theory. Mentoring theory and leadership skills will be applied to mentoring activities within and outside of the class in efforts to create a mentoring program. Prerequisite: open to students in the physical education, school and public health program.

HPE 585. Event, Facilities, and Scheduling Management of Sport (3). Provides students with the knowledge and understanding of the protocols and process of scheduling and managing events and facilities. Students will practice scheduling and management processes. Organizational, communication, and technological skills will be emphasized and refined. Prerequisite: admitted to the Athletic Administration Program.

HPE 586. Athletic Budgeting, Finance, and Fundraising (3). Budgeting and fund raising course provides students with the exploration and applications of budgeting and fundraising philosophies, considerations, strategies, and timelines for athletic programs. Students will examine various development and planning

processes for athletic budgeting and fundraising, including the consideration of equity principles. Prerequisite: open to students in the physical education, school and public health program.

HPE 587. Governing Organizations in Sports and Athletics (2). This course provides students with the knowledge and understanding of the agencies that regulate, support, and review sport and athletic programs, such as the NCAA, NFHS, WIAA, and other athletic-related associations. Prerequisite: Admission to the MS in PESPH.

HPE 595. Graduate Research (1-6). Development and investigation of an approved laboratory or field research problem. May be repeated. Maximum of 6 credits may be included in course of study for the master's degree. May be repeated for credit. By permission.

HPE 700. Master's Thesis, Project Study, and/or Examination (1-6). Designed to credit and record supervised study for the master's thesis, non-thesis project, and/or examination. May be repeated up to 6 credits. Grade will either be S or U. By permission.

Physical Education Courses

PE 521. Advanced Football Coaching (3).

PE 523. Advanced Basketball Coaching (3).

PE 524. Advanced Track Coaching (3).

PE 525. Advanced Baseball Coaching (3).

PE 530. Gender in Sport (3). Role of women and men in sport and analysis of gender discrimination with models for change.

PE 540. Socio-psychological Dimensions of Sport (3). The social and psychological factors which affect behavior and performance in sport.

PE 541. Sport and Culture (3). The interrelationship of sport with other aspects of the culture.

PE 560. Systematic Analysis of Teaching Physical Education (3).

PE 561. Curricular Trends in Physical Education (3). Investigation of current trends in physical education curriculum design. Prerequisite: PE 300 or previous K-12 teaching experience.

PE 590. Cooperative Education (1-6). An individualized, contracted field experience with business, industry, government, or social service agencies. The contractual arrangement involves a student learning plan, cooperating employer supervision, and faculty coordination. May be repeated for credit. Grade will either be S or U. By permission.

PE 591. Workshop (1-6).

PE 596. Individual Study (1-6).

PE 598. Special Topics (1-6).

PE 599. Seminar (1-5).

PHYSICS DEPARTMENT

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See website for how this program may be used for educational and career purposes.

Faculty and Staff

Chair

Michael Jackson, PhD

Professors

Michael Jackson, PhD, optics, spectroscopy
Bruce Palmquist, PhD, science education

Associate Professor

Michael Braunstein, PhD, nuclear physics, astronomy

Assistant Professors

Andrew A. Piacsek, PhD, acoustics
Sharon L. Rosell, MS, nuclear physics

Staff

Erin Sargent, secretary
Greg Lyman, instructional and classroom technician

Physics Courses

PHYS 561. Advanced Computational

Physics (4). Applications of standard numerical modeling techniques to physics problems involving nonlinear and/or differential equations, including wave propagation, fluid flow, thermodynamics, electrodynamics, and particle physics. PHYS 461 and PHYS 561 are equivalent courses; students may not receive credit for both. Prerequisite: MATH 376 and PHYS 361.

PHYS 562. Multiphysics Modeling Using

COMSOL (4). Students will learn how to use the multi-physics software package COMSOL to solve problems that involve coupled physical processes. Emphasis is on establishing a computational mesh, choosing appropriate differential equations and boundary conditions, and displaying and interpreting the results. Prerequisite: MATH 376 and PHYS 561.

PHYS 595. Directed Research (1-5). May be repeated for credit. By permission.



PRIMATE BEHAVIOR AND ECOLOGY

College of the Sciences
Ellensburg
Dean Hall, room 357A

509-963-3201

Fax: 509-963-3215

www.cwu.edu/~primate

See website for how this program may be used for educational and career purposes.

Program Director

Lori K. Sheeran, PhD

Professors

John Alsoszatai-Petheo, PhD, biological anthropology
Daniel Beck, PhD, biology, habitat selection, physiological ecology, foraging behavior, rattlesnake ecology, biology of helodermatid lizards
Lixing Sun, PhD, biology, ecology and evolution of animal behavior (especially communication systems), chemical ecology

Associate Professors

Megan D. Matheson, PhD, psychology, general experimental and comparative psychology, nonhuman primate social behavior, stress and coping, post-conflict behavior
Lori K. Sheeran, PhD, anthropology, primate behavior, primate conservation, gibbon behavior and ecology, biological anthropology
Steve Wagner, PhD, biology, conservation population genetics, herpetology, molecular evolution

Assistant Professors

Matthew Altman, PhD, early modern philosophy (Kant), 19th century philosophy, ethics and applied ethics, social and political philosophy, philosophy of art
Mary Lee Jensvold, PhD, anthropology, chimpanzee sign language studies, ape behavior, communication and culture, chimpanzee care and enrichment, non-verbal behavior
Joseph G. Lorenz, PhD, anthropology, intraspecific genetic variation, molecular phylogenetics, ancient DNA, genotype-phenotype associations, evolutionary anthropology

Chimpanzee and Human Communication Institute (CHCI)

Mary Lee Jensvold, PhD, Director, CHCI
Bldg., room 118

Staff

Penelope Anderson, secretary senior, anthropology
Lynn Whitacre, program coordinator, CHCI

Primate Behavior, MS

This program is interdisciplinary and emphasizes the approaches and contributions to primatology made by biologists, anthropologists, psychologists, and philosophers. It includes a basic core of 21 credits in primatology, with 18 elective credits selected in consultation with the student's advisor.

Students must complete at least 45 credits as outlined in an approved course of study filed with the Office of Graduate Studies and Research. The course of study is selected by advisement before completing 20 credits. Two quarters in residence are required.

Admission Requirements

In addition to general regulations for admission to master's programs, applicants for admission must have the following qualifications:

1. An undergraduate degree in anthropology, psychology, or biology. Before admission, program faculty will evaluate the academic course work and experience of all applicants for admission, and will recommend remedial course work if, in their judgment, there are deficiencies in pre-baccalaureate work which need to be overcome before entrance into the program.
2. Students must submit GRE scores for the general test.
3. International students for whom English is a second language must provide TOEFL scores to demonstrate English proficiency.
4. Students must arrange for a graduate faculty advisor in the program to serve as their major advisor.

Admission to the program and continuation in it may be conditional on the applicant's satisfactory completion of remedial courses. Such courses will not count toward the program credit requirement, but in some cases they may be taken after admission to the program.

Special Programs

The PBE library room in room 204 Dean Hall houses several hundred books, articles, and DVDs/videotapes related to primatology. The room includes a TV, DVD player, and four computer work stations.

The PBE Program has available for student use one video camera, two digital cameras, two DVD players, one television, observational software (The Observer), and two PDAs for using this software at remote locations. The Observer software can also be used on two desktop computers.

Students and faculty who have been approved to conduct research at CHCI may have access to resources housed there. These include an extensive library of articles, books, videos, and DVDs, and more than 20 years of archived video footage collected from the

chimpanzees living there. CHCI also houses several VCRs, TVs, DVD players, video cameras, and computers that students can use in research projects conducted at CHCI. Access is considered on a case-by-case basis in consultation with the director and associate director of CHCI.

The Anthropological Genetics Laboratory in Dean Hall, room 232 A, is equipped for performing DNA extractions, PCR (Polymerase Chain Reaction) amplification, genotyping, and DNA sequencing. Software for analyzing genetic data and performing phylogenetic analysis is also available.

The anthropology department owns casts of fossil and living nonhuman primates. These span a variety of taxa including prosimians, monkeys, and apes. Access is considered on a case-by-case basis in consultation with the anthropology faculty.

The PBE Program is affiliated with the Conservation and Biodiversity Field School in China, which is coordinated through the CWU Office of International Study and Programs.

Primate Behavior, MS

Required Core Courses

PRIM 501 - Introduction to Primatology . . .	4
PRIM 503 - Current Issues in Primatology . .	4
PRIM 504 - Primate Culture and Cognition .	4
PRIM 505 - History of Primate	
Interconnections	4
PSY 550 - Research in Natural Environments	5

Subtotal Credits: 21

Additional Courses

Electives (to be selected by advisement) . .	18
PRIM 700 - Thesis	6

Total Credits: 45

Graduate Committee

The student will have at least a three-member graduate committee selected in consultation with the thesis committee chair.

Program Fees

Lab fees are attached to the following courses conducted at the Chimpanzee and Human Communication Institute: PRIM 595C, PRIM 700, and PRIM 516.

Primate Behavior and Ecology Courses

PRIM 501. Introduction to Primatology (4).

Introduces students to the perspectives anthropologists, biologists, and psychologists bring to the study of nonhuman primates.

PRIM 503. Current Issues in Primatology (4).

This course surveys current literature in primatology, with students identifying major theoretical and methodological topics of interest to primatologists. Prerequisite: PRIM 501.

PRIM 504. Primate Culture and Cognition (4).

Seminar course covering topics in primate social behavior, intelligence, learning processes, communication and culture. Topics will be covered through weekly reading assignments, class discussions, and a research paper. Prerequisite: PRIM 501.

PRIM 505. History of Primate

Interconnections (4). Survey of the history of human views and uses of nonhuman primates from 1600 through the present; consideration of evolutionary, psychological, and historical interconnections among primates. Prerequisite: PRIM 501.

PRIM 511. Primate Conservation (4).

A seminar that focuses on conservation issues of particular relevance for non-human primates, including deforestation, bushmeat hunting, and pet trade; conservation strategies, including reintroduction, captive management, and ecotourism. PRIM 511 and ANTH 411 are equivalent courses; students may not receive credit for both.

PRIM 595A. Graduate Research in

Primatology (1-10). Organize or conduct an approved laboratory and/or field research problem. Maximum of 10 credits may be included on course of study for the master's degree. By permission.

PRIM 595C. CHCI Graduate Research (1-10).

Organize or conduct an approved research problem based at Chimpanzee and Human Communication Institute. Maximum of 10 credits may be included on course of study for the master's degree. By permission.

PRIM 700. Master's Thesis, Project Study,

and/or Examination (1-6). Designed to credit and record supervised study for the master's thesis, non-thesis project, studio project, public recital and/or examination. May be repeated for credit. Grade will either be S or U. By permission.

PSYCHOLOGY DEPARTMENT

College of the Sciences
Ellensburg
Psychology Bldg., room 421

509-963-2381

Fax: 509-963-2307

www.cwu.edu/~psych

See website for how these programs may be used for educational and career purposes.

Faculty and Staff

Chair

Stephanie Stein, PhD

Assistant Chair

Stephen B. Schepman, PhD

Professors

Terry L. DeVietti, PhD, physiological psychology, experimental

Roger S. Fouts, PhD, Director of Research, general experimental, language acquisition, primate behavior, comparative psychology
Eugene R. Johnson, EdD, school psychology, psychological and educational evaluation, exceptional children

Susan D. Lonborg, PhD, psychotherapy research, psychology of women, clinical and research ethics, career development, health psychology

Stephen B. Schepman, PhD, personality theories, social psychology, statistics

Anthony J. Stahelski, PhD, organization development, social psychology, small group interaction

Stephanie Stein, PhD, school psychology, behavior disorders in children, lifespan development, school-based assessment

Elizabeth M. Street, EdD, educational psychology, learning theory, exceptional children, applied behavior analysis

Philip Tolin, PhD, sensation and perception, human factors, experimental

Associate Professors

Robyn Brammer, PhD, multicultural counseling, counseling supervision, adolescent interventions, psychology of religion

W. Owen Dugmore, PhD, counseling, psychology of adjustment

Marte Fallshore, PhD, human learning and memory, development of expertise, statistics, cognition, environmental decision-making, crime severity

Megan D. Matheson, PhD, general experimental, primate behavior, comparative psychology

Jeffrey M. Penick, PhD, counseling psychology, health psychology, adult development

Terrence J. Schwartz, PhD, educational psychology, counseling psychology, statistical analysis

Wendy A. Williams, PhD, general experimental, single-subject design, experimental analysis of human and nonhuman behavior, animal welfare



Assistant Professors

Kara I. Gabriel, PhD, general experimental, biopsychology, psychopharmacology, behavioral genetics, spatial learning, memory

Ralf Greenwald, PhD, cognitive neuroscience, cognitive psychology, brain dynamics, electro-physiology

Breyan Haizlip, PhD, multicultural counseling, social justice advocacy, counselor education and supervision, counseling theories, qualitative research

Suzanne Little, PhD, school psychology, psychological/educational assessment, diverse learners, gifted, autism

Heath Marrs, EdD, educational and school psychology, developmental psychology, assessment

Danielle Polage, PhD, cognitive psychology, psychology and law, memory, lying, eyewitness testimony, jury decision making, and repression

Senior Lecturer

Mark Soelling, PhD, clinical psychology

Lecturers

Elizabeth Haviland, PhD, counseling psychology, counseling supervision, multicultural counseling

Augustus Little, PhD, school counseling, educational psychology

Mary Radeke, PhD, child language development, experimental psychology

Staff

Estelle Mathews, secretary lead

Loretta Ney, secretary lead

Chris Buchanan, engineering technician III

Department Information

The Department of Psychology offers courses of study leading to the master of science degree in experimental psychology and mental health counseling and to the master of education degree in school counseling and school psychology. For students already holding the master's degree, certification-only programs are offered in school counseling and school psychology.

Admission Requirements

Admission to these programs is based on evaluation of the student's prior scholastic record: verbal and quantitative scores on the Graduate Record Examination (GRE), recommendations by instructors and/or employers, a statement of professional objectives, and, where appropriate, the applicant's potential to succeed in required practica and internships. If prerequisite background courses or their equivalents have not already been completed, they must be taken as soon as possible. Courses will not be accepted as meeting program prerequisites if taken on a credit/no-credit basis.

Each student is required to file a course of study form with the Office of Graduate Studies and Research by the end of their first quarter. The course of study is structured

in consultation with the student's academic advisor and is approved by the department chair. The student is expected to complete at least 30 credits after full admission to the program. Students who wish to use faculty time or departmental resources for completion of thesis work must register for at least one (1) credit of PSY 595 or PSY 700 during each quarter in which they require assistance and resources. Students must be registered for two (2) credits of PSY 595 or PSY 700 during the quarter in which the final thesis defense is held.

Background Check and Liability

Insurance: Students admitted to the Mental Health Counseling, School Counseling, or School Psychology programs will be required to have on file a completed, current background and fingerprint check. Also, in order to enroll in clinical training courses (practicum or internship), a student must arrange to purchase individual professional liability insurance. More information regarding procedures, costs, and types of insurance coverage available may be obtained from the department chair or program director.

Practica and Internships: Satisfactory completion of all required practica and internships is mandatory for retention in all degree and certification programs. Grades assigned in these courses are S or U.

Final Examination: Candidates for the master's degree must pass an oral final examination on work offered for the degree. This examination will include a presentation and defense of the thesis and may include a review of courses completed in the student's area of specialization.

Master of Education and/or Certification in School Counseling and School Psychology

The mission, purpose, and governance structure of the School Counseling and School Psychology programs is based in the scientist-practitioner model. This approach asserts that:

1. The practice and theory of counseling and the provision of school psychological services must be interconnected
2. Applied skill must be melded with existing scientific knowledge
3. While school counselors and school psychologists are primarily trained as practitioners, scientific principles, methods, and approaches should be utilized when working with clients
4. Knowledge evolves through the interaction of experimentation, practice, and study

This framework for the professional preparation of school counseling and school psychology is divided into three facets:

- Facet 1: Coursework
- Facet 2: Practica
- Facet 3: Internship and thesis

The three facets are interrelated.

Students begin without significant academic knowledge. As they begin academic work, their initial assumptions are challenged, guiding them to new understandings of practice and knowledge of counseling and psychology. Their maturity through academics and practica culminate with the final facet where they begin their independent work both in practice (internship) and science (thesis). Students are highly encouraged to meld their academic work with their applied work at each level, and their theses are encouraged to connect to the work they pursue in their internship.

School Counseling, MEd**Program Director:**

Robyn Brammer, PhD
Psychology Building, room 118

The MEd and Certification programs in School Counseling train specialists to provide individual and group counseling in the schools and to consult with parents and teachers concerning the social, educational, and developmental tasks of children and youth.

The State Board of Education's standards for certification of school counselors require that the candidate complete an approved master's degree program in counseling which has been developed in concert with school and professional organizations. CWU is affiliated with and Educational Staff Associate (ESA) professional Education Advisory Board for the preparation of school counselors. The program emphasizes supervised practicum and field experiences. Upon completion of the master's degree and certification program, the individual will be qualified for the residency-level certificate as a school counselor in the state of Washington. Candidates for residency certification generally follow the two-year program leading to the master of education degree in school counseling. Candidates who have already earned a master's or doctoral degree in a related field, such as education, special education, mental health counseling, and school social work are not required to earn a second master's, but must complete all requirements for the MEd degree and certification program in school counseling, with the exception of the thesis or project. The certification program also requires satisfactory completion of a comprehensive examination.

Prerequisites: PSY 362 and 363 (or approved equivalents) may be taken concurrently with certain program courses. In addition, the following undergraduate courses are strongly recommended: personality or abnormal; social or developmental; learning; physiological, and a course in history and systems of psychology. Students not having these courses should expect to do additional work when prior course knowledge is needed. Please note the background check and liability insurance requirements described in the general departmental information section.

Required Courses

PSY 503 - Proseminar in School Counseling	3
PSY 544 - Tests and Measurements	4
PSY 551 - Behavior Analysis	4
PSY 552 - Human Growth and Development, Advanced	3
PSY 555 - Design and Analysis for Applied Research (in lieu of EDF 510)	4
PSY 559 - Advanced Educational Psychology	4
PSY 560 - Theories and Practice of Counseling	4
Successful completion of PSY 560 and 593A is required for final admission to the school counseling program.	
PSY 561 - Group Counseling	3
PSY 567 - Counseling and Assessment: Children and Adolescents	5
PSY 569 - Administering School Counseling Programs	4
PSY 571 - Counseling for Relationships and Families	4
PSY 573 - Career Development and Counseling	4
PSY 574 - Multicultural Counseling	3
PSY 584 - Behavior Disorders and Psychopathology	4
PSY 589 - Professional and Ethical Issues	4
PSY 593A - Practicum in Counseling I: Interviewing	4
Successful completion of PSY 560 and 593A is required for final admission to the school counseling program.	
PSY 593B - Practicum in Counseling II: Assessment	4
PSY 593C - Practicum in Counseling III: Advanced	4
PSY 682A - School Counseling Internship I: Group	3
PSY 682B - School Counseling Internship II: Advanced	12
PSY 700 - Master's Thesis, Project Study, and/or Examination	6

Total Credits: 90**School Psychology, MED****Program Director**

Eugene R. Johnson, EdD
Psychology Bldg., room 118

The State Board of Education's standards for certification of school psychologists require that the candidate complete an approved master's degree program in psychology that has been developed in concert with school and professional organizations. (Note: candidates who have already received a master's degree in a related field are not required to earn a second master's, but must complete all requirements

or their equivalent.) Successful completion of the preparation program at Central leads to eligibility for the residency certificate as an educational staff associate (ESA) school psychologist and national certification through the National Association of School Psychologists. The certification program also requires satisfactory completion of the PRAXIS II examination in school psychology. The MED degree and certification program in school psychology is fully approved by the National Association of School Psychologists (NASP).

Prerequisites: PSY 362, PSY 363, (or approved equivalents) may be taken concurrently with certain program courses.

Master's Degree Requirements

The master of education degree in school psychology is granted to the candidate upon completion of 99 quarter hours of coursework including thesis. The following courses (or approved equivalents) are required:

Required Courses

EDF 507 - Studies and Problems in Intercultural Education	3
EDSE 523 - Curriculum for Students with Special Needs	3
PSY 501 - Professional Seminar in School Psychology	3
PSY 525 - Psychology of Reading	3
OR	
EDRD 525 Psychology of Reading (3)	
PSY 551 - Behavior Analysis	4
PSY 552 - Human Growth and Development, Advanced	3
PSY 553 - Single-subject Design	3
PSY 554 - Behavioral Interventions	4
PSY 555 - Design and Analysis for Applied Research (in lieu of EDF 510)	4
PSY 556 - Advanced Evaluative Techniques	5
PSY 559 - Advanced Educational Psychology	4
PSY 560 - Theories and Practice of Counseling	4
PSY 561 - Group Counseling	3
PSY 564 - Intellectual Assessment	5
PSY 566 - Behavioral and Social-Emotional Assessment	5
PSY 575 - RTI in the Schools	4
PSY 577 - Interviewing Skills for School Psychologists	4
PSY 578 - Applied Physiological Psychology	4
PSY 583 - Consultation	3
PSY 584 - Behavior Disorders and Psychopathology	4
PSY 592A - Practicum in School Psychology	3
PSY 592B - Practicum in School Psychology	3
PSY 683* - School Psychology Internship	5-15
PSY 700 - Master's Thesis, Project Study, and/or Examination	1-6

Med and Certification Total Credits: 99

*One public-school year, minimum 1,200 clock hours

**Master of Science
Experimental Psychology****Program Director**

Wendy Williams, PhD
Psychology Bldg., room 426

The experimental Psychology Graduate Program reflects our commitment to providing students with a generalized background in experimental psychology at the graduate level. Two specializations are available: general experimental psychology and applied behavior analysis. Students are expected to complete a set of required core courses and additional requirements within either of the two specializations. Applicants for admission should indicate their interest area(s) in their personal statement of goals. Upon enrolling students will meet with their faculty advisors to discuss academic objectives and to establish a research plan. Collaborative research that is developed in conjunction with a faculty advisor and that may lead to the student's thesis is encouraged.

Prerequisites: PSY 300, 362, 363, (or approved equivalents). Prerequisite courses may be taken concurrently with certain program courses. Only students in the ABA specialization are required to complete PSY 301 as a prerequisite.

MS in Experimental Psychology Core Courses

Methods and Statistics	9-10
Choose at least two courses:	
PSY 550 - Research in Natural Environments (5)	
PSY 553 - Single-subject Design (3)	
PSY 555 - Design and Analysis for Applied Research (4)	
PSY 558 - Advanced Statistics (5)	
Theory and Research	12-13
Choose at least three courses:	
PSY 541 - Advanced Cognitive Psychology (5)*	
PSY 551 - Behavior Analysis (4)	
PSY 576 - Comparative Psychology (4)	
PSY 578 - Applied Physiological Psychology (4)	

Other Required Courses:

PSY 505 - Psychology Colloquium (1)	3
PSY 580 - Current Issues in Psychology	3
PSY 587 - Ethics in Experimental Psychology and Applied Behavior Analysis	4
PSY 595 - Graduate Research (1-10)	3
Must be taken for 3 credits	
PSY 700 - Master's Thesis, Project Study and/or Examination (1-6)	6

Subtotal Credits: 38-42

*ABA specialization students must select PSY 551 from the theory and research option list.



General Experimental Psychology Specialization

Advisor

Wendy Williams, PhD
Psychology Bldg., room 426

The general experimental psychology specialization requires students to complete the required core courses and a set of electives that allow the students to concentrate in areas of study adequately represented among the faculty. These areas currently include cognitive psychology, physiological psychology, social psychology, educational psychology, and animal behavior.

It may be possible to develop curricular tracks in other areas of psychology and/or interdisciplinary programs. However, to be certain that a curriculum can be developed that meets the student's needs, it should be planned in consultation with a faculty advisor prior to enrollment in the program.

The educational requirements of the Animal Behavior Society's Associate Applied Animal Behaviorist Certificate can be met by completing the degree program with an appropriate selection of core and elective courses.

Prerequisites: PSY 300, 362, 363, (or approved equivalents). Prerequisite courses may be taken concurrently with certain program courses.

Required Courses

MS in experimental psychology
core courses38-42
Electives6-10
By advisement, in approved areas of concentration

Specialization Total Credits: 48

Applied Behavior Analysis Specialization

Advisor

Elizabeth M. Street, EdD, BCBA
Psychology Bldg., room 478

The specialization in ABA is designed to prepare graduates with the knowledge and skills of behavior analysis for later doctoral study or for work with individuals and organizations in clinical or research settings such as education, developmental disabilities, mental health, business, and industry. This program provides the educational requirements to become a Board-Certified Behavior Analyst (BCBA). Additional BCBA requirements include supervised hours of practice and a board examination.

Prerequisites: PSY 300, 362, 363, (or approved equivalents). Prerequisite courses may be taken concurrently with certain program courses.

Required Courses

MS in experimental psychology
core courses38-42

ABA Required Courses

EDSE 501 - Orientation, Foundation, and Issues 2
EDSE 510 - Instructional Management Principles 3
EDSE 521 - Functional Behavioral and Instructional Assessment 3
PSY 554 - Behavioral Interventions 4
PSY 562 - Advanced Principles of Learning 3
PSY 651 - Advanced Applied Behavior Analysis 3
PSY 684 - Internship in Applied Experimental Psychology (3-12) 12

Specialization Total Credits: 68-72

*ABA track students must select PSY 551 from the theory and research option list.

Master of Science Mental Health Counseling

Program Director

Robyn Brammer, PhD
Psychology Building, room 118

The MS program in mental health counseling trains mental health professionals for careers in a variety of settings. The orientation of the program is eclectic, with particular emphasis on those active counseling skills which are appropriate to short-term counseling. In addition, the program's scientist-practitioner emphasis may be useful to those students interested in pursuing doctoral study. The MS program in mental health counseling is accredited by the Council for Accreditation of Counseling and Related Programs (CACREP).

The student shall complete a comprehensive exam and an approved course of study filed with graduate studies and research. The course of study normally consists of the courses below.

Prerequisites: PSY 362 and 363 (or approved equivalent). Prerequisite courses may be taken concurrently with certain program courses. In addition, the following undergraduate courses are strongly recommended: personality or abnormal; social or developmental; learning; physiological, and a course in history and systems of psychology. Students not having these courses should expect to do additional work when prior course knowledge is needed. Please note the background check and liability insurance requirements described in the general departmental information section.

Required Courses

PSY 502 - Professional Orientation: Mental Health Counseling 2
PSY 544 - Tests and Measurements 4
PSY 552 - Human Growth and Development, Advanced 3
PSY 555 - Design and Analysis for Applied Research 4
PSY 560 - Theories and Practice of Counseling 4
Successful completion of PSY 560 and 593A is required for final admission to the Mental Health Counseling Program.

PSY 561 - Group Counseling 3
PSY 567 - Counseling and Assessment: Children and Adolescents 5
PSY 568 - Counseling and Assessment Strategies for Adults 5
PSY 571 - Counseling for Relationships and Families 4
PSY 573 - Career Development and Counseling 4
PSY 574 - Multicultural Counseling 3
PSY 584 - Behavior Disorders and Psychopathology 4
PSY 589 - Professional and Ethical Issues 4
PSY 593A - Practicum in Counseling I: Interviewing 4
Successful completion of PSY 560 and 593A is required for final admission to the Mental Health Counseling Program.
PSY 593B - Practicum in Counseling II: Assessment 4
PSY 593C - Practicum in Counseling III: Advanced 4
PSY 681A - Mental Health Internship I: Group 3
PSY 681B - Mental Health Internship II: Advanced1-12

Students who take the MS degree and also seek school counseling certification must complete the remaining classes for the school counseling degree, including 12 hours of PSY 682B in a school setting. Students who take the master of science (MS) degree and also seek school psychology certification must complete an internship in mental health (PSY 681BJ) and in school psychology (PSY 683). Other courses required for certification in school counseling or school psychology will be determined through individual assessment.

PSY 700 - Master's Thesis, Project Study, and/or Examination 6
Department-approved Electives 8

Total Credits: 90

Psychology Courses

PSY 501. Professional Seminar in School Psychology (3).

An introduction to the activities of school psychologists and the conditions under which they function. Prerequisite: admission to the school psychology program.

PSY 502. Professional Orientation: Mental Health Counseling (2).

Professional identity in mental health counseling. Roles and functions of mental health counselors, professional organizations, credentialing, and accreditation, practices, and standards. May be repeated up to 4 credits. Prerequisite: admission to graduate program in mental health counseling.

PSY 503. Proseminar in School Counseling (3).

Introduction to role of the school counselor; comprehensive, developmental guidance, and counseling programs; interagency collaboration; current professional issues in school counseling. By permission.

PSY 504. Thesis and Project Management (1).

Comprehensive review of thesis/

project process including topic and advisor selection, library research, proposal construction, timing of data collection, writing and editing, and final defense. Grade will either be S or U. Prerequisite: admission to a graduate course of study in psychology.

PSY 505. Psychology Colloquium (1). Course will address professional development, grant-writing skills, philosophy of teaching, career paths, and research of presentation skills. May be repeated for credit. Grade will either be S or U. By permission.

PSY 521. Human Neuroanatomy (4). An introduction to the anatomical organization and basic functional/clinical principles of the major systems of the human brain and their relation to disease and behavior. PSY 421 and PSY 521 are equivalent courses; students may not receive credit for both.

PSY 525. Psychology of Reading (3). Principles of learning and readiness, perception, psychological, and physiological aspects of reading. PSY 525 and EDRD 525 are equivalent courses; students may not receive credit for both. By permission. Prerequisites: a reading methods course, a basic psychology of learning course.

PSY 541. Advanced Cognitive Psychology (5). Advanced theories, methods, and research in cognitive psychology and information processing. Prerequisite: PSY 300.

PSY 542. Evolutionary Psychology (4). Application of the principles of evolution by natural selection to the understanding of human and nonhuman behavior and cognition. PSY 542 and PSY 442 are equivalent courses; students may not receive credit for both.

PSY 544. Tests and Measurements (4). Psychological and educational tests, theory, and practice. PSY 544 and PSY 444 are equivalent courses; students may not receive credit for both. Prerequisite: PSY 315 or PSY 362.

PSY 550. Research in Natural Environments (5). A seminar in describing behavior, developing questions, designing procedures, and analyzing data that address applied and naturalistic research situations. Prerequisite: PSY 362.

PSY 551. Behavior Analysis (4). Advanced behavior analytic principles, techniques and strategies applied across a variety of professional settings.

PSY 552. Human Growth and Development, Advanced (3). Developmental theories, multicultural differences, exceptionality, related research, and implications for education and guidance. Prerequisite: PSY 313, and PSY 314.

PSY 553. Single-subject Design (3). Course will address single-subject designs and methods common to behavior analytic assessments and interventions. Focus will be on behavioral assessment, experimental evaluation, and the measurement, display, and interpretation of single-subject data

sets. Includes both lecture and laboratory activities. By permission. Prerequisite: PSY 551.

PSY 554. Behavioral Interventions (4). Research-based behavioral interventions for school, home, business, community, and professional service settings. Prerequisites: PSY 551.

PSY 555. Design and Analysis for Applied Research (4). Design and analysis of experimental and quasi-experimental research, with an emphasis on applied settings. Prerequisite: PSY 363.

PSY 556. Advanced Evaluative Techniques (5). Evaluation procedures and assessment devices for use with children and adolescents, emphasizing variables affecting test performance, interpretation, and report writing. Prerequisite: PSY 444 and admission to the School Psychology Program.

PSY 558. Advanced Statistics (5). Advanced topics in analysis of variance and introduction to multiple regression, factor analysis, and MANOVA. Prerequisite: PSY 555.

PSY 559. Advanced Educational Psychology (4). Investigation of principles of learning and behavior as it relates to educational situations, including major theories of learning and development and assessment/evaluation procedures. Prerequisite: PSY 315.

PSY 560. Theories and Practice of Counseling (4). Survey of counseling theories with an introduction to counseling skills and practices. Prerequisite: CCPAC director's approval or admission to Mental Health Counseling, School Counseling, or School Psychology Programs.

PSY 561. Group Counseling (3). Theoretical approaches to group counseling and introductory laboratory/demonstration experience. Prerequisite: PSY 560.

PSY 564. Intellectual Assessment (5). Administration of intellectual assessment instruments-early childhood through adult. Variables affecting test performance, interpretation, and report writing are emphasized. Prerequisite: admission to the School Psychology Program.

PSY 565. Advanced Animal Behavior (5). Advanced knowledge in the study of animal behavior. Three-hour lecture, two-hour laboratory, one-hour independent study per week. PSY 565 and BIOL 465 BIOL 565 are equivalent courses; students may not receive credit for both.

PSY 566. Behavioral and Social-Emotional Assessment (5). Attainment of competencies in the use of behavioral and social-emotional assessment techniques, with a focus on school-age children. Prerequisite: admission to the School Psychology Program.

PSY 567. Counseling and Assessment: Children and Adolescents (5). Basic counseling assessment and treatment strategies for common problems presented by child and adolescent clients. Prerequisite: PSY 560 and PSY 593A.

PSY 568. Counseling and Assessment Strategies for Adults (5). Basic counseling assessment and treatment strategies for common problems presented by adult clients. Prerequisite: PSY 560. May be taken concurrently.

PSY 569. Administering School Counseling Programs (4). Strategies for developing, implementing, and evaluating comprehensive school counseling programs; counselor's role in issues such as school climate, school safety, and school crisis information. Prerequisite: PSY 503.

PSY 571. Counseling for Relationships and Families (4). Major theoretical approaches to counseling with couples and families. Prerequisites: PSY 560.

PSY 572. International Counseling and Psychology (3). This course immerses students within a cultural group and examines how psychological and counseling services are provided within that society. The location for the course varies by year. Students will learn about a society's available services, health care provision, relationship/child-rearing traditions, common prejudices, and economic values. PSY 472 and PSY 572 are equivalent courses; students may not receive credit for both. May be repeated up to 6 credits. Prerequisite: PSY 101.

PSY 573. Career Development and Counseling (4). Major theories of career development; career assessment; and career intervention, emphasizing individual, ethnic, and cultural differences. By permission.

PSY 574. Multicultural Counseling (3). Multicultural counseling theories and implications for research, training, and practice. By permission.

PSY 575. RTI in the School (4). The understanding of the foundations and procedures for the implementation of response to intervention and the applications of respect to invention within schools and individual classrooms.

PSY 576. Comparative Psychology (4). Seminar in the study of behavior and cognition across species. PSY 479 and PSY 576 are equivalent courses; students may not receive credit for both. By permission.

PSY 577. Interviewing Skills for School Psychologists (4). An introduction to interviewing and assessment for school psychologists, with an emphasis on developing skills for interviewing children, parents and other caregivers, and school personnel. Prerequisite: admission to the School Psychology Program.

PSY 578. Applied Physiological Psychology (4). Physiological bases of various psychological disorders, brain injury and repair, and pharmacological treatment of clinical disorders. By permission.

PSY 580. Current Issues in Psychology (3). May be repeated up to 6 credits.

PSY 583. Consultation (3). Role of the consultant, stages of consultation, application of consultation principles to school and mental health settings.

PSY 584. Behavior Disorders and

Psychopathology (4). Major systems of classification for normal and abnormal child/adult behavior. Prerequisite: PSY 449.

PSY 587. Ethics in Experimental Psychology and Applied Behavior Analysis (4).

This course will familiarize the student with ethical issues and responsibilities of experimental psychologists and behavior analysts. Ethical decision-making processes will be emphasized and the relationship between ethics and law will be explored.

PSY 589. Professional and Ethical Issues

(4). Professional, ethical, and legal issues for mental health and school counselors. Prerequisite: PSY 593A.

PSY 591. Workshop (1-6).

PSY 592A. Practicum in School Psychology

(3). Attainment of competence in the use of observational techniques, anecdotal reports, rating scales, behavioral analyses, and developmental interviews. Grade will either be S or U. Prerequisite: admission to the School Psychology Program.

PSY 592B. Practicum in School Psychology

(3). Experience in complete case workups within state and federal requirements. Includes assessments, interpretation of results, treatment plans, and educational programs. Emphasis on developing consultation skills. Grade will either be S or U. Prerequisite: PSY 592A.

PSY 593A. Practicum in Counseling I:

Interviewing (4). Interviews, role-playing, observation, and analysis of interview behavior. A maximum of 4 credits may be included on the course of study on the master's degree. Grade will either be S or U. By permission. Prerequisite: admission to Counseling Psychology, School Counseling, or School Psychology Programs. To be taken concurrently with PSY560.

PSY 593B. Practicum in Counseling II:

Assessment (4). Assess client problems, set goals, and plan counseling strategies. Grade will either be S or U. By permission. Prerequisites: PSY 551 (may be taken concurrently), PSY 560, 593A.

PSY 593C. Practicum in Counseling

III: Advanced (4). Implementation of counseling strategies with children, adults, couples, or families. Grade will either be S or U. By permission. Prerequisites: PSY 593B.

PSY 593D. Practicum in Counseling IV:

Advanced (1-4). Implementation and evaluation of counseling with children, adults, couples, or families. Grade will either be S or U. By permission. Prerequisites: PSY 567, PSY 571, and PSY 593C (all may be taken concurrently).

PSY 594A. Supervised Field Experience in School Psychology (3). Prerequisite: graduate status in school psychology.

PSY 595. Graduate Research (1-10). Students using faculty and department resources for thesis development must register for PSY 595, PSY 595CHCI, or PSY 700. May be

repeated. Not more than 10 credits of PSY 595 and PSY 595CHCI combined may be on the master's degree course of study.

PSY 595CHCI. CHCI Graduate Research

(1-10). Directed research or thesis research at the Chimpanzee and Human Communication Institute. Course fee will be assessed. Not more than 10 credits of PSY 595 and PSY 595CHCI combined may be included on the master's degree course of study. May be repeated for credit.

PSY 596. Individual Study (1-6).

PSY 598. Special Topics (1-5).

PSY 599. Seminar (1-5).

PSY 651. Advanced Applied Behavior

Analysis (3). This course builds upon the basic principles of learning and applied behavior analysis. Advanced instruction in behavioral programming, data collection, analysis, program generalization, best practices, and current research will be presented. By permission. Prerequisite: PSY 551.

PSY 681A. Mental Health Internship I:

Group (3). Supervised counseling of child or adult groups. Some individual internship hours may also be obtained. Grade will either be S or U. By permission. Prerequisites: PSY 561, PSY 593C.

PSY 681B. Mental Health Counseling

Internship II: Advanced (1-12). Full-time internship placement in a mental health agency or psychiatric hospital. Grade will either be S or U. Prerequisites: PSY 584 and PSY 681A.

PSY 682A. School Counseling Internship I:

Group (3). Supervised counseling of child or adult groups. Grade will either be S or U. By permission. Prerequisites: PSY 561, PSY 593B.

PSY 682B. School Counseling Internship II:

Advanced (1-12). Placement in the public schools (K-12). Grade will either be S or U. Prerequisite: PSY 593C and PSY 682A.

PSY 683. School Psychology Internship

(5-15). A full-time placement in school district (K-12). May be repeated for credit. Grade will either be S or U. By permission.

PSY 684. Internship in Applied Experimental Psychology (3-12). Placement in

professional setting in experimental psychology. Academic and professional activities supervised by faculty and site supervisors. May be repeated for credit. Grade will either be S or U. By permission. Prerequisite: admission to experimental psychology master's program.

PSY 700. Master's Thesis, Project Study,

and/or Examination (1-6). Designed to credit and record supervised study for the master's thesis, non-thesis project, studio project, public recital, and/or examination. May be repeated up to 6 credits. Grade will either be S or U. By permission.

RESOURCE MANAGEMENT

College of the Sciences

Ellensburg

Fax: 509-963-1047

www.cwu.edu/~rem/

See website for how this program may be used for educational and career purposes

Faculty

Program Coordinators

Natural Resources

Karl Lillquist, PhD

Department of Geography

Lind Hall, room 319

509-963-1184

lillquis@cwu.edu

Cultural Resources

Steven Hackenberger, PhD

Department of Anthropology

Dean Hall, room 349

509-963-3224

hackenbe@cwu.edu

Professors

Tracy J. Andrews, PhD, anthropology, cultural anthropology, political ecology, Native America, environmental and medical anthropology

Anthony Gabriel, PhD, geography, resource analysis, physical geography, shoreline inventory and assessment, aquatic systems

Steven Hackenberger, PhD, anthropology, archaeology, paleoecology, cultural resource management, Columbia Plateau

Robert Hickey, PhD, geography, GIS remote sensing, environment, geology, erosion modeling, Australia

James L. Huckabay, PhD, geography, conflict studies, energy, wildlife, aerial photography, western United States

Robert Kuhlken, PhD, geography, cultural geography, urban and regional planning, environmental literature

Karl Lillquist, PhD, geography, geomorphology, soils, environmental change in arid lands and mountains, airphoto analysis, field methods

Patrick Lubinski, PhD, anthropology, archaeology, cultural resource management, zooarchaeology

Patrick McCutcheon, PhD, anthropology, archaeology, geoarchaeology, cultural resource management

Morris Uebelacker, PhD, geography, cultural geography, rivers, resource and land utilization patterns, cultural resource management

Rex Wirth, PhD, political science, resource policy in developing nations

Associate Professors

James Cook, PhD, history, Asian studies, environmental history, China/Japan,

desertification, water resource management

Daniel Herman, PhD, history, 19th century

American West, American Indian history,

American cultural history

Lene Pedersen, PhD, cultural anthropology, ecological, political, and visual anthropology, natural resources, local governance, Southeast Asia, Circumpolar North, East Africa

Lori Sheeran, PhD, anthropology, biological anthropology, primate ecology, China

Assistant Professors

John Bowen, PhD, geography, transportation, economic development, quantitative methods, Southeast Asia

Jennifer Lipton, PhD, geography, cultural and political ecology, landscape ecology, climate change, geospatial techniques

Joseph Lorenz, PhD, molecular anthropology, primates, human mtDNA and aDNA studies

Michael Pease, PhD, geography, water resource management, environmental law, resource allocation

Craig Revels, PhD, geography, cultural and historical geography, cultural ecology

Megan Walsh, PhD, geography, biogeography, paleoecology, climate change, fire history

Charles Wassell, PhD, economics, mathematical modeling of economic issues with policy implications

Faculty from other departments participate in the program as graduate committee members

Resource Management, MS

Program: The program is interdisciplinary, emphasizing understanding of problems encountered in the management of both natural and cultural resources. It includes a basic core of 27 credits in resource management, courses in areas of interest and a specialty track in either natural resource areas (management of land, water, biotic, atmospheric, and energy resources) or cultural resources management (ethnographic and archaeological sites and materials, historic properties, and archives). An internship is recommended. Students must complete at least 60 credits as outlined in an approved course of study filed with the Office of Graduate Studies and Research. The course of study is selected by advisement before completing 25 credits.

Program Admission Requirements:

In addition to general master's degree regulations for admission to master's programs, applicants for admission must have the following qualifications:

1. A solid background in a discipline closely related to the resources they expect to manage. Normally, a bachelor's degree is required in a technical field such as one of the biological, Earth, or physical sciences, geography, engineering, archaeology, ethnology, history, or architecture. In some cases work experience may be accepted in lieu of a technical major. Before admission, program faculty will evaluate the academic coursework and experience of all applicants for admission, and will

recommend remedial course work if, in their judgment, there are deficiencies in pre-baccalaureate work which need to be overcome before entrance into the program.

2. A high proficiency in written and spoken English as well as potential for post-graduate study and research. Evidence of proficiency and potential may include: GRE scores, samples of previous writing, letters of recommendation, an interview.
3. A good background in basic statistics (the equivalent of two quarters of undergraduate statistics), knowledge of microeconomic principles, and some knowledge of computer systems (the equivalent of a one-quarter undergraduate course).

Admission to the program and continuation in it may be conditional on the applicant's satisfactory completion of remedial courses. Such courses will not count toward the program credit requirement but in some cases they may be taken after admission to the program.

Application Deadline and Materials: students must comply with all deadlines and procedures for "applying to CWU" in the graduate admissions section of this catalog.

Required Core Courses

ECON 462 - Economics of Energy, Resources and Environment	5
REM 501 - Introduction to Resource Management	4
REM 502 - Policy and Law in Resource Management	5
REM 505 - Introduction to Graduate Research	3
REM 506 - Resource Management Colloquium (1)	2
Must be repeated for 2 credits.	
REM 522 - Resource Analysis	5
REM 562 - Issues and Conflicts in Resource Management	3

Subtotal Credits: 27

Additional Courses

* Electives (to be selected by advisement):	
Natural Resource or Cultural Resource Management	27
REM 700 - Master's Thesis, Project Study, and/or Examination Credits: (1-6)	6

Total Credits: 60

Additional Information

Graduate Committee: The student will have at least a three-member graduate committee, to be selected in consultation with the program coordinator and the dean of Graduate Studies and Research.

Final Examination: Each candidate must pass a final oral examination on all phases of his or her program including the thesis and related coursework.

Thesis: Each candidate must successfully complete a thesis that involves original research undertaken within a literature context.

Resource Management Courses

REM 501. Introduction to Resource Management (4).

The nature of resources; traditional systems of resource management; problems associated with resource "ownership"; principles, and practice of management related to local, regional, and global resources.

REM 502. Policy and Law in Resource Management (5).

The scope and formation of U.S. resource policy, history of resource-related policies and legislation, current legislation and policies, future directions in resource policy.

REM 505. Introduction to Graduate Research (3).

Discussion and application of research problem definition, research methods, literature review, and funding sources as applied to a research proposal. By permission.

REM 506. Resource Management Colloquium (1).

Seminar series for REM students to both observe and present relevant research. All REM students must take this class twice: once as an attendee and, once as an attendee who must also present their research proposal. May be repeated for credit. Grade will either be S or U.

REM 522. Resource Analysis (5).

Problems of resource allocation; techniques of resource determination, cost-benefit analysis, principles of systems analysis, politics of resource analysis, understanding the "planner" and the "developer." Prerequisite: ECON 462.

REM 540. Ecology and Culture (4).

Investigation into interdependent environmental and human cultural systems. Traditional agroecologies and subsistence strategies; contemporary problems of resource management, social equity, political ecology, and sustainable development. REM 540, ANTH 440, and GEOG 440 are equivalent courses; student may not receive credit for more than one.

REM 562. Issues and Conflicts in Resource Management (3).

Current issues and problems in resource management.

REM 590. Internship (1-8). Supervised off-campus practical experience in accordance with a written agreement between student, faculty, and cooperating agency. May be repeated for credit. Grade will either be S or U. By permission.

REM 593. Resource Management Field Experience (1-8).

Off-campus experience in the field study of resource management. May be repeated for credit. By permission.

REM 595. Graduate Research (1-10).

REM 598. Special Topics (1-5).

REM 599. Seminar (1-3).

REM 700. Master's Thesis, Project Study, and/or Examination (1-6). Designed to credit and record supervised study for the master's thesis, non-thesis project, studio project, public recital, and/or examination. May be repeated up to 6 credits. Grade will either be S or U. By permission.

SCIENCE EDUCATION DEPARTMENT

College of the Sciences
Ellensburg
Science Building, room 107

509-963-2929

Fax: 509-963-1222

www.cwu.edu/~scied

See website for how this program may be used for educational and career purposes.

Faculty Chair

Martha J. Kurtz, PhD

Professors

Martha J. Kurtz, PhD, chemistry and science education

Bruce C. Palmquist, PhD, physics and science education

Associate Professor

Ian J. Quitadamo, PhD, biological sciences and science education

Assistant Professors

Jennifer Dechaine, PhD, biological sciences and science education

Vanessa Hunt, PhD, science education

Beth Pratt-Situla, PhD, geological sciences and science education

Tim Sorey, PhD, chemistry and science education

Staff

Denece Scribner, secretary

Department Information

The master of education, Science Education Program is on reserve and may be offered subject to program needs. Applications for the program are not being accepted at the present time. However, our faculty work closely with other programs on campus that do offer master's degrees. It is possible to earn a master's degree in another program (i.e., Master Teacher) with a focus on science education.

Science Education Courses

SCED 501. Interdisciplinary Science Inquiry for Teachers (4). An interdisciplinary investigation of applied life, physical, and Earth science concepts applicable to K-12 classrooms using integrated contexts. Inquiry as it applies to scientific process and teaching is emphasized.

SCED 511. Watershed Activities to Enhance Research in Schools (1-5). Interdisciplinary investigation of applied life, physical, Earth science, and resource management concepts and issues as they apply to integrating authentic watershed research into K-12 classroom. By permission.

SCED 521. Life Science Concepts for Teachers (3). An in-depth look at specific life-science concepts applicable to the K-12 classrooms using inquiry-based approaches. Scientific modeling and processes are emphasized.

SCED 598. Special Topics (1-5).

SOCIOLOGY DEPARTMENT

College of the Sciences
Ellensburg
Farrell Hall, room 409

509-963-1305

Fax: 509-963-1308

www.cwu.edu/~sociolo

See website for how this program may be used for educational and career purposes.

Faculty and Staff Chair

Delores (Kandee) Cleary, PhD

Professors

Laura L. Appleton, PhD, sex and gender, death and dying, and sociology of religion
Delores Cleary, PhD, criminology, the life-course, American society, minorities, ethnic studies, and American Indian issues

Kirk A. Johnson, PhD, criminology, delinquency, victimization, organizations, and methods

Hong Xiao, PhD, social stratification, social theory, comparative sociology, social ecology, and China studies

Associate Professors

Nelson Pichardo, PhD, ethnic studies, and social movements

Assistant Professors

Eric Cheney, PhD, deviance and social control, economic sociology, organizations, statistics and urban sociology

Michael Harrod, PhD, social psychology, criminology theory, intimate partner violence, statistics, research methods

Judith Hennessy, PhD, social welfare and poverty, gender, sociology of work, sociology of family

Pamela McMullin-Messier, PhD, demography, aging, collective action, social justice, environmental studies, family, gender, and sexuality

Michael Mulcahy, PhD, political sociology, political economy, organizations, theory

Staff

Noella Wyatt, secretary

Department Information

The Department of Sociology does not offer any graduate degrees

Sociology Courses

SOC 501. Social Science Research Methods (4). Principles of scientific research methodology applied to human behavior.

SOC 510. Ethics (1). Principles of ethical behavior. May be repeatable up to 2 credits.

SOC 557. Families in Society (3). Theories and critical analysis of families; specifically the social processes that organize and shape contemporary families.

SOC 564. Statistical Analysis of Social Data I (2). Elementary and advanced descriptive statistics for the social sciences. Topics include graphical displays of data, probability, measures of central tendency and variability, and measures of association between two or more variables.

SOC 565. Statistical Analysis of Social Data II (2). Elementary and advanced inferential statistics for the social sciences. Topics include statistical inference theory and hypothesis testing of sample means, proportions, correlation, and regression coefficients, and other measures of association.

SOC 566. Organization Research and Assessment (5). Principles of scientific research, methodology, and their application to the analysis of organizations. By permission. Prerequisite: introductory statistics.

SOC 596. Individual Study (1-6).

SOC 598. Special Topics (1-6).

SOC 599. Seminar (1-5)



TEACHING ELEMENTARY, ADOLESCENT, AND YOUNG CHILDREN DEPARTMENT (TEACH)

College of Education and Professional Studies
Ellensburg
Black Hall, room 101

509-963-1464

Fax: 509-963-1162

www.cwu.edu/~education

See the website for how these programs
may be used for educational and career
purposes.

Faculty and Staff Chair

David Shorr, PhD

Professors

Susan Donahoe, PhD, elementary education
David Shorr, PhD, early childhood education

Associate Professors

Susan Donahoe, PhD, elementary education
Cory Gann, PhD, early childhood education
Tina Georgeson, EdD, early childhood and
elementary education
Deborah Haskell, PhD, TEACH contributions
middle-level programs and early childhood
education

Assistant Professors

Khodi Kaviani, PhD, elementary education
Teri Walker, EdD, early childhood education

Lecturers

Susan M. Connolly, MEd, lecturer
Leslie Elsaesser, EdD, senior lecturer
Kristin Fisher, MEd, senior lecturer
Melanie Kingham, MEd, senior lecturer
Mary Pack, EdD, lecturer

Staff

Tina Clark, program support supervisor

The Department of Teaching Elementary,
Adolescent, and Young Children does not
offer any graduate degrees at this time.

Elementary Education Courses

EDEL 590. Cooperative Education (1-8). An
individualized, contracted field experience
with business, industry, government, or
social service agencies. The contractual
arrangement involves a student learning
plan, cooperating employer supervision,
and faculty coordination. May be repeated
for credit. Grade will either be S or U. By
permission.

EDEL 591. Workshop (1-6). No more than two
workshops for a combined maximum of 8

credits can be applied toward a master's
program. May be repeated for credit.

EDEL 596. Individual Study (1-6).

EDEL 597. Graduate Research (1-10).

Individual student research under the
direction of a faculty member. Maximum
of 10 credits may be included on course of
study for the master's degree.

EDEL 598. Special Topics (1-6).

EDEL 599. Seminar (1-5).

**EDEL 700. Master's Thesis, Project Study,
and/or Examination** (1-6). Designed to
credit and record supervised study for the
master's thesis, non-thesis project, studio
project, public recital, and/or examination.
May be repeated for up to 6 credits. Grade
will either be S or U. By permission.
Prerequisite: EDF 510.

THEATRE ARTS DEPARTMENT

College of Arts and Humanities
Ellensburg
McConnell Hall, room 102

509-963-1750

Fax: 509-963-1767

www.cwu.edu/~theatre

See website for how these programs may be
used for educational and career purposes.

Faculty and Staff

Chair and Director of Summer Institute

Scott R. Robinson, MFA

Graduate Coordinator

Nadine Pederson, PhD

Professors

Brenda Hubbard, MFA, performance head,
acting, directing, literature
Scott R. Robinson, MFA, resident costume
designer
Michael J. Smith, MFA, acting, directing,
voice, literature, musical theatre

Associate Professors

Christina Barrigan, MFA, design head,
resident lighting designer
George W. Bellah, 3rd, MFA, movement, stage
combat, acting, Asian drama

Assistant Professors

David Brown, MM, music director, music
theory
Terri Brown, PhD, music theatre head, history
Marc Haniuk, MFA, scenic design and
technology
Elise Forier, MFA, theatre education head,
youth theatre, playwriting
Nadine Pederson, PhD, history, literature,
criticism

Lecturers

David Barnett, MFA, theatre technology
Jerry Dougherty, MFA, theatre technology
Keith Edie, MFA, performance

Staff

David Barnett, McConnell state manager/
technical director
Mary Makins, senior department secretary
M. Catherine McMillen, costume shop
manager
Linda Waters, fiscal technician II

Department Information

Students must choose one of two
specializations: theatre production or theatre
studies.

Theatre Studies

The theatre studies specialization is
specifically designed for students with career
goals in dramaturgy, teaching in higher
education, or pursuing a PhD in theatre
history, research, literature, or criticism. The
program is designed to build the research and
analytical skills needed for an academic career
in theatre. This Resident Program focuses on
the dramaturgical aspects of production, as
well as individual scholarly interests related
to theatre arts. With opportunities to both
teach and undertake research projects in
theatre, this program offers the perfect blend
of pedagogy and theory needed to prepare
students for careers as theatre scholars.

A limited number of teaching or research
assistantships are available to qualified
candidates for the academic year. Out-of-state
tuition waivers are also available to qualified
candidates.

Theatre Production

The theatre production specialization is
specifically designed for the working middle
and secondary school teacher who produces
plays and would like to obtain an advanced
degree through hands-on courses in a
program offered entirely during the summer
months, within the context of the Summer
Institute for Theatre Arts.

This program is specifically designed
around the students work schedule with
courses offered annually from mid-June to
mid-July and a culminating project at the
home school. Since it was established in 1996,
teachers representing 27 states and 12 nations
have attended this unique limited-residency
graduate program. Students join more than
60 other students each summer learning
new skills to take back to the classroom and
networking with other theatre artists and
educators.

Most graduate courses supporting the
theatre production specialization are offered
over three summer sessions through the
Summer Institute for Theatre Arts. Many are
intensive workshops and meet from three
to 10 hours per day. Most candidates can
complete approximately 16-20 credits per
summer. Qualified students in the institute
may enroll in the master's degree courses if
room permits, and master's candidates enroll
in selected courses from the institute listings.

Housing for summer institute
participants is available in nearby university
accommodations.

Admission Requirements

Theatre Studies Specialization

Incoming candidates are expected to meet both the requirements for admission to the graduate programs at Central and the following requirements:

- A writing sample, preferably in the discipline, of at least five pages.
- Permission of the faculty, which may include prerequisite or background courses.

The GRE is required for admission to this specialization and a foreign language is required as a graduation requirement.

Theatre Production Specialization

Incoming candidates are expected to meet both the requirements for admission to the graduate programs at Central and the following program requirements:

- Two years of teaching experience or two years of professional theatre experience earned in preparation for teaching
- Permission of the faculty, which may include prerequisite or background courses
- If the candidate does not hold a bachelor's degree in theatre and basic course work in theatre history, prerequisite or background courses may often be taken in the Summer Institute for Theatre Arts. An assessment entry exam is required and is taken shortly after classes begin.

Neither the GRE nor a foreign language is required for the theatre production specialization.

Graduate Assistantships

A limited number of teaching or research assistantships are available to qualified candidates for the academic year. Assistantships are appointed by the dean of Graduate Studies and Research upon recommendation of the department chair.

Assistantship applications must be completed by February 16 in order to insure full consideration; applicants should submit all materials required by the Office of Graduate Studies and Research. Contact them at 509-963-3131 to request application materials.

Master of Arts - Theatre

Required Core Courses

Courses required in all specializations 15

- TH 501 - Introduction to Graduate Studies (1)
- TH 510 - Studies in Dramatic Literature (4)
- TH 511 - Analysis and Criticism (4)
- TH 700 - Master's Thesis Project (6)

Students must choose either the theatre studies or theatre production specialization to complete degree requirements.

Total Core Credits: 56

Theatre Studies Specialization

The theatre studies specialization is designed to build the research and analytical skills students will need for academic careers in theatre. Through opportunities for hands-on dramaturgical experience, teaching, and theatre research, this program offers the perfect blend of theory and practice needed to prepare students for entry into PhD programs, begin teaching careers, and/or professional theatre dramaturgical positions for which they are well qualified.

The program is offered entirely during the academic year requiring a minimum two academic year residency or equivalent.

Program Requirements

A minimum of 45 credits is required for the theatre studies specialization. Thesis credits are included in the minimum. An oral examination and defense of the thesis is required.

Theatre Studies Specialization required courses:

In addition to the MA core of 15 course credits, students must complete the following:

Component 1: Research and History

TH 505 - Research Methods	2
TH 525 - Theatre History Ancients-Renaissance	3
TH 526 - Theatre History Renaissance-Modernism	3
TH 527 - Theatre History Modernism-Present	3

Component 2: Dramatic Literature

Select a minimum of 10 credits from the following	10
TH 512 - Studies in Gender Issues (5)	
TH 513 - Studies in World Drama (5)	
TH 514 - Studies in Asian Drama (5)	
TH 515 - Studies in Ethnic Drama (5)	
TH 516 - Studies in Classical Drama (5)	
TH 517 - Studies in Medieval Drama (5)	
TH 518 - Studies in Early Modern Drama (5)	
TH 519 - Studies in Drama and the State (5)	
TH 598 - Special Topics (1-6)	
TH 599 - Seminar (1-5)	

Component 3: Focal Area

Choose a minimum of 9 credits from the following	9
TH 540 - Directing I (3)	
TH 541 - Directing II (3)	
TH 582 - Performance Studies (3)	
TH 587 - Theatre Pedagogy (3)	
TH 588 - Dramaturgy (3)	
TH 589 - International Applied Studies (1-6)	
TH 593 - Practicum (1-3)	

Component 4: Foreign Language

In order to place students in the best position possible for entry into nationally recognized PhD programs, a minimum of two years of at least one foreign language at the

undergraduate level with a minimum grade of B or better in all terms is required. This may be completed prior to admission or while enrolled in the Theatre Studies Program.

Total Credits: 45

Theatre Production Specialization

The theatre production specialization is designed to prepare English and drama teachers to teach and produce theatre in the secondary and middle schools. Courses are designed specifically for the secondary-school setting and include study in stage technology, teaching acting skills, acquiring basic learning in dramatic literature and history, supervised practice in directing plays and musicals, compiling classroom activities, and creating a curriculum for drama program development.

The program is offered almost entirely in the summer months within the context of the Summer Institute for Theatre Arts. Some graduate study is available during the regular school year. It should be noted that students may find it necessary to register for thesis credits during the academic year. Residency requirement for this program is fulfilled over three summers.

Program Requirements

A minimum of 56 credits is required for the degree specialization. Creative project (thesis) credits may be included in the minimum. The creative project (thesis) required is a full production of a play or musical at an approved outside venue - usually the candidate's high school, or an approved process drama project with written documentation, director's book, and video submitted to the department. The candidate's graduate committee which consists of three faculty members selected by the candidate, will select a member, usually the chair, who will view the production in performance at the candidate's theatre. An oral examination and defense of the creative project (thesis) is required.

A maximum of 15 graduate credits earned within the previous four years at CWU may be applied to the program. The department and the university reserve the right to determine the acceptability of other transfer credit from any institution. Prerequisites required for admission to the program may not be applied to the total required credit for graduation.

Theatre Production Specialization required courses:

In addition to the MA core of 15 course credits, students must complete the following:

Component 1: Directing

TH 540 - Graduate Directing I	3
TH 541 - Graduate Directing II	3
TH 542 - Musical Theatre Directing	4

Component 2: Performance

Choose 12 credits from the following 12

- TH 531 - Mime and Movement (3)
- TH 533 - Stage Combat for Teachers (3)
- TH 534 - Improvisational Techniques (3)
- TH 539 - Directing and Teaching Young Actors (3)
- TH 543 - Acting Fundamentals (3)
- TH 544 - Acting Styles (3)
- TH 545 - Voice and Dialects (3)
- TH 546 - Teaching Shakespeare Performance (3)

Component 3: Technology and Design

Choose 12 credits from the following 12

(At least one course in each of the following areas: costume, scenic, lighting)

- TH 560 - Stage & TV Makeup (3)
- TH 562 - Costume Accessories (3)
- TH 565 - Creative Costuming (3)
- TH 566 - Masks and Makeup (3)
- TH 568 - Lighting Techniques (3)
- TH 571 - Design Methodology (3)
- TH 580 - Scenic Methods (3)
- TH 583 - Settings and Properties (3)

Component 4: Pedagogy and Program Development

Choose six credits from the following 6

- TH 520 - Exploring Drama in the Classroom (3)
- TH 521 - Curriculum & Program Development (3)
- TH 530 - Playwriting Application (3)
- TH 584 - Puppetry in the Classroom (3)

Component 5: Creative Project

TH 502 - Introduction to the Creative Project 1

Total Credits: 56

Note: TH 510, 511, 520, 521, 530, 533, 534, 539, 540, 544, 545, 565, 566, 568, 580, 583, 584, and 700, required for teacher certification, meets Washington State and NCATE criteria. To earn the Washington State endorsement in theatre, the candidate must successfully complete the WEST-E examination. The Praxis test may be required to complete certification in other states.

Note: TH 543 and 583 may be used to fulfill Component 3 if not used to fill deficiencies on admission to the program.

Theatre Arts Courses**TH 501. Introduction to Graduate Studies**

(1). Introduction to current theatre research topics and library resources. Prerequisite: admission to the MA program.

TH 502. Introduction to the Creative Project

(1). Research and preparation for directing the culminating Creative Project: production of an approved play at the candidate's home venue. Review of MLA and documentation format and content. Grade will either be S or U. Prerequisite: TH 501. All coursework (except TH 700) in course of study must be completed.

TH 503. Survey of Theatre History and Literature

(4). Study of important periods of theatre history from beginnings to the present and analysis of selected plays from each period.

TH 505. Research Methods

(2). The procedure, techniques, and application of research methods in theatre. By permission. Prerequisite: admission to MA theatre.

TH 510. Studies in Dramatic Literature

(4). Course content identified by title in the university class schedule. By permission. Prerequisite: admission to MA program.

TH 511. Analysis and Criticism

(4). Critical analysis from Aristotle to the present as applied to selected dramatic texts. By permission. Prerequisite: admission to MA program.

TH 512. Studies in Gender Issues

(5). The study of theory and practices of gender in drama, films, and contemporary performance culture. May be repeated for credit as topics change.

TH 513. Studies in World Drama

(5). The study of theory and practices of post-modern world drama. May be repeated for credit as topics change.

TH 514. Studies in Asian Drama

(5). The study of theory and practices of traditional drama, puppetry, and dance-drama forms of Asia. May be repeated for credit as topics change.

TH 515. Studies in Ethnic Drama

(5). The study of theory and practices of multicultural plays by people of color and other ethnic groups. May be repeated for credit as topics change.

TH 516. Studies in Classical Drama

(5). The study of theory and practices of the drama of the ancients, including Greek and Roman. May be repeated for credit as topics change.

TH 517. Studies in Medieval Drama

(5). The study of theory and practices of drama from the early, middle, and/or late Middle Ages in Europe and/or Asia. May be repeated for credit as topics change.

TH 518. Studies in Early Modern Drama

(5). The study of theory and practices of drama from the Renaissance, 17th- and 18th century in Europe, Asia, and/or the Americas. May be repeated for credit as topics change.

TH 519. Studies in Drama and the State

(5). The study of theory and practices of drama of state-controlled censorship and/or sponsorship, i.e., drama under the French Revolution, drama under the Third Reich, or NEA-sponsored performance. May be repeated for credit as topics change.

TH 520. Exploring Drama in the Classroom

(3). Projects for building drama skills through classroom activities ranging from creative movement to storytelling.

TH 521. Curriculum & Program Development

(3). Exploration of national trends and practices in high school drama programs with emphasis on development in specific situations.

TH 525. Theatre History Ancients-

Renaissance (3). The study of theatrical history from the Ancients through the Renaissance. By permission. Prerequisite: admission to MA theatre.

TH 526. Theatre History Renaissance-

Modernism (3). The study of theatrical history from the Renaissance through Modernism. By permission. Prerequisite: admission to MA theatre.

TH 527. Theatre History Modernism-

Contemporary (3). The study of theatrical history from Modernism to contemporary. By permission. Prerequisite: admission to MA theatre.

TH 530. Playwriting Application

(3). Methods of teaching playwriting and producing one-act play festivals in secondary schools.

TH 531. Mime and Movement

(3). Techniques for teaching basic mime skills and stage movement classes to teenage performers.

TH 533. Stage Combat for Teachers

(3). Training in unarmed skills. Some training in weapon use may be included. Practice in using and teaching these skills for stage performance.

TH 534. Improvisational Techniques

(3). Improvisational exercises to teach young actors the purpose of freeing the body and voice, while sharpening their instincts and intuition.

TH 536. Advanced Stage Movement

(3). The study and practice of specialized movement techniques for the stage focusing on methods such as Laban, Suzuki, Rasabboxes, Alexander, and Linkletter, among others. May be repeated up to 9 credits, if the content changes.

TH 539. Directing and Teaching Young Actors

(3). Staging and teaching skills to draw truth from young actors and eliminate over-acting and frozen memorization.

TH 540. Graduate Directing I

(3). Theory and practice in directing realistic plays.

TH 541. Graduate Directing II

(3). Theory and practice in directing classical plays.

TH 542. Musical Theatre Directing

(4). Study of the director's preparation and rehearsal practices for coordinating and mounting a full musical production. Prerequisite: TH 540.

TH 543. Acting Fundamentals

(3). Teaching realistic acting techniques to young actors.

TH 544. Acting Styles Application

(3). Advanced practice in applying skills of performance to special textual needs, including stylized comedy, modern realism, and heightened language.

TH 545. Voice and Dialects

(3). The physiological fundamentals of vocal production and dialect acquisition skills.

TH 546. Teaching Shakespeare Performance

(3). Techniques to guide young actors for analysis, preparation, and speaking Shakespeare's language.

TH 550. Theatre and Arts Management

(3). Policy and practice of theatre and arts administration including budgets,

contracts, box office, purchasing, staffing, grant writing, marketing, and patron development.

TH 551. Stage Management Curriculum Development (3). Techniques, communication methodology resources, practices, and technical training to develop curriculum for high school stage managers.

TH 554. Scene Painting Applications (3). Advanced study in the application, methodology, and skills of scene painting, materials, and techniques. By permission.

TH 556. Sound Design and Engineering (3). Exploration and application of the elements of design and engineering as they relate to sound for the performing arts.

TH 560. Stage & TV Makeup (3). Study of materials and practice in techniques of creating effect through makeup.

TH 562. Costume Accessories (3). Hat making and accessory construction and their relationship to theatrical costuming.

TH 564. Wig Applications (3). The study and practice of creating and restoring wigs for stage. TH 464 and TH 564 are equivalent courses; student may not receive credit for both. Additional course fees apply.

TH 565. Creative Costuming (3). Creating costumes—both realistic and classic—from old clothes and unusual materials with a minimal budget.

TH 566. Masks and Makeup (3). Creating masks from face castings and techniques for special effects makeup.

TH 568. Lighting Techniques (3). Study of color, instruments, drafting, and electricity for lighting stage productions, with emphasis on limited equipment and budgets.

TH 569. Advanced Lighting Concepts (3).

The study and practice of advanced lighting concepts as they apply to stage production. Prerequisite: TH 568.

TH 570. Music Theatre Workshop (1-6).

Participation in the production of a large musical from first rehearsal to opening night.

TH 571. Design Methodology (3). Study and practice in the concepts and fundamentals of design for the stage. Prerequisite: TH 510.

TH 575. Stage Rigging (3). Study and practice of the techniques of theatrical rigging for the stage.

TH 576. Theatre and Auditorium Maintenance and Management (3).

The study and practice of specialized procedures for maintaining and managing theatre and auditorium stages including rigging, lighting, sound, and related equipment.

TH 580. Scenic Methods (3). Study and practice in techniques of scenery construction, stage rigging, and painting.

TH 582. Performance Studies (3). Explores the concept of performance in the 20th and 21st centuries through case studies and scholarship, with special attention paid to the multi-disciplinary nature of the field.

TH 583. Settings and Properties (3).

Construction of mock stages using various scene-shifting techniques. Theatre shop safety, set assembly, and prop construction techniques.

TH 584. Puppetry in the Classroom (3). Art of puppetry applied to classroom use by teachers and counselors, emphasizing self expression and entertainment.

TH 587. Theatre Pedagogy (4). Student will be given individualized instruction in teaching

practices and will participate in journal writing, critiquing, counseling, coaching, advising, leading discussion, and grading. TH 487 and TH 587 are equivalent courses; students may not receive credit for more than one. May be repeated up to 8 credits. Prerequisite: TH 501

TH 588. Dramaturgy (3). Foundations in the research as applied to theatre production, including author, the world of the play, production history, critical analysis, images, and sources, with attention to the influences of social history, culture, and environment on the production.

TH 589. International Applied Studies (1-6). Applied research at international venues. May be repeated up to 6 credits.

TH 591. Workshop (1-6). No more than two workshops for a combined maximum of 8 credits can be applied toward a master's program.

TH 593. Dramaturgical Practicum (1-3). Practical experience in dramaturgy within the context of theatre production. May be repeated up to 6 credits. By permission. Prerequisite: TH 588.

TH 595. Culminating Portfolio (1). LiveText portfolio will be employed to build professional portfolios, documenting theatre training and compliance with state certification and NCATE standards. Grade will either be S or U.

TH 596. Individual Study (1-6).

TH 598. Special Topics (1-6).

TH 599. Seminar (1-5).

TH 700. Master's Thesis Project (1-6).

Designed to credit and record supervised study for the master's examination. May be repeated up to 6 credits. Grade will either be S or U. By permission.



TRUSTEES**Dan Dixon, BA**

Seattle (September 30, 2012)

Sid Morrison, BS

Zillah (September 30, 2015)

Patricia Notter, BA

Wenatchee (September 30, 2012)

Kate Reardon, BA

Everett (September 30, 2011)

Annette Sandberg, JD

Davenport (September 30, 2014)

Keith Thompson, BA

Spokane (September 30, 2013)

Ron Erickson, JD

Bainbridge Island (September 30, 2015)

Logan Bahr, Student Trustee

Ellensburg (June 30, 2010)

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Aaby, Anthony: Lecturer, Computer Science; PhD, Pennsylvania State University, University Park

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Adams, Susan: Assistant Professor, Nutrition Exercise & Health Science; MS, University of Washington

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- Black, Christine:** Associate Professor, Mathematics; PhD, University of Massachusetts, Amherst
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- Blair, Susan:** Lecturer, Nutrition Exercise & Health Science; MA, University of Missouri
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- Brandsdorfer, Rodney:** Professor, Foreign Languages; PhD, University of Illinois, Urbana
- Braunstein, Michael:** Associate Professor, Physics; PhD, University of Colorado, Boulder
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- Chase**, Dorothy: Associate Professor, Family & Consumer Sciences; PhD, Clemson University
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- Cheney**, Eric: Assistant Professor, Sociology; PhD, University of Massachusetts
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- Cook**, Wendy: Assistant Professor, Management; PhD, University of Washington
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- Cotner Montoya**, Judith: Lecturer, Management; MBA, City University
- Cottonwood**, Andrew: Lecturer, Asia University America Program; MA, Central Washington University
- Cottrell**, Tom: Associate Professor, Biological Sciences; PhD, Colorado State University
- Crane**, Joan: Senior Lecturer, Art; MA, Central Washington University
- Creech**, John: Professor, Library Services; MLS, University North Carolina
- Culjak**, Toni: Professor, English; PhD, University of Wisconsin, Madison
- Cummings**, Bobby: Professor, English; PhD, University of Michigan
- Curtis**, Wendell: Associate Professor, Mathematics; PhD, University of Massachusetts, Amherst
- Cutsinger**, Loran: Associate Professor, Anthropology; PhD, Washington State University
- D'Acquisto**, Leonardo: Professor, Nutrition Exercise & Health Science; EDD, University of Northern Colorado
- Davault**, Kent: Senior Lecturer, English; MA, Central Washington University
- Dechaine-Berkas**, Jennifer: Assistant Professor, Biological Sciences; PhD, University Minnesota, Twin Cities
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- Dittmer**, Timothy: Associate Professor, Economics; PhD, University of Washington
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- Storey, Desi:** Head Coach, Athletics; BS, Central Washington University
- Straughan, Jerome:** Lecturer, Sociology; PhD, University of Southern California
- Strawn, Jessica:** Lecturer, Sociology; MA, Washington State University
- Street, Elizabeth:** Professor, Psychology; DED, West Virginia University, Morgantown
- Stryker, Gabrielle:** Assistant Professor, Biological Sciences; PhD, Johns Hopkins University
- Sun, Key:** Professor, Law & Justice; PhD, Rutgers University
- Sun, Lixing:** Professor, Biological Sciences; PhD, State University of New York
- Sund, James:** Lecturer, University Math Center; MS, Central Washington University
- Sutphin, Christine:** Professor, English; PhD, University of Oregon
- Switzer, Carissa:** Lecturer, Nutrition Exercise & Health Science
- Szabo, Danielle:** Lecturer, Nutrition Exercise & Health Science
- Szal, Dennis:** Assistant Professor, Advanced Programs; EDD, University of Wyoming
- Szpek, Heidi:** Associate Professor, Philosophy & Religious Studies; PhD, University of Wisconsin, Madison
- Takei, Hideki:** Assistant Professor, Information Technology & Administrative Management; DBA, Southern New Hampshire University
- Taussig-Simpson, Gretchen:** Lecturer, Nutrition Exercise & Health Science; MS, Central Washington University
- Temple, Kathryn:** Assistant Professor, Mathematics; PhD, University of Wisconsin
- Tenerelli, Thomas:** Assistant Professor, Economics; PhD, University of Chicago
- Thomas-Bradley, Carin:** Professor, Chemistry; PhD, University of Nevada, Reno
- Thompson, James:** Associate Professor, Accounting; PhD, University of Oklahoma
- Tidd, Ronald:** Professor, Accounting; PhD, University of Minnesota, Twin Cities
- Tolin, Philip:** Professor/Phased Retiree, Psychology; PhD, University of Iowa, Iowa City
- Tolzin, Keith:** Lecturer, Industrial & Engineering Technology; PhD, Walden University
- Trimble, Richard:** Lecturer, Finance & Supply Chain Management; PhD, Arizona State University, Tempe
- Trudgeon, Richard:** Senior Lecturer, Mathematics; MA, Gonzaga University
- Trumpy, Robert:** Assistant Professor, Information Technology & Administrative Management; EDD, Seattle University
- Turcotte, Karen:** Senior Lecturer, Philosophy & Religious Studies; MA, Central Washington University
- Turnbull, Scott:** Lecturer, Political Science; JD, Seattle University of Law
- Uebelacker, Morris:** Professor, Department of Geography; PhD, University of Oregon
- Underhill, Jason:** Lecturer, Aviation; BS, Central Washington University
- Unruh, Richard:** Assistant Professor, Physical Education, School and Public Health; EDD, University of Montana

Unruh, Angela: Senior Lecturer, Information Technology & Administrative Management; MBA, University of Montana

Vaagen, Lindsey: Lecturer, Sociology; MSW, Eastern Washington University

Vendsel, Jeffrey: Lecturer, Communication; BA, San Francisco State University

Volyn, Scott: Lecturer, Communication; JD, University of Idaho

Wade, Suzanne: Lecturer, Department of Geography; MS, Central Washington University

Wagner, Ronald: Associate Professor, Biological Sciences; PhD, Oregon State University

Wahle, Charles: Lecturer, Information Technology & Administrative Management; MED, Central Washington University

Walker, Teresa: Assistant Professor, Teaching Elementary, Adolescent and Young Children; MED, Southwestern College, Kansas

Walker, Sharryn: Assistant Professor, Language, Literacy, & Special Education; PhD, University of Toledo

Wallace, Michael: Lecturer, Information Technology & Administrative Management; MDI, Nyack Alliance Theological Seminary

Wallen, Norman: Lecturer, Music; MA, Central Washington University

Wallin, Jason: Lecturer, Sociology; BS, Central Washington University **Walsh**, Megan: Assistant Professor, Department of Geography; PhD, University of Oregon

Wang, Penglin: Professor, Anthropology; PhD, University of Hawaii, Manoa

Wang, Fen: Assistant Professor, Information Technology & Administrative Management; PhD, University of Maryland

Wang, Fang: Assistant Professor, Finance & Supply Chain Management; PhD, West Virginia University

Ward, Paul: Assistant Professor, Physical Education, School and Public Health; PhD, University of Northern Colorado

Wassell, Charles: Associate Professor, Economics; PhD, University of Wisconsin, Madison

Watkins, Shani: Lecturer, Information Technology & Administrative Management; MED, Central Washington University

Watson, Becky: Lecturer, Communication; DED, University Nevada Las Vegas

Weaver, Robert: Lecturer, Biological Sciences

Weidenaar, Gary: Assistant Professor, Music; DMA, University of Kansas

Wentworth, Sandra: Assistant Professor, Language, Literacy, & Special Education; PhD, University of Southern Mississippi

Whelan, Michael: Associate Professor, Industrial & Engineering Technology; PhD, Iowa State University

Whelan, Lynne: Lecturer, Family & Consumer Sciences; MS, University of Wyoming

Whitcomb, Katharine: Associate Professor, English; MFA, Norwich University

Whitehill, Caroline: Lecturer, Geological Sciences; PhD, Stanford University

Whitmire, Jane: Assistant Professor, Mathematics; PhD, University of Montana

Whitney, Jeff: Assistant Coach, Athletics; BS, Central Washington University

Wibe, Maria: Senior Lecturer, Music; PhD, Russian Institute of Art History

Wickstrom, Stefanie: Senior Lecturer, Foreign Languages; PhD, University of Oregon

Width, Dale: Senior Lecturer, Mathematics; MA, Central Washington University

Willard, Teri: Associate Professor, Mathematics; EDD, Montana State University, Bozeman

Williams, Henry: Professor, Advanced Programs; EDD, East Tennessee State University

Williams, Wendy: Associate Professor, Psychology; PhD, University of California, San Diego

Willis, Scott: Senior Lecturer, Law & Justice; MS, Central Washington University

Wilson, Dale: Professor, Aviation; MS, Central Missouri State University

Wilson, Asher: Lecturer, Accounting; JD, University of Washington

Wilson, Theresa: Lecturer, Management; MBA, University of Washington

Winberry, Jeremy: Research Associate, Geological Sciences; PhD, Pennsylvania State University, University Park

Wirth, Rex: Professor, Political Science; PhD, University of Tennessee, Knoxville

Wise, Mary: Professor, Library Services; MLS, California State University, Fullerton

Woodcock, Don: Professor, Educational Foundations and Curriculum; PhD, University of Oregon

Woodcock, Bruce: Lecturer, Mathematics; MED, Western Washington University

Woods, Robert: Senior Lecturer, University English Second Language; MA, Macquarie University Australia

Woody, Susan: Associate Professor, Nutrition Exercise & Health Science; PhD, University of California, Davis

Wretzel, Joshua: Lecturer, Philosophy & Religious Studies; PhD, Binghamton University

Wu, Keke: Assistant Professor, Management; PhD, University Alabama, Tuscaloosa

Wyatt, Marla: Professor, Family & Consumer Sciences; PhD, Ohio State University Columbus

Xiao, Hong: Professor, Sociology; PhD, University of Connecticut

Yang, Taiqian: Professor, Industrial & Engineering Technology; PhD, University of Washington

Yastchenko, Alena: Lecturer, Undergraduate Studies; MS, Central Washington University

Yoon, Bang-Soon: Professor, Political Science; PhD, University of Hawaii, Manoa

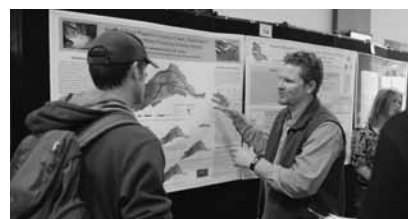
Young, Therese: Assistant Professor, Physical Education, School and Public Health; MA, Texas Woman's University

Young, Michael: Associate Professor, Finance & Supply Chain Management; PhD, University of Missouri, Columbia

Zempel, Gregory: Lecturer, Law & Justice; JD, University of Puget Sound

Zentner, Nicolaus: Lecturer, Geological Sciences; MS, Idaho State University

Zhong, Ke: Assistant Professor, Accounting; PhD, Southern Illinois University



In 1977, Central Washington University initiated an annual program to honor professors who excel in teaching, research or artistic accomplishment, and public service. The honorees' names are placed on a continuing plaque and they receive a monetary bonus during the award year. The honorees to date are:

1977

Chester Z. Keller, Professor of Philosophy, PhD, University of Southern California, Distinguished Teaching

1978

Curt A. Wiberg, Professor of Biology, MS, University of Oregon, Distinguished Teaching

1979

William F. Cutlip, Professor of Mathematics, PhD, Michigan State University, Distinguished Teaching

Martin R. Kaatz, Professor of Geography, PhD, University of Michigan, Distinguished Public Service

George Macinko, Professor of Geography, PhD, University of Michigan, Distinguished Research

1980

Dee R. Eberhart, Professor of Geography, MA, Northwestern University, Distinguished Public Service

Kenneth A. Hammond, Professor of Geography, PhD, University of Michigan, Distinguished Teaching

Stamford D. Smith, Professor of Biology, PhD, University of Idaho, Distinguished Research

1981

Robert D. Bentley, Professor of Geology, PhD, Columbia University, Distinguished Research

Marco G. Bicchieri, Professor of Anthropology, PhD, University of Minnesota, Distinguished Teaching

1982

Barbara M. Brummett, Associate Professor of Music, MM, Wichita State University, Distinguished Public Service

Patrick R. O'Shaughnessy, Professor of Accounting, MBA, Washington State University, Distinguished Teaching

Robert M. Panerio, Professor of Music, MEd, Central Washington University, Distinguished Research

1983

Terry L. DeVietti, Professor of Psychology, PhD, University of Utah, Distinguished Research

Leo D. Nicholson, Professor of Health, Human Performance and Recreation, MEd, Central Washington University, Distinguished Teaching

Dorothy M. Purser, Associate Professor of Health, Human Performance and Recreation, MEd, University of Idaho, Distinguished Public Service

1984

Donald W. Cummings, Professor of English, PhD, University of Washington, Distinguished Teaching

Leonard C. Duncan, Professor of Chemistry, PhD, University of Washington, Distinguished Research

John F. Moawad, Associate Professor of Music, MEd, Central Washington University, Distinguished Public Service

1985

Ronald J. Boles, Professor of Science Education and Biology, PhD, University of Wisconsin, Distinguished Teaching

Allen C. Vautier, Associate Professor of Accounting, JD, University of Washington, Distinguished Public Service

Robert E. Pacha, Professor of Biology, PhD, University of Washington, Distinguished Research

1986

Kenneth A. Briggs, Professor of Health Education, EdD, University of Northern Colorado, Distinguished Public Service

William B. Owen, Professor of Mathematics, PhD, Colorado State University, Distinguished Teaching

1987

Anthony Canedo, Professor of English, PhD, University of Washington, Distinguished Teaching

Wolfgang W. Franz, Professor of Economics, PhD, Washington State University, Distinguished Public Service

Cynthia S. Kriebel, Professor of Art, MFA, Stanford University, Distinguished Artistic Accomplishment

1988

Richard S. Mack, Professor of Economics, PhD, Colorado State University, Distinguished Research

1989

Laura L. Appleton, Professor of Sociology, PhD, University of California at Santa Barbara, Distinguished Teaching

James E. Brooks, Professor of Geography and Land Studies, PhD, University of Washington, Distinguished Public Service

Roger S. Fouts, Professor of Psychology, PhD, University of Nevada, Reno, Distinguished Research

1990

Peter M. Burkholder, Professor of Philosophy, PhD, Tulane University, Distinguished Teaching

Edward P. Klucking, Professor of Biology, PhD, University of California at Berkeley, Distinguished Research

1991

Makiko Doi, Associate Professor of Library Science, MLS, University of Washington, Distinguished Public Service

Thomas J. Kerr, Professor of Political Science, PhD, Syracuse University, Distinguished Teaching

Christian I. Schneider, Professor of German, PhD, University of California at Santa Barbara, Distinguished Research

1992

Elbert E. Bilyeu, Professor of Spanish, PhD, University of Colorado, Distinguished Teaching

Donald J. Cocheba, Professor of Economics, PhD, Washington State University, Distinguished Research

1993

Robert J. Carbaugh, Professor of Economics, PhD, Colorado State University, Distinguished Teaching

Glenn A. Madsen, Professor of Education, EdD, University of Oregon, Distinguished Public Service

1994

William V. Dunning, Professor of Art, MFA, University of Illinois, Distinguished Artistic Accomplishment

Gary W. Heesacker, Professor of Accounting, MBA, University of Washington, CPA, Distinguished Public Service

David G. Lygre, Professor of Chemistry, PhD, University of North Dakota, Distinguished Teaching

1995

Carlos E. Martín, Professor of Spanish, PhD, Northwestern University, Distinguished Teaching

Kent D. Richards, Professor of History, PhD, University of Wisconsin, Distinguished Research

1996

A. James Hawkins, Professor of Theatre Arts, MA, Sacramento State College, Distinguished Public Service

John Q. Ressler, Professor of Geography, PhD, University of Oregon, Distinguished Teaching

Carolyn C. Schactler, Professor of Clothing and Textiles, MA, Central Washington University, Distinguished Research/Artistic Accomplishment and Invention

1997

James L. Nimnicht, Professor of Business Administration, PhD, University of Nebraska-Lincoln, Distinguished Teaching

Roger H. Yu, Professor of Physics, PhD, Montana State University, Distinguished Research

1998

Morris L. Uebelacker, Associate Professor of Geography, PhD, University of Oregon, Distinguished Teaching

Hal J. Ott, Professor of Music, DM, Florida State University, Distinguished Research/Artistic Accomplishment and Invention

Norman J. Gierlasinski, Professor of Accounting, DB Administration, Nova University, Distinguished Public Service

1999

Karen Jane Blair, Professor of History, PhD, State University of New York, Distinguished Research/Artistic Accomplishment and Invention

David Lawrence Gee, Professor of Foods and Nutrition, PhD, University of California at Davis, Distinguished Teaching

Stephen Charles Jefferies, Professor of Health, Human Performance and Recreation, PhD, University of Oregon, Distinguished Public Service

2000

Patricia Anne Callaghan, Professor of English, PhD, University of Oregon, Distinguished Public Service

Terry Lynn Martin, Professor of English, PhD, University of Oregon, Distinguished Teaching

2001

Ethan Alan Bergman, Professor of Family and Consumer Sciences PhD, University of Colorado, Distinguished Public Service

Robert John Carbaugh, Professor of Economics, PhD, Colorado State University, Distinguished Research

Larry Dee Gookin, Professor of Music, MM, University of Oregon, Distinguished Teaching

2002

David Michael Darda, Professor of Biological Sciences, PhD, University of California, Berkeley, Distinguished Teaching

Corwin King, Professor of Communication, PhD, Pennsylvania State University, Distinguished Public Service

Mark Warren Halperin, Professor of English, 2002, MFA, State University of Iowa, Distinguished Artistic Accomplishment/Invention

2003

David Warner Carns, Professor of Industrial and Engineering Technology, MS, Oregon State University, Distinguished Teaching

James G. Pappas, Professor of Education, EdD, Nova Southeastern University, Distinguished Public Service

Alla Ditta Raza Choudry, Associate Professor of Mathematics, PhD, University of Bucharest, Romania, Distinguished Research/Artistic Accomplishment

2004

Bruce Christopher Palmquist, Associate Professor of Physics and Science Education, PhD, University of Minnesota, Distinguished Public Service

Lisa Lee Weyandt, Professor of Psychology, PhD, University of Rhode Island, Distinguished Research/Artistic Accomplishment

2005

Natalie Lefkowitz, Professor of Spanish and French, PhD, University of Washington, Distinguished Teaching

John Pickett, Professor of Music, DM, Indiana University, Distinguished Artistic Accomplishment

2006

Jan S. Bowers, Professor of Family and Consumer Sciences, PhD, Kansas State University, Distinguished Public Service

Keith A. Lewis, Professor of Art, MFA, Kent State University, Distinguished Research/Artistic Accomplishment

Vincent M. Nethery, Professor of Health, Human Performance, and Recreation, PhD, University of Oregon, Distinguished Teaching



2007

Jeffrey Dippmann, Professor of Philosophy and Religious Studies, PhD, Northwestern University, Distinguished Public Service

Peter Jason Saunders, Professor of Economics, PhD, University of Colorado, Distinguished Research/Artistic Accomplishment and Invention

Gerald Joseph Stacy, Professor of English, PhD, Bowling Green State University, Distinguished Teaching

2008

Martha J. Kurtz, Professor of Chemistry and Science Education, PhD, Arizona State University, Distinguished Public Service

Scott M. Lewis, Professor of Mathematics, PhD, Oregon State University, Distinguished Teaching

Chenyang Li, Professor of Philosophy, PhD, University of Connecticut, Distinguished Research/Artistic Accomplishment

2009

Matthew Altman, Director of The William O. Douglas Honors College and Assistant Professor of Philosophy and Religious Studies, PhD, University of Chicago, Distinguished Non-Tenure Track Teaching

Roxanne Easley, Professor of History, PhD, University of Oregon, Distinguished Teaching

Robert Holtfreter, Professor of Accounting, PhD, University of Nebraska, Distinguished Public Service

Joseph Powell, Professor of English, MFA, Florida International University, Distinguished Artistic Accomplishment

2010

Peter Gries, Professor of Music, DM, University of Oregon, Distinguished Service

Susan Lonborg, Professor of Psychology, PhD, Ohio State University, Distinguished Teaching

Ruthi Erdman, Senior Lecturer, English, MA, Central Washington University, Distinguished Non-Tenure Track Teaching

2011

Vijay Singh, Professor of Music, MS, Portland State University, Distinguished Artistic Accomplishment

Sharon Rosell, Professor of Physics, MS, University of Washington, Distinguished Non-Tenure Track Teaching

Laila Abdalla, Professor of English, PhD, McGill University, Canada, Distinguished Teaching

Bobby Cummings, Professor of English, PhD, University of Michigan, Distinguished Public Service

Emeritus Faculty as of January 31, 2011

- Agars, Janis John** (1964): Professor, Department of Art, BA, University of Washington; MFA, Washington State University
- Alawiye, Osman** (1989): Professor, Department of Education, 2005; BA, Dakota Wesleyan University; MA, University of South Dakota; PhD, New Mexico State University
- Alexander, James M.** (1965): Professor, Department of Anthropology, 2001; AB, University of New Mexico; MS, Clemson University; PhD, University of Washington (SeaTac)
- Allen, Helen D.** (1965): Assistant Professor, Library Services, 1975; AB, Earlham College, Indiana; MALS, George Peabody College
- Alumbaugh, Richard** (1969): Professor, Department of Psychology, 2002; BA, MS, Fort Hays Kansas State College; PhD, Texas Technological College (Steilacoom)
- Amby, Joan M.** (1996): Professor, Department of Family and Consumer Sciences, 2006; BA, MA, San Francisco State University; PhD, Oregon State University
- Anderson, David R.** (1969): Professor, Department of Mathematics, 1999; BA, Bradley University; PhD, Duke University
- Andress, Joel M.** (1966): Professor, Department of Geography, 1993; AB, University of Pacific; MS, PhD, University of California at Berkeley
- Applegate, Jimmie R.** (1970): Professor, Department of Education, 1996; BS, Oregon State University; BS, MS, Eastern Oregon College; PhD, Washington University, St. Louis
- Arlt, Walter H.** (1968): Associate Professor, Department of Health, Human Performance and Nutrition, 2000; BS, Washington State University; MEd, Central Washington University
- Bachrach, Jay E.** (1967): Professor, Department of Philosophy, 1998; AB, Indiana University; PhD, Columbia University
- Basler, David D.** (1960): Professor, Department of Education, 1992; BA, State College of Iowa; MA, PhD, State University of Iowa
- Beardsley, Eric R.** (1959): Associate Professor, Department of Health, Human Performance and Nutrition, 1986; BAEd, Central Washington University; MS, Springfield College
- Beath, Linda S.** (1992): Professor, Department of Education, 2007; BA, MA, Western Washington University; PhD, University of Oregon
- Bennett, Robert B.** (1967): Professor, Department of Physics, 1989; BA, Willamette University; MA, PhD, University of Oregon
- Benson, William** (1968): Professor, Department of Sociology, 2000; BA, PhD, Washington State University
- Bentley, Robert** (1969): Professor, Department of Geology, 1997; BS, Oregon State University; PhD, Columbia University
- Berg, Walter L.** (1955): Professor, Department of History, 1982; BA, University of Puget Sound; MA, PhD, University of Washington
- Bilyeu, Elbert E.** (1970): Professor, Department of Foreign Language, 1995; BS, Southwest Missouri State College; PhD, University of Colorado
- Bird, Herbert A.** (1947): Professor, Department of Music, 1978; BM, Oberline Conservatory of Music; MA, Teachers College, Columbia University; ADM, Boston University
- Blanton, Thomas L.** (1967): Professor, Department of English, 1996; BA, MA, Washington State University
- Bowman, Andrea C.** (1989): Professor, Department of Education, 2003; BA, San Jose State University; MAE, Northern Arizona University; EdD, Arizona State University
- Boyungs, Janice C.** (1965): Associate Professor, Department of Health, Human Performance and Nutrition, 1998; BS, Western Illinois University; MEd, Central Washington University
- Brennan, James F.** (1967): Professor, Department of History, 1997; BS, Georgetown University; MA, PhD, University of California at Berkeley
- Brooker, George W.** (1990): Professor, Department of Business Administration, 2001; BA, MBA, PhD, Northwestern University
- Brooks, James E.** (1961): Professor, Department of Geography, 1993; BA, Central Washington University; MA, PhD, University of Washington
- Brown, Donald G.** (1963): Assistant Professor, Department of Education, 1982; BA, MEd, University of Washington
- Brown Jr., James R.** (1980): Professor, Department of Political Science, 2005; BA, University of North Carolina; MA, University of Nebraska; PhD, University of Kansas
- Brown, Robert H.** (1967): Professor, Department of Biology, 1997; BSEd, MS, PhD, University of Arizona
- Byrd, Ross F.** (1969): Professor, Department of Administrative Management and Business Education, 2000; BA, Eastern Washington University; MA, Whitworth College; EdD, Washington State University
- Calhoun, David K.** (1973): Professor, Department of Industrial and Engineering Technology, 2004; BS, MEd, Oregon State University; EdD, Arizona State University
- Canzler, David G.** (1966): Associate Professor, Department of English, 1990; BA, Linfield College; MA, PhD, University of Oregon
- Caples, Minerva L.** (1986): Professor, Department of Education, 2008; BA, MA, University of Texas; EdD, Texas A&M University
- Carne, Eva-Marie** (1968): Professor, Department of Foreign Language, 1992; BA, University of Bristol; MA, PhD, University of Colorado
- Chan-Nui, Ernest** (1967): Associate Professor, Department of Education, 1998; BEd, University of Hawaii; MA, EdD, Columbia University
- Choudary, Alla Ditta R.** (1986): Professor, Department of Mathematics, 2006; BS, Government College Civilline, Pakistan; MS, Punjab University, Pakistan; PhD, University of Bucharest, Romania
- Cocheba, Donald J.** (1970): Professor, Department of Economics, 2002; BS, Southern Illinois University; MS, Louisiana State University; PhD, Washington State University
- Comstock, Dale R.** (1964): Professor, Department of Mathematics, 1996; BA, Central Washington University; MS, PhD, Oregon State University
- Condit, Colin** (1965): Professor, Department of Psychology, 1983; BA, University of Washington; MA, Columbia University; PhD, Washington State University
- Craig, William S.** (1968): Professor, Department of Instructional Media, Academic Computing, 2001; BAEd, MEd, Central Washington University
- Cummings, Donald W.** (1960): Professor, Department of English, 1996; BA, MA, PhD, University of Washington

- Cunha**, Clifford C. (1970): Professor, Department of Music, 1979; BA, San Jose State College; MAEd, Stanford University
- Cutlip**, William F. (1968): Professor, Department of Mathematics, 2000; BS, Eastern Illinois University; MA, University of Illinois; PhD, Michigan State University
- Denman**, Anne S. (1969): Professor, Department of Anthropology, 2003; BA, Mount Holyoke College; PhD, University of California at Berkeley
- DeShaw**, Byron L. (1967): Professor, Department of Education, 1991; BA, MA, Washington State University; EdD, University of Idaho
- Devietti**, Terry L. (1968): Professor, Department of Psychology, 2006; BA, MS, PhD, University of Utah
- Doi**, Makiko (1974): Associate Professor, Library Services, 1993; BA, University of the Pacific; MLS, University of Washington
- Donovan**, Ann F. (1977): Associate Professor, Library Services, 1990; BAEd, University of Florida; MLS, Florida State University; MA, Central Washington University
- Dudley**, Stanley A. (1957): Associate Professor, Department of Industrial and Engineering Technology, 1984; BA, MEd, Central Washington University
- Duncan**, Leonard Clinton (1965): Professor, Department of Chemistry, 1999; AB, Wabash College; MA, Wesleyan University, Conn.; PhD, University of Washington
- Easterling**, Ilda-Marie (1967): Professor, Department of Foreign Language, 1991; BA, MA, University of Utah; PhD, Brigham Young University
- Eberhart**, Dee Richard (1965): Professor, Department of Geography, 1986; BA, University of Washington; MA, Northwestern University
- Edington**, Robert V. (1988): Professor, Department of Political Science, 1999; BA, San Francisco State College; MA, PhD, University of Washington
- Eickhoff**, Henry J. (1950): Professor, Department of Music, 1989; BA, BD, Concordia Seminary; MM, PhD, Northwestern University
- Elaine**, Sharon (1981): Professor, Department of Health Education, 1998; BS, University of Washington; MPH, PhD, University of Michigan
- Emken**, Walter C. (1969): Professor, Department of Chemistry, 1999; BS, Fresno State College; PhD, Oregon State University
- Ennick**, Robert M. (1973): Professor, Department of Industrial and Engineering Technology, 1998; BA, MA, Kearney State College; EdD, University of Northern Colorado
- Erickson**, Barney L. (1969): Professor, Department of Mathematics, 2002; BS, Utah State University; MS, Syracuse University; MS, EdD, Utah State University
- Esbeck**, Edward S. (1978): Professor, Department of Business Administration, 1999; BS, Drake University; MA, State University of Iowa; PhD, Case Western Reserve University
- Eubanks**, James L. (1983): Professor, Department of Psychology, 2007; AB, Humboldt State University; PhD, Arizona State University
- Fairburn**, Wayne A. (1972): Professor, Department of Business Administration, 2005; BA, MS, Eastern Washington University; PhD, Michigan State University
- Farkas**, Steven E. (1965): Associate Professor, Department of Geology, 1996; BS, MA, University of Wisconsin; PhD, University of New Mexico
- Forsyth**, Jay D. (1969): Professor, Department of Accounting, 2007; AS, Kansas State College at Fort Hays; MS, Oklahoma State University; CPA (SeaTac)
- Foster**, John P. (1965): Associate Professor, Department of Communication, 1995; BS, MS, Indiana University
- Franz**, Wolfgang W. (1969): Professor, Department of Economics, 1998; BA, Central Washington University; PhD, Washington State University
- Frederick**, Gary C. (1967): Professor, Department of Health, Human Performance and Nutrition, 1999; BAEd, MEd, Central Washington University; EdD, University of Idaho
- Frye**, Ronald M. (1966): Professor, Department of Industrial and Engineering Technology, 1993; BA, Central Washington University; MS, Kansas State College of Pittsburgh; EdD, University of Missouri
- Gabriel**, Lloyd M. (1966): Associate Professor, Department of Education, 1987; BA, Washington State University; MEd, Oregon State University; EdD, Washington State University
- Gaines**, Robert D. (1961): Professor, Department of Chemistry, 1995; BS, MS, PhD, Montana State College
- Galbraith**, Gary M. (1971): Professor, Department of Art, 2000; BFA, MFA, California College of Arts and Crafts; MA, Central Washington University
- Gamon**, Kenneth O. (1965): Professor, Department of Mathematics, 2001; BS, Eastern Washington University; MS, PhD, Oregon State University
- Garrett**, Roger L. (1968): Associate Professor, Department of Communication, 2000; BA, MA, University of Montana; PhD, Stanford University
- Garrison**, Philip B. (1967): Professor, Department of English, 2004; BA, MA, University of Missouri
- Glauert**, Earl (1968): Professor, Department of History, 1994; AB, Earlham College; PhD, University of Pennsylvania
- Golden**, Edward (1977): Professor, Department of Business Administration, 2001; BS, Northwestern University; MBA, EdD, Seattle University (Lynnwood)
- Goss**, Gail (1988): Professor, Department of Education, 2006; BA, MA, Central Washington University; PhD, Seattle University
- Greatsinger**, Calvin G. (1969): Professor, Department of Education, 1994; BA, Jamestown College, ND; MEd, University of North Dakota; EdD, University of Northern Colorado
- Green**, James G. (1968): Professor, Department of Psychology, 1995; BA, Eastern Michigan University; MA, University of Michigan; EdD, Washington State University
- Gregor**, John G. (1970): Professor, Department of Health, Human Performance and Nutrition, 1999; BAEd, Western Washington University; MEd, Central Washington University; EdD, University of Oregon
- Gregson**, Robert J. (1966): Associate Professor, Department of Health, Human Performance and Nutrition, 1998; BS, MEd, Linfield College
- Gries**, Peter (1974): Professor, Department of Music, 2010; BA, Queens College, MM, University of Puget Sound, DMA, University of Oregon
- Grossman**, George C. (1966): Professor, Department of Education, 1991; BAEd, Eastern Washington University; MEd, EdD, University of Washington
- Guatney**, Charles L. (1976): Associate Professor, Department Administrative Management and Business Education, 1997; BS, Kansas State College; MA, Rider College

- Gunn, Gerald P.** (1973): Professor, Department of Business Administration, 2008; BA, MA, Simon Fraser University; PhD, Colorado State University
- Habib, Helmi S.** (1964): Professor, Department of Chemistry, 1995; BS, Walla Walla College; MS, University of Idaho; PhD, Washington State University
- Halperin, Mark W.** (1966): Professor, Department of English, 2002; BA, Bard College; MFA, State University of Iowa
- Hammond, Kenneth A.** (1962): Professor, Department of Geography, 1997; BA, Eastern Washington University; MS, Oregon State University; PhD, University of Michigan
- Hansen, Russell W.** (1969): Professor, Department of Sociology and Law and Justice, 1993; BA, University of Nevada; MA, PhD, Washington State
- Harsha, Kenneth K.** (1966): Professor, Department of Business Education and Administrative Management, 1991; BSEd, MS, Kansas State Teachers College; EdD, University of Wyoming
- Hartman, Ruth D.** (1965): Associate Professor, Library Services, 1985; BS, Minot State College, ND; AMLS, University of Michigan
- Hasbrouck, Richard W.** (1964): Professor, Department of Chemistry 1995; BS, College of Great Falls; MA, Wesleyan University; PhD, University of Wyoming
- Hawkins, Arlin J.** (1970): Professor, Department of Theatre Arts, 2001; BA, MA, Sacramento State College
- Heckart, Beverly** (1967): Professor, Department of History, 2003; BA, Hood College; MA, PhD, Washington University, St. Louis, MO
- Heimbeck, Raeburne S.** (1967): Professor, Department of Philosophy and Religious Studies, 1999; BA, Stanford University; MDiv, Fuller Theological Seminary; PhD, Stanford University
- Herum, John M.** (1962): Professor, Department of English, 1993; BA, Carroll College
- Hileman, Betty J.** (1967): Professor, Department of Health, Human Performance and Nutrition, 1986; BA, Ohio Wesleyan University; MS, University of Wisconsin; PhD, University of Southern California
- Hinthorne, James R.** (1980): Professor, Department of Geological Sciences, 2001; BA, University of California at Santa Barbara; MS, University of Massachusetts; PhD, University of California at Santa Barbara
- Hood, Webster F.** (1966): Professor, Department of Philosophy, 2006; BA, MA, PhD, Pennsylvania State University
- Hosford, David R.** (1969): Professor, Department of Biological Sciences, 2003; BA, Portland State University; PhD, University of Washington
- Howard Jr., Alexander H.** (1950): Professor, Department of Education, 1984; BAEd, Central Washington University; AM, PhD, University of Chicago
- Hultquist, Nancy B.** (1988): Professor, Department of Geography, 2010, AB, Georgia State University, MA University of Cincinnati, PhD, University of Idaho
- Irving Jr., Robert N.** (1965): Associate Professor, Department of Health, Human Performance and Nutrition, 1987; BA, University of Idaho; MS, Indiana University; EdD, University of Oregon
- Jacobs, Robert C.** (1970): Professor, Department of Political Science, 2002; BA, City College of New York; AM, PhD, Columbia University
- Jakubek, Doris E.** (1959): Associate Professor, Department of Education, 1988; BEd, State University of New York, Teachers College; MA, State University of Iowa
- Jaques, Jennifer** (1967): Professor, Library Services, 2007; BA, Central Washington University; ML, University of Washington
- Jenkins, Andrew P.** (1992): Professor, Department of Health, Human Performance, and Nutrition, 2008; BS, MS, Central Washington University; PhD, Pennsylvania State University
- Johns, Deloris M.** (1964): Associate Professor, Department of Health, Human Performance and Nutrition, 1999; BS, MS, Montana State University
- Johnson, Carl B.** (1982): Associate Professor, Department of Business Administration, 1994; BS, ME, University of North Dakota; MBA, Santa Clara University
- Johnson, Sheldon R.** (1966): Professor, Department of Biological Sciences, 2004; BA, Occidental College; MA, University of California at Los Angeles; PhD, Oregon State University
- Jones, Jane** (1972): Professor, Department of Music, 1985; BAEd, MEd, Central Washington University
- Jones, Robert E.** (1968): Professor, Library Services, 1992; BA, Western State College, Colorado; MALS, University of Denver; MEd, Central Washington University
- Jurenka, Nancy E.** (1989): Professor, Department of Education, 2007; BA, Wilson College; MS, Western Connecticut State; EdD, Indiana University
- Kaatz, Martin R.** (1952): Professor, Department of Geography, 1982; AB, AM, PhD, University of Michigan
- Kadlec, Maria-Maya** (1968): Assistant Professor, Department of Family and Consumer Science, 1976; BA, California State College; MA, Los Angeles State College
- Kaufman, David E.** (1971): Professor, Department of Sociology, 2003; AB, AM, Northwestern University; Ph D, University of California at Los Angeles
- Keller, Chester Z.** (1960): Professor, Department of Philosophy, 1995; AB, Bridgewater College; MA, PhD, University of Southern California
- Kerr, Thomas J.** (1970): Professor, Department of Political Science, 1996; BA, University of Washington; AM, George Washington University; PhD, Syracuse University
- Killorn, Erlice** (1963): Professor, Department of Health, Human Performance and Nutrition, 1999; BS, Montana State College; MS, University of Nevada; PhD, University of Arizona
- King, Donald R.** (1968): Associate Professor, Department of English, 1993; BA, MA, University of Colorado; PhD, University of New Mexico
- King, Corwin P.** (1976): Professor, Department of Communication, 2009; BA, Washington State University; MA, PhD, Pennsylvania State University
- Klemin, Vernon W.** (1979): Professor, Department of Information Technology and Administrative Management, 2007; BBA, Evangel College at Springfield; MEd, University of Missouri; EdD, Utah State University
- Klucking, Edward P.** (1960): Professor, Department of Biological Sciences, 1994; BA, Macalester College; MA, PhD, University of California at Berkeley
- Klug, Linda M.** (1970): Professor, Department of Anthropology, 2001; BA, University of California at Santa Barbara; MA, San Francisco State College; PhD, University of Pittsburgh
- Knight, Kelton W.** (1983): Professor, Department of Foreign Languages, 2008; BA, Weber State College; MA, PhD, University of Utah

- Kollmeyer**, Louis A. (1958): Professor, Department of Art, 1982; BS, Southwest Missouri State College; MA, State University of Iowa; EdD, University of Oregon
- Kramar**, Zoltan (1963): Professor, Department of History, 1996; BA, MA, Creighton University; PhD, University of Nebraska
- Kriebble**, Cynthia (1973): Professor, Department of Art, 2001; BA, Middlebury College; BFA, San Francisco Art Institute; MFA, Stanford University
- Lacey**, William F. (1972): Associate Professor, Department of Education, 1986; BAEd, Central Washington University; MEd, EdD, University of Oregon
- Lacey**, Patricia J. (1970): Assistant Professor, Department of Health, Human Performance and Nutrition, 1986; BAEd, MEd, Central Washington University
- Lalley**, Madalon C. (1990): Professor, Department of Education, 2002; BA, Central Washington University; MA, Arizona State University; EdD, University of Oklahoma
- Lapen**, Robert F. (1973): Professor, Department of Biology, 1998; BS, Wagner College; MS, University of Idaho; PhD, Washington State University
- Lawrence**, Larry L. (1963): Professor, Department of English, 1988; BA, Montana State University; MA, PhD, Stanford University
- Lefevre**, Dale (1975): Professor, Department of Education, 1996; BS, Southern Utah State College; MEd, EdD, Utah State University
- Leinaweaver**, Richard E. (1965): Professor, Department of Theatre Arts, 1992; BA, MA, University of Colorado; PhD, Michigan State University
- Lester**, Margaret N. (1970): Professor, Department of Foreign Language, 1993; BA, Middlebury College; MA, PhD, University of Colorado
- Lister**, Frederick M. (1968): Professor, Department of Mathematics, 1988; BS, Tufts College; MA, University of Michigan; PhD, University of Utah
- Lloyd**, Margaret E. (1985): Professor, Department of Psychology, 1996; BS, Black Hills State College; MS, PhD, Washington State University
- Lowther**, Lawrence L. (1965): Professor, Department of History, 1992; BA, MA, PhD, University of Washington
- Lygre**, David G. (1970): Professor, Department of Chemistry, 2008; BA, Concordia College; PhD, University of North Dakota
- Macinko**, George (1967): Professor, Department of Environmental Studies and Geography, 1996; BA, University of Idaho; MA, PhD, University of Michigan
- Mack**, Richard S. (1972): Professor, Department of Economics, 2008; BA, Dartmouth; PhD, Colorado State University
- Madley**, Susan M. (1990): Professor, Department of Education, 2001; BS, MA, Nonington College, London University; PhD, University of Michigan
- Madsen**, Glenn A. (1971): Professor, Department of Education, 1995; BS, Northern Montana College; MA, San Francisco State College; EdD, University of Oregon
- Majsterek**, David J. (1992): Professor, Department of Language, Literacy and Special Education, 2010; BA, The Catholic University of America, MA, University of New Mexico, EDD, New Mexico State University
- Marra**, Linda (1984): Professor, Department of Music, 2010; BA, Queens College, MM, University of Michigan, DMA, University of Colorado
- Martin**, Bernard L. (1959): Professor, Department of Mathematics and Computer Science, 1993; BA, MEd, Central Washington University; MS, PhD, Oregon State University
- Martin**, Carlos E. (1969): Professor, Department of Foreign Language, 2000; AB, Pontifical University, Spain; MA, Loyola University, PhD, Northwestern University
- Martinen**, Dennis L. (1972): Professor, Department of Education, 2008; BA, MEd, Central Washington University; EdD, Montana State University
- Marx**, Victor (1965): Professor, Library Services, 2001; College of Horticulture and Viticulture, Budapest; BSA, MSA, University of British Columbia; ML, University of Washington
- McGehee**, Charles L. (1969): Professor, Department of Sociology, 1999; BA, Baylor University; MA, University of Oregon; PhD, University of Nevada
- McInelly**, Wells A. (1966): Associate Professor, Department of Psychology, 1993; BA, Utah State University; MA, PhD, University of Wyoming
- McLaughlin**, Patrick L. (1984): Professor, Library Services, 2006; BA, MA, University of Montana; MLS, University of Oregon; PhD, Oklahoma State University
- Miller**, Robert S. (1966): Professor, Department of Psychology, 1984; BSEd, Kansas State Teachers College; MEd, EdD, University of Kansas
- Mitchell**, Robert (1966): Professor, Department of Physics, 1993; BS, New Mexico State University; MS, University of Washington; PhD, New Mexico University
- Moore**, John O. (1980): Professor, Department of Accounting, 2002; BBA, Texas State University; MBA, Sam Houston State University; PhD, University of Houston; CPA, CMA
- Mueller**, Leslie C. (1979): Professor, Department of Business Administration, 2001; BS, University of Kansas; MBA, University of California at Los Angeles; DBA, University of Southern California
- Myers**, Robert L. (1971): Associate Professor, Department of Education, 1991; BAEd, Western Washington University; MEd, Central Washington University; DED, University of Oregon
- Neal**, Lloyd G. (1984): Associate Professor, Department of Communication, 1997; BS, Northwestern University; MA, University of Arizona
- Nelson**, Frank (1966): Associate Professor, Department of Psychology, 1988; BA, Brigham Young University; MS, PhD, University of Utah
- Nesselroad**, Sidney L. (1978): Professor, Department of Music, 2002; BM, West Virginia University; MM, DMA, University of Illinois
- Nicholson**, Leo D. (1964): Professor, Department of Health, Human Performance and Nutrition, 1990; BA, MEd, Central Washington University
- Norris**, Melvin L. (1965): Professor, Department of Education, 1990; BS, MEd, Midwestern University; EdD, North Texas State University
- Olson**, Virgil J. (1960): Professor, Department of Sociology, 1992; BA, MA, Southern Methodist University; PhD, Washington State University (South Seattle)
- O'Shaughnessy**, Patrick R. (1964): Professor, Department of Accounting, 1999; BA, MBA, Washington State University; CPA
- Otto**, Dale E. (1971): Professor, Department of Early Childhood Education and TESL/Bilingual Studies, 1998; BS, Idaho State University; MA, PhD, University of California at Los Angeles
- Owen**, William B. (1969): Professor, Department of Mathematics, 2001; BS, MS, PhD, Colorado State University

- Pacha**, Robert E. (1969): Professor, Department of Biology, 1997; BS, MS, PhD, University of Washington
- Panerio**, Robert M. (1963): Professor, Department of Music, 1991; BA, MEd, Central Washington University
- Papadopoulos**, CJ K. (1966): Associate Professor, Department of Art, 2001; BFA, Michigan State University; MFA, Cranbrook Academy of Art
- Parry**, Thomas J. (1966): Assistant Professor, Department of Health, Human Performance and Nutrition, 1986; BS, MA, Washington State University
- Patton**, Charles D. (1973): Professor, Department of Industrial and Engineering Technology, 1987; BS, Colorado State University; MEd, Montana State University; EdD, University of Illinois at Champaign-Urbana
- Phillips**, Barbara A. (1994): Associate Professor, Department of Education, 2006; BS, Northern Illinois University; MA, Western State College (Colorado); PhD, University of Denver
- Potter**, Mary J. (1981): Associate Professor, Department of Education, 1994; BA, MEd, Central Washington University; EdD, Washington State University (SeaTac)
- Powell**, Willa D. (1975): Associate Professor, Department of Family and Consumer Science, 1996; BS, University of Arkansas, MEd, Central Washington University; PhD, Oklahoma State University
- Putnam**, Betty J. (1967): Professor, Department of Health, Human Performance and Nutrition, 1992; BSEd, Illinois State Normal University; MS, Smith College; PhD, University of Southern California
- Ressler**, John Q. (1969): Professor, Department of Geography, 1997; BA, University of California at Riverside; MA, University of Arizona; PhD, University of Oregon
- Reynolds**, Roger R. (1968): Assistant Professor, Department of Communication, 1999; BS, Oregon State University; MA, University of Hawaii
- Richards**, Kent D. (1966): Professor, Department of History, 1997; BA, Knox College; MS, PhD, University of Wisconsin
- Ringe**, Louis D. (1968): Professor, Department of Geology, 1993; BS, MS, University of Idaho; PhD, Washington State University
- Roberts**, Connie M. (1976): Professor, Department of Information Technology and Administrative Management, 2008; BBA, Evangel College; MEd, Central Washington University; EdD, Utah State University
- Roberts**, Neil A. (1970): Associate Professor, Department of Education, 1997; BA, University of California at Santa Barbara; MA, California State College at Los Angeles; EdD, Colorado State College
- Rogers**, Helen E. (1970): Associate Professor, Department of Education, 1986; BA, University of Idaho; MA, University of Chicago; EdD, Indiana University
- Roth**, Eric S. (1979): Professor, Department of Music, 2001; BS, MM, DMA, College Conservatory of Music of the University of Cincinnati
- Rust**, Samuel P. (1969): Professor, Department of Education, 1992; BA, BAEd, Western Washington University; MEd, Central Washington University; EdD, University of Oregon
- Sahlstrand**, Margaret A. (1965): Professor, Department of Art, 1996; BA, Linderwood College; MFA, State University of Iowa
- Schactler**, Carolyn C. (1976): Professor, Department of Family and Consumer Sciences, 2000; BA, MA, Central Washington University
- Schliesman**, Donald M. (1957): Professor, Department of Education, 1996; AB, Northern State Teachers College, SD; AM, EdD, University of Northern Colorado
- Schmidt**, William D. (1963): Professor, Department of Education, 1999; BS, University of Nebraska; MA, San Diego State College; PhD, Ohio State University
- Schneider**, Christian I. (1968): Professor, Department of Foreign Languages, 2002; BA, University of Tübingen (Germany); MA, Central Washington University; MA, PhD, University of California, Santa Barbara
- Schomer**, Joe H. (1971): Professor, Department of Education, 1999; BA, Washington State University; MEd, Central Washington University; EdD, University of Idaho
- Scott**, Howard G. (1967): Professor, Department of Psychology, 1983; BA, MEd, Western Washington University; EdD, University of Washington
- Sessions**, Frank Q. (1967): Professor, Department of Sociology, 1989; BS, Idaho State College; MS, University of Idaho; PhD, University of Utah
- Sharpe**, Lana J. (1967): Professor, Department of Education, 2002; BS, University of Utah; MA, Central Washington University
- Sheldon**, Dorothy H. (1969): Professor, Department of Education, 1988; BA, MEd, College of Idaho, EdD, University of Utah
- Shorr**, David N. (1980): Professor, Department of Teaching Elementary, Adolescent and Young Children, 2010; BA, California State College, PhD, University of Washington
- Silva**, John L. (1962): Professor, Department of Psychology; BA, MA, San Jose State College; PhD, Washington State University
- Smith**, Milo L. (1956): Professor, Department of Theatre Arts, 1990; BAEd, Northern Idaho College of Education; MA, PhD, University of Oregon
- Smith**, Bonalyn B. (1973): Professor, Department of Music, 1999; BA, University of Rochester; MA, Columbia University; DM, University of Cincinnati
- Smith**, Gary L. (1968): Associate Professor, Department of Health, Human Performance and Nutrition, 2000; BS, Northern Michigan University; MS, Indiana University
- Smith**, Stamford D. (1968): Professor, Department of Biology, 2001; BA, San Jose State College; MS, PhD, University of Idaho
- Smith**, William C. (1968): Professor, Department of Anthropology, 1998; AB, PhD, University of California at Berkeley
- Spall**, Hugh M. (1989): Professor, Department of Business Administration, 2007; BA, University of Montana; MA, PhD, Michigan State University; JD, University of Miami
- Sparks**, Larry M. (1967): Associate Professor, Department of Psychology, 1999; BS, PhD, University of Washington
- Sperry**, Willard C. (1966): Professor, Department of Physics, 1997; BS, Stanford University; MS, PhD, University of California at Davis
- Speth**, Constance (1964): Professor, Department of Art, 1995; BA, MEd, Central Washington University; MFA, University of Idaho
- Stacy**, Gerald J. (1990): Professor, Department of English, 2009; BA, St. Procopius College; MA, Purdue University; PhD, Bowling Green State University
- Street**, Warren R. (1967): Professor, Department of Psychology, 2008; BA, Occidental College; MA, PhD, Claremont Graduate School
- Sutherland**, Harry S. (1968): Professor, Department of Education, 1983; BS, MEd, Lewis and Clark College; EdD, University of Portland
- Taylor**, Azella (1964): Professor, Department of Education, 1983; BA, MEd, EdD, University of Washington

Teets, Bruce E. (1968): Professor, Department of English, 1981; BA, Fairmont State College, MA, West Virginia University; PhD, Duke University

Thelen, Thomas H. (1970): Professor, Department of Biology, 1999; BS, St. Johns University; PhD, University of Minnesota

Tobin, Louise A. (1959): Associate Professor, Department of Family and Consumer Sciences, 1980; BS, University of Washington; MS, Oregon State University

Tolin, Philip (1967): Professor, Department of Psychology, 2006; BS, University of Massachusetts; MA, PhD, University of Iowa

Tolman, Rosco N. (1970): Professor, Department of Foreign Language, 2006; BS, Utah State University; MA, University of Iowa; PhD, University of Utah

Toomey, Ned (1967): Associate Professor, Department of English, 1987; BBA, American University of Beirut; BJ, University of Missouri; MA, West Texas State University; PhD, University of Iowa

Town, George G. (1972): Professor, Department of Computer Science, 1996; BS, MS, University of Wisconsin

Unruh, Dan A. (1965): Professor, Department of Education, 1991; BS, Oregon College of Education; MEd, University of Oregon; EdD, Columbia University

Utzinger, John G. (1963): Associate Professor, Department of Philosophy, 1993; BA, Occidental College; MA, PhD, University of Washington

Van Tassel, Wesley H. (1991): Professor, Department of Theatre Arts, 2006; BS, Moorhead State College; MA, University of North Carolina; PhD, University of Denver

Vance, William C. (1981): Professor, Department of Health, Human Performance, and Nutrition, 2007; BA, MS, California State University at Long Beach; EdD, University of Oregon

Vautier, Allen C. (1975): Professor, Department of Accounting, 2006; BA, JD, University of Washington (Lynnwood)

Vifian, John L. (1961): Professor, Department of English, 1998; BA, Whitworth College; MA, Washington State University; PhD, University of Colorado

White, Donald H. (1981): Professor, Department of Music, 1990; BS, Temple University; MM, PhD, University of Rochester, Eastman School of Music

Wiberg, Curt A. (1956): Professor, Department of Biology, 1991; BS University of Wisconsin; MS, University of Oregon

Wiekling, Robert H. (1981): Professor, Department of Industrial and Engineering Technology, 2003; BA, MA, San Jose State University; PhD, Washington State University

Willberg, Calvin G. (1969): Professor, Department of Computer Science and Geography, 1993; BS, MS, Ohio State University; PhD, University of Washington

Wilson, Blaine R. (1975): Professor, Department of Administrative Management and Business Education, 1999; BS, Brigham Young University; MS, Utah State University; EdD, University of Minnesota

Wolford, Norman H. (1983): Professor, Department of Industrial and Engineering Technology, 1996; BA, MS, North Carolina State

Yee, Robert (1960): Professor, Department of Political Science, 1982; BA, MA, PhD, University of Washington

Yeh, Thomas Y. (1965): Professor, Library Services, 2004; FA, Soochow University; MA, MALS, University of Minnesota

Young, Madge A. (1968): Professor, Department of Education, 1982; BS, University of Nebraska; MA, San Jose State College; EdD, University of Pacific

Young, Timothy W. (1980): Professor, Department of Education, 2002; AB, University of Michigan; MA, Antioch; PhD, Indiana University

Yoxtheimer, Tim L. (1981): Professor, Department of Industrial and Engineering Technology, 2007; BA, MS, Ohio University

Zink, Karl E. (1968): Professor, Department of English, 1982; AB, MA, University of Florida; PhD, University of Washington



FAMILY EDUCATIONAL RIGHTS AND PRIVACY ACT

Notice to Students of Privacy Rights

The Family Educational Rights and Privacy Act (FERPA) of 1974 is a federal law governing access to student education records. FERPA stipulates conditions for release of information from education records and affords students the opportunity to review and seek revision of those records. In addition, the federal law states: (a) that a written institutional policy must be established; and (b) that a statement of adopted procedures covering the privacy rights of students must be made available. The law provides that the institution will maintain the confidentiality of student education records. Central Washington University (CWU) accords all the rights provided by the law, and reserves for itself the right to use and release student education records under the conditions specified by the law.

Education records, as defined by FERPA, include admission, academic, financial aid, and placement records, and other information directly related to students, with the exception of records created by the university police for the purpose of law enforcement, student health records that are created and used solely

in connection with the provision of health care, employment records that relate exclusively to individuals in their capacities as employees, and alumni or other post-attendance records. FERPA regulations apply only to records held for institutional use concerning students who enroll at the university; they do not govern records of applicants who are denied admission or who choose not to attend the university. Nor do they govern records kept by a university official that are the sole possession of the maker and are not normally revealed to anyone else except a temporary substitute (e.g., temporary reminder notes).

FERPA stipulates that institutions may not disclose personally identifiable information contained in education records without a student's written consent, except under conditions specified by FERPA. Information is considered personally identifiable if it contains a student's name or the name of family members, a student's local or family address, an identification number, or descriptions or data sufficient to identify an individual.

FERPA permits access to student education records for school officials with legitimate educational interests. A school official is a person employed by the university in an administrative, supervisory, academic, research, or other staff position (including those in law enforcement and health care); a person serving on the Board of Trustees; or an individual or organization with whom the university has contracted to serve as its agent or to provide services in support of

its operations (examples include attorneys, auditors, collection agents, and the National Student Clearinghouse). Student employees, students serving on official committees, and students serving in other positions in which they assist a university employee in performing her or his official tasks are also considered school officials. A school official has a legitimate educational interest in a student education record if the official needs to review the record in order to fulfill her or his professional responsibilities or official tasks.

With certain exceptions allowed by the law and listed below, no persons outside the university shall have access to, nor will the institution disclose any information from, a student's education record without the written consent of the student. FERPA permits information to be released from education records without written consent of the student to the following officials and agencies:

- Officials of other institutions to which students are applying to enroll
- Persons or organizations providing financial aid
- Individuals and organizations charged with oversight of the university, or of federal or state programs in which the university participates
- Accrediting agencies
- Parents of any student under the age of 21, regardless of the student's dependency status, in cases where the student has violated laws or university rules governing alcohol or controlled substances
- Persons as directed by a judicial order or lawfully issued subpoena, provided the university makes a reasonable attempt to notify the student in advance of compliance (unless directed by judicial authorities not to disclose the existence of an order or subpoena)
- Any person where there is an articulable and significant threat to the health or safety of a student or other individuals
- The Immigration and Naturalization Service under the terms and provisions of immigration law
- An ex parte court order obtained by the United States Attorney General (or designee not lower than an Assistant Attorney General) concerning investigations or prosecutions of any offense listed in United States Code (USC) 18-2332 or an act of domestic or international terrorism as defined in USC 18-2331.

With the exception of alcohol and drug violations, and crimes of violence, for student under the age of 21, CWU does not release information from student education records to parents without the written consent of students.

FERPA permits the university to release information concerning crimes of violence



and non-forcible sex offenses (statutory rape or incest) committed by its students. Victims of alleged crimes of violence or non-forcible sex offense may be informed of the final results of university disciplinary hearings concerning the allegation. When a student is an alleged perpetrator of a crime of violence or a non-forcible sex offense and the university concludes with respect to that allegation that the student has violated university rules, the university may release to the public the name of the student, the offense committed, and the sanction the university imposes against the student.

FERPA further allows student education records to be released to individuals or organizations performing research on behalf of, or in cooperation with, the university. When education records are released for research purposes, FERPA requires the university and its research partners to implement procedures to safeguard their confidentiality. In addition, records released for research must be returned or destroyed when the research is completed, and research findings may not be presented in a manner that makes it possible to identify confidential data from an individual's education record. Central Washington University releases information from student education records to outside researchers only under the conditions specified by FERPA and only to those that agree in writing to safeguard the confidential information contained therein.

At its discretion, Central Washington University may publish or release directory information in accordance with the provisions of FERPA. Directory information includes student name, university and permanent home address and telephone number, a photograph, , dates of attendance, class, major fields of study, previous institutions attended, awards and honors (including honor roll), degrees conferred (including dates), participation in officially recognized sports and activities, and heights and weights of members of athletic teams. Students may withhold directory information by logging into the Student Information System, SAFARI. Once logged in, students can navigate to Student Center>Personal Information>Privacy Settings, and 1) select "Edit FERPA Restrictions" button 2) select the "Restrict all information" or "Release all restrictions" box, and 3) Select "Save" 4) Click the OK button. Requests for non-disclosure of directory information will be honored until the student removes the FERPA/Directory Restriction from SAFARI.

By selecting the FERPA restriction to Directory Information on your Safari student account, you have indicated that no information can be released regarding your student record. The FERPA restriction takes precedence over any "Release of Information" forms that you may have submitted. Therefore, if applicable, we will no longer be able to discuss your student records, including account information, with any family member that you may have previously indicated we

can release information to. With the FERPA restriction in force, you must come in person with picture identification before any CWU office can release any information. If you call a CWU office you will not be provided any information over the phone. CWU employees will only be able to respond, "We do not have any information available". In addition, if you make the CWU honor roll, your name cannot be published on the web or in your hometown newspaper.

FERPA provides students with the right to inspect and review information contained in their education records, to challenge the content and accuracy of those records, to have a hearing if the outcome of the challenge is unsatisfactory, and to submit explanatory statements for inclusion in their files if they disagree with the decisions of the hearing panel. The Student Affairs office has been designated by Central Washington University to establish procedures by which students may review their education records.

Students wishing to review their education records should submit a written request, clearly specifying the records of interest, to the official responsible for maintaining those records. The Student Affairs office will assist in identifying the appropriate official. The responsible official will then make arrangements for the student to inspect the records within forty-five days of the request, and will notify the student of the time and place of inspection. The Student Affairs office is located in Bouillon Hall, 204 on the Ellensburg Campus. You may contact them by phone at 509-963-1515.

Students may have copies made of their records with certain exceptions (e.g., students may not have a copy of academic records for which a financial "hold" exists, or a transcript of an original or source document produced by another institution or by a person not employed by CWU). Copies will be made at the student's expense at prevailing rates, which are listed in the office of Registrar Services in Mitchell Hall at the Ellensburg campus.

Only records covered by FERPA, as delineated in the above paragraph defining "education records," will be made available for inspection. (However, students may have their health records reviewed by their own physicians.) Furthermore, the university is permitted or required to withhold from students the following sorts of records: financial information submitted by their parents, confidential letters of recommendation to which students have waived their rights of inspection, and education records containing information about more than one student. In the latter case, the institution will permit access only to the parts of education records that pertain to the inquiring student. Nor is the university required to permit students to inspect and review confidential letters and recommendations placed in their files prior to January 1, 1975, provided those letters were collected under established policies of

confidentiality and were used only for the purpose for which they were collected.

Students who believe their education records contain information that is inaccurate, misleading, or held in violation of privacy rights or other rights, may ask the university to amend a record. In such cases, the student should write the university official responsible for the record, identify the parts of the record the student believes should be changed, and indicate the reasons it should be changed. If university officials agree with the student's request, the appropriate records will be amended. If the university decides not to amend the record as requested by the student, the student will be notified and advised of her or his right to a hearing regarding the request for amendment. Additional information regarding the hearing procedures will be provided to the student when notified of the right to a hearing. FERPA confers the right to challenge grades only in cases where the grade has been mis-recorded. However, CWU has other procedures for appealing grades.

Student requests for a formal hearing must be made in writing to the Student Affairs office, who, within a reasonable period of time after receiving such a request, will inform the student of the date, place, and the time of the hearing. Students may present evidence relevant to the issues raised and may be assisted or represented at the hearings by one or more persons of their choice, including attorneys, at their own expense. The hearing panels that adjudicate such challenges are appointed by the Student Affairs office. The decisions of the hearing panel will be based solely on the evidence presented at the hearing and are final. They will consist of written statements summarizing the evidence and the reasons for the decision, and will be delivered to all parties concerned. If the decision is in favor of the student, the education records will be corrected or amended in accordance with the decision of the hearing panel. If the decision remains not to amend the student's education record, the student has a right to insert a statement in her or his record commenting on the information therein. This statement will be maintained as a permanent part of the record and must be included when the record is disclosed to an authorized party.

Students who believe the adjudications of their challenges were unfair, or not in keeping with the provisions of FERPA, may request the assistance of the Office of the President of Central Washington University. Students who believe their FERPA rights have been violated may also file complaints with The Family Policy Compliance Office, U. S. Department of Education, 400 Maryland Avenue S.W., Washington, DC 20202-4605 (<http://www.ed.gov/offices/OM/fpc/>).

[PAC: 1/15/03]

Disclaimer:

These policies and procedures are regularly updated. Please check the online CWU catalog for the most recent version of these appendices.

APPENDIX A

Equal Opportunity and Affirmative Action

I. Equal Opportunity for Employees

Central Washington University is an equal opportunity employer that values an inclusive campus and welcomes a diversity of ideas and people. In keeping with its commitment to employee equity, the university recruits, hires, trains, and promotes persons in all job titles, without regard to race, color, creed, religion, national origin, sex, sexual orientation, gender identity and gender expression, age, marital status, disability, genetic information, or status as a protected veteran.

The university ensures that all personnel actions such as compensation, benefits, transfers, terminations, layoffs, return from layoffs, university-sponsored training, education, tuition assistance, and social and recreation programs, will be administered without regard to race, color, creed, religion, national origin, sex, sexual orientation, gender identity and gender expression, age, marital status, disability, genetic information, or status as a protected veteran.

II. Affirmative Action

Central Washington University is committed to affirmative action for Asians / Pacific Islanders, Blacks, Hispanics, Native Americans / Alaskan Natives, women, persons 40 years of age or older, persons of disability, and protected veterans. This commitment is expressed through the university's efforts to eliminate barriers to equal employment opportunity and improve employment opportunities encountered by these affected groups.

III. Equal Opportunity for Students

Central Washington University will provide students equal access to all programs and services on the basis of merit without regard to race, color, creed, religion, national origin, sex, sexual orientation, gender identity and gender expression, age, marital status, disability, or status as a protected veteran.

No person will be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity sponsored by the university, including, but not limited to, admissions, academic programs, student employment, counseling and guidance services, financial aid, recreational activities, and intercollegiate athletics.

No member of the university community shall treat students differently because of their race, color, creed, religion, national origin, sex, sexual orientation, gender identity

and gender expression, age, marital status, disability (except to provide reasonable accommodation), or status as a protected veteran. The university has established mechanisms to address complaints of discriminatory treatment, including harassing behaviors (e.g., physical, verbal, graphic, or written) which might lead to the creation of a hostile environment.

IV. Gender Equity in Higher Education

Washington State law prohibits discrimination on the basis of gender in institutions of higher education. Provisions of this law can be found in RCW 28B.110. Rules and guidelines have been developed to eliminate possible gender discrimination to students, including sexual harassment. These rules address academic programs, student employment, counseling and guidance services, financial aid, and recreational activities including club sports and intercollegiate athletics.

With respect to higher education student employment, all institutions shall be required to: a) make no differentiation in pay scales on the basis of gender; b) assign duties without regard to gender except where there is a bonafide occupational qualification as approved by the Washington Human Rights Commission; c) provide the same opportunities for advancement to males and females; and d) make no difference in the conditions of employment on the basis of gender in areas including, but not limited to, hiring practices, leaves of absence, and hours of employment.

Admission to academic programs shall be made without regard to gender. Counseling and guidance services for students shall be made available to all students without regard to gender. All academic and counseling personnel shall be required to stress access to all career and vocational opportunities to students without regard to gender. All academic programs shall be available to students without regard to gender. Recreational activities shall be offered to meet the interests of students, with no disparities based on gender. Financial aid shall be equitably awarded by type of aid, also with no disparities based on gender.

With respect to intercollegiate athletics, institutions that provide the following shall do so with no disparities based on gender: a) benefits and services (e.g., equipment and supplies; medical services; services and insurance; transportation and per diem allowances; opportunities to receive coaching and instruction; scholarships and other forms of financial aid; opportunities for competition; publicity and awards, and scheduling of games and practice times); b) opportunities to participate in intercollegiate athletics; c) male and female coaches and administrators. (Institutions shall attempt to provide some coaches and administrators

of each gender to act as role models for male and female athletes.)

Each institution shall develop and distribute policies and procedures for handling complaints of sexual harassment.

The executive director of the Higher Education Coordinating Board, in consultation with the Council of Presidents, shall monitor the compliance by institutions of higher education with this chapter. A violation of this chapter shall constitute an unfair practice under chapter 49.60 RCW, including the right to file a complaint with the Human Rights Commission and to bring a civil action, shall apply. This chapter shall supplement, and shall not supersede, existing law and procedures relating to unlawful discrimination based on gender. Institutions of higher education shall distribute copies of the provisions of this chapter to all students. If any provision of this act or its application to any person or circumstance is held invalid, the remainder of the act or the application of the provision to other persons or circumstances is not affected.

The person responsible for coordinating and monitoring compliance with the provisions of this chapter as well as Title IX, is Staci Sleight-Layman, Office for Equal Opportunity, Barge Hall, room 211, Central Washington University, 509-962-2205. Students with gender discrimination complaints are encouraged to utilize the complaint and resolution policy and procedures noted below.

V. Sexual Harassment Policy

It is the policy of Central Washington University to maintain a work and academic community which is free from sexual harassment. Sexual harassment violates state and federal law and will not be tolerated by this institution. An individual in violation of this policy will be subject to informal or formal disciplinary action up to and including dismissal from employment.

For the purposes of this policy, sexual harassment is defined as unwelcome sexual advances, requests for sexual favors, and other verbal or physical conduct of a sexual nature when:

- A. Submission to such conduct is made either explicitly or implicitly a term or condition of an individual's employment or career advancement.
- B. Submission to or rejection of such conduct by an individual is used as a basis for an employment decision or an academic decision affecting such individual; or
- C. Such conduct has the purpose or effect of unreasonably interfering with an individual's work or creating an intimidating, hostile, or offensive work or academic environment.

Based on the definition provided above, examples of sexual harassment prohibited

by this policy include, but are not limited to: physical assault, direct propositions of a sexual nature, or subtle pressure for sexual activity. In addition, behaviors which constitute a pattern of conduct that discomforts or humiliates the recipient are prohibited. Such behaviors may include: comments of a sexual nature, sexually explicit statements, questions, jokes, or anecdotes, unnecessary touching, patting, hugging, or kissing, remarks of a sexual nature about a person's clothing or body, or remarks about sexual activity or speculations about previous sexual experience, and persistent, unwanted attempts to change a professional relationship to an amorous one.

All members of the university community are encouraged to work toward maintaining an educational and work environment free from sexual harassment.

To this end,

- A. The director of the Office for Equal Opportunity will provide training programs to educate the university community on the subject of sexual harassment and the university's obligation to prevent its occurrence. In addition, the director will ensure that the sexual harassment policy is appropriately displayed on campus and included in the university's policy manual.
 - B. Persons who believe they are experiencing sexual harassment are encouraged to act promptly and report such concerns to their immediate supervisor, administrator or department chair, or the director of the Office for Equal Opportunity (Barge Hall, room 211, 509-963-2205, oeo@cwu.edu) or the vice president for Student Affairs (Bouillon Hall, room 204, 509-963-1515). (Concerns which involve sexually harassing behaviors of university employees may be brought to the director of the Office for Equal Opportunity. Concerns which involve student-to-student sexual harassment may be brought to the attention of the conduct officer.) The university encourages resolution of sexual harassment complaints at the lowest possible level. Persons who have been sexually assaulted are also encouraged to contact Campus Police (Campus Safety Building, 509-963-2958).
 - C. Supervisors, administrators, and department chairs who receive informal sexual harassment complaints will act on them in a timely fashion in an attempt to resolve such situations informally. They may wish to obtain guidance from the Office for Equal Opportunity. If matters cannot be resolved informally, discrimination complaint and resolution procedures are available.
 - D. No individual shall be penalized or retaliated against in any way by the university community for his or her participation in any complaint process.
1. Complaints alleging sexual harassment by a university employee or other agent of the university may be filed in the Office for Equal Opportunity. Copies of the procedures are available at www.cwu.edu/~oeo/complaint_procedures.html or on request.
 2. Complaints alleging student peer sexual harassment may be made to the conduct officer.
 3. Complaints may also be filed with outside government agencies. A list of these agencies and their addresses is available in the Office for Equal Opportunity or online at www.cwu.edu/~oeo/complaint_procedures.html.

VI. Discrimination Complaint and Resolution Policy and Procedures

Central Washington University is committed to the investigation and resolution of complaints against employees by any person alleging discriminatory behavior and/or violations of the university's nondiscrimination policy. Discrimination complaint and resolution procedures are available to members of the university community (faculty, administrators, staff, and students), applicants for employment or admission, and members of the public who believe they have been discriminated against by the university or members of the university community. Complaints against the university or its employees should be made to the Office for Equal Opportunity, Barge Hall, room 211, CWU 509-963-2205, oeo@cwu.edu. Complaints against students should be made to the conduct officer, Bouillon Hall, room 204, 509-963-1515. Copies of these procedures are available at www.cwu.edu/~oeo/complaint_procedures.html.

APPENDIX B

Central Washington University Student Rights and Responsibilities Policy

Section One

Statement of Rights and Responsibilities

I. Preamble

Central Washington University is a community that exists for the generation, acquisition, diffusion, and preservation of knowledge, the growth of all its members, and the general well-being of society. Free inquiry and free expression are indispensable to the attainment of these goals. All members of the university community are encouraged to develop the capacity for critical judgment

and to engage in a sustained and independent search for truth in an atmosphere of academic freedom. Freedom to teach and freedom to learn are inseparable facets of academic freedom. The freedom to learn depends upon appropriate opportunities and conditions in the classroom as well as elsewhere on campus. The responsibility to secure and to respect general conditions conducive to the freedom to learn is shared by all members of the university community. The university has developed policies and procedures which provide and safeguard this freedom, within the framework of general standards, and with the broadest possible participation of the members of the university community. This document articulates the general policies that provide for the academic freedom of students in this university community and forms the basis on which more specific policies such as the Student Conduct Code, rules on students records, etc., have been formulated and adopted.

II. Access to Central Washington University

A. Admissions, Retention, and Graduation

Central Washington University supports equal educational opportunity for all regardless of sex, race, color, creed, national origin, age, sexual orientation, marital status, handicap, religion, disability, or status as a disabled or Vietnam-era veteran. Persons seeking admission to the university have the right to be admitted if they meet the admission standards established for the university by the board of trustees of Central Washington University. Admission to the university does not automatically admit students to those programs which have special standards for admission or which may restrict admissions on the basis of available resources. To be eligible for continued enrollment in the university and for graduation from the university, students are responsible for meeting the university's published requirements for retention and graduation.

B. University Facilities and Services

All regular students have the right to make full use of the facilities and services of the university which are generally available to students. There are, however, some limitations on the availability and use of university resources. Students are expected to use university facilities and services responsibly and with consideration for other members of the university community. Offices responsible for providing facilities and services will, upon request, furnish guidelines for their use.

III. Student, Faculty, Staff Relationship

The relationship between students and faculty/staff is one which is based upon mutual respect. Students see faculty and staff

in a variety of roles: teachers, counselors, librarians, administrators, advisors, employers, supervisors, colleagues. In those rare instances where a student may wish to pursue a grievance having to do with grades or actions taken by a faculty member or a staff member of an office or department which adversely affected the student's academic progress, the university provides a procedure by which the grievance may be pursued. The rules for the process are contained in the Rules Governing the Operations of the Board of Academic Appeals, copies of which are available in the Office of the Vice President.

A. In the Classroom

1. Student Rights

A student who enrolls in a course has the following rights:

- a. To know from the instructor the goals and content of the course
- b. To know from the beginning the instructor's expectations and grading methods
- c. To be evaluated on the materials of the course and not on extraneous matters
- d. To consult with the instructor outside the classroom on matters related to the course

2. Student Responsibilities

A student who enrolls in a course has responsibility to observe the standards of academic performance defined by the instructor and the standards of conduct established by the instructor so as to assure the freedom of the instructor to teach and the freedom of the other students to learn.

B. Outside the Classroom

Students have a right to the services provided by faculty and staff, including such services as academic advising, counseling over a broad range of problem areas, dissemination of information, and clarification of university policies and procedures, including those involving grievances. Because of the size and complexity of the university, students have the primary responsibility for initiating requests for such services, although faculty and staff are expected to be sensitive to student's needs and to offer assistance if students appear to need it.

IV. Student Records

A. Student Records Rules

The university has adopted rules which govern the form and variety of student records collected and maintained by the university, the nature of information collected, and the way in which student information is recorded, maintained, and eventually disposed of, consistent with federal and state regulations. Copies of the rules (in accordance with Public Law

93-380 the Family Educational Rights and Privacy Act of 1974, i.e., the Buckley Amendment) are available in the Office of the Vice President. Students have a right to expect that information about themselves of a private, personal, or confidential nature which they share with faculty and staff will be disclosed only according to student records rules. Faculty and staff may provide judgments of a student's ability and character to others in appropriate circumstances, normally with the knowledge and consent of the student concerned, and in accordance with the university's rules on student records.

B. Students' Rights

The rules on student records also define the following rights of students with respect to their records and the procedures to be followed to guarantee those rights:

1. The right to inspect and review information contained in their educational records
2. The right to challenge the contents of their educational records
3. The right to submit an explanatory statement for inclusion in the educational record if the outcome of the challenge is unsatisfactory
4. The right to prevent disclosure, with certain exceptions, of personally identifiable information
5. The right to secure a copy of the university rules, which includes the location of all educational records
6. The right to file complaints with the appropriate federal and state agency(ies) concerning alleged failures by the university to comply with applicable laws, rules, and their implementing regulations

C. Students' Responsibilities

Students are responsible for furnishing, completely and accurately, such pertinent information as required by the university so that it may perform its proper function as an educational institution. If students' circumstances change, e.g., name, address, financial situation, etc., they are responsible for seeing that proper university officials are informed of such changed circumstances.

V. Student Life

Student Life encompasses a broad area, including the freedoms to form associations, to inquire and express opinions, and to participate in institutional government.

A. Association

Students have the right to form organizations and to join associations to promote their common interests. In doing so, they have the responsibility to follow university policies and procedures, copies

of which are available in the Office of Campus Life.

B. Inquiry and Expression

Students and student organizations have the right to examine and discuss all questions of interest to them, to express opinions publicly and privately, to support causes, and to invite and hear any person of their own choosing. Such activities shall not disrupt the regular and essential operation of the university. Students and student organizations are responsible for following the policies and procedures related to these activities, copies of which are available in the Office of Campus Life.

C. Student Participation in Institutional Government

Students have the right to express their views by lawful procedures on issues of institutional policy and on matters of general interest to the student body, and to participate in the formulation and application of institutional policy affecting academic and student affairs. Student government, the Associated Students of Central Washington University, is the primary vehicle for student participation in institutional government, and its role is explicitly stated in its constitution and by-laws, copies of which are available in the Office of Campus Life. Other opportunities for involvement in academic and student affairs areas may be found in the various departmental or administrative offices. Having become involved in institutional governance, students are responsible for fulfilling the obligations they have undertaken.

VI. Student Conduct

The following areas are subject to change please consult the CWU policy manual at www.cwu.edu/~pres/policies/index.html.

Students are members of both the university community and the larger community outside the university. As members of the university community, students are guaranteed those rights described in this document. As members of the larger community, students are afforded those rights guaranteed by the state and federal constitutions, the authority of which extends across both communities.

At the same time, both communities have established standards of conduct designed to protect their essential purposes. The university community has defined in its Student Conduct Code that conduct in which its members may not engage without penalty. The larger community has defined such behavior in its laws.

Outlined below are the standards in disciplinary proceedings established by the university with respect to student conduct which violates the norms of either the university or the larger community.

A. The University Community

The Student Conduct Code enumerates proscribed behavior and describes procedures followed in cases where students are alleged to have engaged in such conduct. These procedures guarantee procedural due process to the accused students and are fully described in the Student Conduct Code, copies of which are available in the Office of the Vice President.

B. The Larger Community

If a student's behavior results in charges that both the law of the larger community and the proscriptions of the university's Student Conduct Code have been violated, the university does not waive the right to initiate proceedings in accordance with provisions of the Student Conduct Code.

Section Two

Student Conduct Code (Refer to WAC 106-120 for complete code. Revisions and current policy available in the Office of the Vice President.)

I. General Policy

A. Definitions

1. "University" shall mean Central Washington University.
2. "Vice president" shall mean the vice president for Academic and Student Life or the vice president's designee.
3. "Student" shall mean a person enrolled at the university either full or part time, pursuing undergraduate, graduate, or extension studies, or a person accepted for admission or readmission to the university.
4. "University community" shall include the employees and students of Central Washington University and all property and equipment of the university.
5. "Hazing" shall include any method of initiation into a student organization or living group, or any pastime or amusement engaged in with respect to such an organization or living group that causes, or is likely to cause, bodily danger or physical harm, or serious mental or emotional harm, to any student or other person attending Central Washington University. The term does not include customary athletic events or other similar contests or competitions.
6. "Sexual assault" occurs when the act is intentional and is committed either by (a) physical force, violence, threat, or intimidation; (b) ignoring the objections of another person; (c) causing another's intoxication or impairment through

the use of alcohol or drugs; or (d) taking advantage of another person's incapacitation, state of intimidation, helplessness, or other inability to consent.

7. "Sexual misconduct" occurs when an act is committed without intent to harm another and where, by failing to correctly assess the circumstances, a person mistakenly believes that effective consent was given and did not meet his/her responsibility to gain effective consent.
8. "Sexual harassment" is defined as unwelcome sexual advances, requests for sexual favors, and other verbal or physical conduct of a sexual nature. More specifically, sexually harassing behavior that includes the following:
 - (a) Gender harassment, including sexist statements and behaviors that convey insulting, degrading, or sexist attitudes
 - (b) Seductive behavior encompassing unwanted, inappropriate, and offensive physical or verbal sexual advances
 - (c) Sexual bribery, involving solicitation of sexual activity or other sex-linked behavior by promise of reward
 - (d) Sexual coercion of sexual activity or other sex-linked behavior by threat of punishment
 - (e) Sexual assault, attempted rape, and rape. Additional examples of sexual harassment can be found in the university's Sexual Harassment Policy
9. "Stalking" is a legal term for repeated harassment or other forms of invasion of a person's privacy in a manner that causes fear to its target. Stalking may include such acts as repeated following; unwanted contact (by letter or other means of communication); observing a person's actions closely for an extended period of time; or contacting family members, friends, or associates of a target inappropriately.

B. Introduction and Purpose

The students of Central Washington University are responsible for complying with policies, standards, rules, and requirements for academic and social behavior formulated by the university for the maintenance of an orderly and responsible functioning of the university community. Students enrolled at any of the university's campuses are expected to uphold these standards both on and off campus. At the same time, students have protection through orderly procedures against arbitrary or capricious actions or decisions by university authorities. Due process is recognized as essential to the proper enforcement of university

rules. The purpose of this document is to provide a procedure and rules by which a student will be afforded due process in the matter of alleged violations of university standards, rules, and requirements governing academic and social conduct of students.

The university recognizes a responsibility to resolve behavior problems before they escalate into serious problems requiring the application of these rules. Therefore, the vice president shall generally review and/or investigate student behavioral problems which are referred by university community members or any subsidiary conduct agencies to the Student Conduct Council, or which otherwise come to the attention of the vice president through the office of Public Safety and Police Services or other official university reports. The vice president and the Problem Solving Team shall be as proactive as possible concerning the resolution of student behavioral problems and use reasonable arbitration and conflict resolution methods in order to prevent such problems from further interfering with the university community or the student's own educational progress.

The vice president shall provide for due process for students throughout the behavioral problem-solving intervention by following the proper steps related to the initiation, investigation, and disposition of complaints against a student as outlined in Section III of this document.

Any student is subject to these rules, independent of any other status the individual may have with the university. Any action taken against a student under these rules shall be independent of other actions taken by virtue of another relationship with the university in addition to that of the student.

C. Cooperation with Law Enforcement Agencies

Central Washington University distinguishes its responsibility for student conduct from the controls imposed by the larger community beyond the university, and of which the university is a part. The university does not have the responsibilities of a parent for the conduct of students. When students are charged with violations of laws of the nation or state, or ordinances of the county or city, the university will neither request nor agree to special consideration for students because of their status as students, but the university will cooperate with law enforcement agencies, courts, and any other agencies in programs for rehabilitation of students.

Central Washington University reserves the right to impose the provisions of this policy and apply further sanctions before or after law enforcement agencies, courts, and other agencies have imposed penalties or otherwise disposed of a case.

II. Proscribed Conduct

A student shall be subject to disciplinary action or sanction upon violation of any of the following conduct proscriptions:

- A. Disruptive and disorderly conduct which interferes with the rights and opportunities of other students to pursue their academic studies.
- B. Academic dishonesty in all its forms including, but not limited to:
 1. Cheating on tests
 2. Copying from another student's test paper
 3. Using materials during a test not authorized by the person giving the test
 4. Collaboration with any other person during a test without authority
 5. Knowingly obtaining, using, buying, selling, transporting, or soliciting in whole or in part the contents of an un-administered test or information about an un-administered test
 6. Bribing any other person to obtain an un-administered test or information about an un-administered test
 7. Substitution for another student or permitting any other person to substitute for oneself to take a test
 8. Plagiarism, which means the appropriation of any other person's work and the unacknowledged incorporation of that work in one's own work offered for credit
 9. Collusion, which means the unauthorized collaboration with any other person in preparing work offered for credit
- C. Filing a formal complaint with the Office of the Vice President with the intention of falsely accusing another with having violated a provision of this code.
- D. Furnishing false information to any university official, especially during the investigation of alleged violations of this code.
- E. Furnishing false information to the Student Conduct Council with the intent to deceive, the intimidation of witnesses, the destruction of evidence with the intent to deny its presentation to the Student Conduct Council or the vice president when properly notified to appear.
- F. Intentionally setting off a fire alarm or reporting a fire or other emergency or tampering with fire or emergency equipment except when done with the reasonable belief in the existence of a need therefore.
- G. Forgery, alteration, or misuse of university documents, records, or identification cards.
- H. Sexual assault in any form, including acquaintance rape and other forced and/or non-consensual sexual activity.
- I. Actual or attempted physical/emotional abuse of any person or conduct which threatens or endangers the health and safety of any person or which intentionally or recklessly causes a reasonable apprehension of harm to any person.
- J. Harassment of any sort or any malicious act which causes harm to any person's physical or mental well being.
- K. Recklessly engaging in conduct which creates a substantial risk of physical harm to another person.
- L. Creating noise in such a way as to interfere with university functions or using sound amplification equipment in a loud and raucous manner.
- M. Theft or malicious destruction, damage, or misuse of university property, private property of another member of the university community, whether occurring on or off campus; or theft or malicious destruction, damage or misuse on campus of property of a nonmember of the university community.
- N. Unauthorized seizure or occupation or unauthorized presence in any university building or facility.
- O. Intentional disruption or obstruction of teaching, research, administration, disciplinary proceedings, or other university activities or programs whether occurring on or off campus or of activities or programs authorized or permitted by the university pursuant to the provisions of this document.
- P. Intentional participation in a demonstration which is in violation of rules and regulations governing demonstrations promulgated by the university pursuant to the provisions of this document.
- Q. Unauthorized entry upon the property of the university or into a university facility or any portion thereof which has been reserved, restricted in use, or placed off limits; unauthorized presence in any university facility after closing hours; or unauthorized possession or use of a key to any university facility.
- R. Possession or use on campus of any firearm, dangerous weapon or incendiary device or explosive unless such possession or use has been authorized by the university.
- S. Possession, use, or distribution on campus of any controlled substance as defined by

the laws of the United States or the state of Washington except as expressly permitted by law.

- T. Violation of the university policy on alcoholic beverages which states:
 1. Persons 21 years of age or older may possess and/or consume alcoholic beverages within the privacy of their residence hall rooms or apartments. Washington State law provides severe penalties for the possession or consumption of alcoholic beverages by persons under 21 years of age and for persons who furnish alcoholic beverages to minors. All university students should be aware of these laws and the possible consequences of violations
 2. The university does not condone the consumption of alcoholic beverages by minors at functions sponsored by Central Washington University organizations. Organizations are held responsible for the conduct of their members at functions sponsored by the organization and for failure to comply with Washington State law
 3. The Student Conduct Council may place on probation any organization or prohibit a specific campus social function when the consumption of alcoholic beverages has become a problem of concern to the university
- U. Conduct which violates the university policies on computer use.
- V. Violation of clearly stated proscriptions in any published rule or regulation promulgated by any official campus committee, commission, or council acting within the scope of its authority.
- W. Violation on or off campus of any city, county, state, or federal law while participating in any university-sponsored activity.
- X. Conspiracy to engage in hazing or participation in hazing of another.

III. Initiation, Investigation, and Disposition of Complaints

A. Philosophy

The Problem Solving Team deals with student behaviors which constitute violations of this code. The Problem Solving Team meets weekly to review Residence Hall Incident Reports filed by resident assistants and building managers, as well as police reports, which deal with both on- and off-campus students. The Problem Solving Team works together to suggest intervention strategies which are considered to be most appropriate and effective for eliminating specific negative student behaviors. The Problem Solving Team is co-chaired by the Assistant to the associate VP for Student Life, Senior Director of Housing, New Student Programs/Chief Conduct Officer, also



includes representatives from Public Safety and Police Services, University Housing and New Student Programs, the Diversity Center, Student Medical and Counseling Clinic and the Wildcat Wellness Center.

B. Process

Incidents that come to the attention of the Problem Solving Team may be addressed in one of the following ways:

1. No action.
2. Informal meetings with relevant university officials.
3. Initiate proceedings in the Office of the Vice President for Academic and Student Life. Official proceedings in the vice president's office are conducted when it becomes apparent to the Problem Solving Team that the initial and more informal forms of intervention with a student have been unsuccessful in positively modifying a student's behavior.

C. Investigation and Disposition of Complaints

The following rules will govern the processing of alleged violations of the proscribed conduct listed in the Student Conduct Code, with one exception. Allegations of discrimination, including sexual harassment, will utilize a separate process in order to provide both parties their rights under the law and in accordance with Title VI of the Civil Rights Act of 1964 and Title IX of the Education Amendments of 1972. Copies of the Discrimination Grievance Process are available in the Office of the Vice President.

1. A complaint alleging misconduct against any student at the university may be filed by anyone at the Office of Student Life. Students, faculty members, administrators, and other employees of the university shall have concurrent authority to request the commencement of the disciplinary proceedings provided for in this chapter. A person filing a complaint shall be complainant of record.
2. Any student charged in a complaint shall receive written notification from the vice president. Such notice shall:
 - a. Inform the student that a complaint has been filed alleging that the student violated specific provisions of the Student Conduct Code and the date of the violation(s).
 - b. Set forth those provisions allegedly violated.
 - c. Specify a time and date the student is required to meet with the vice president or designee.
 - d. Inform the student that failure to appear at the appointed time at the vice president's office may subject

the student to suspension from the university.

3. When the vice president meets with the student, the vice president shall:
 - a. Provide for the student a copy of the Student Conduct Code.
 - b. Review the alleged violation with the student.
 - c. Conduct an investigation into the alleged violation.
4. Upon completion of the review with the student and/or the investigation, the vice president may:
 - a. Drop the charges when they appear to be invalid, without substance or capricious.
 - b. Issue a verbal warning.
 - c. Apply any of the sanctions as outlined in Section IV if such sanction is warranted by the evidence.
 - d. Refer the case to the Student Conduct Council.
 - e. Invoke the summary suspension procedure as outlined in Section VII when deemed appropriate.
5. The vice president shall inform the student that only suspension and expulsion sanctions may be appealed to the Student Conduct Council, and that if an appeal is made, the vice president shall take no action nor make any determination, except for summary suspension, in the matter other than to inform the student of the time, date, and location of the proceeding by the Student Conduct Council.

IV. Disciplinary Sanctions

The following may be the sanctions imposed by the Vice President for Academic and Student Life or by the Student Conduct Council.

A. Warning

Notice in writing that the student has violated university rules or regulations or has otherwise failed to meet the university's standard of conduct. Such warning will contain the statement that continuation or repetition of the specific conduct involved or other misconduct will normally result in one of the more serious disciplinary actions described below.

B. Disciplinary Probation

Formal action specifying the conditions under which a student may continue to be a student at the university, including limitation of specified activities, movement, or presence on the CWU campus, including restricted access to any university building. The conditions specified may be in effect for a limited period of time or for the duration of the student's attendance at the university.

C. Restitution

An individual student may be required to make restitution for damage or loss to university or other property and for injury to persons. Failure to make restitution will result in suspension until payment is made.

D. Suspension

Dismissal from the university and from status as a student for a stated period. The notice suspending the student will state in writing the term of the suspension and any condition(s) that must be met before readmission is granted. The student so suspended must demonstrate that the conditions for readmission have been met. There is to be no refund of fees for the quarter in which the action is taken, but fees paid in advance for a subsequent quarter are to be refunded.

E. Deferred Suspension

Notice of suspension from the university with the provision that the student may remain enrolled contingent on meeting a specified condition. Not meeting the contingency shall immediately invoke the suspension for the period of time and under the conditions originally imposed.

F. Expulsion

The surrender of all rights and privileges of membership in the university community and exclusion from the campus without any possibility for return.

G. Forfeiture of Entitlements or Awards

For the specific instance of hazing, forfeiture of any entitlement to state-funded grants, scholarships, or awards for a specified period of time.

V. Campus Judicial Council

A. Purpose

The Student Conduct Council shall be the principal campus wide conduct body with jurisdiction over all students, whether graduate or undergraduate, and student organizations and authority to hear all charges of misconduct. It has authority to impose the sanctions described in Section IV. Other divisions of the university may elect to establish subsidiary conduct agencies over which the Student Conduct Council will have appellate jurisdiction. Subsidiary conduct agencies or persons levying sanctions should devise sanctions which are in proportion to both the nature and extent of the misconduct, and which redress injury, damage, expense, inconvenience and/or grievance as far as possible. Appeal from subsidiary councils or agencies must be made within five working days from the time of publication of findings by said subsidiary conduct agency. Failure to file such an appeal will constitute and be construed as full acceptance by all parties of the findings.

B. Composition

The following rules govern the composition of the Student Conduct Council:

1. The council shall consist of six faculty members holding the rank of assistant professor or above, and eight students, at least one of whom should be a graduate student if a graduate student files for appointment to the council.
 - a. The faculty members of the council shall be designated in accordance with procedures established by the Faculty Senate.
 - b. The student members of the council shall be selected in accordance with procedures established by the constitution of the Associated Students of Central Washington University. Eight student members shall be appointed, each student being appointed for a term of one calendar year. Terms of office for students begin with the first day of instruction of the academic year for which the student is appointed.
2. A Student Conduct Council chair shall be elected at the first meeting each academic year and shall continue in office until the person resigns or is recalled. The duties of the chair are as follows:
 - a. To call regular and special meetings of the council by notification to members at least 24 hours in advance of the meeting time, except in bonafide emergency situations.
 - b. To preside over all regular and special meetings.
 - c. To act as presiding officer at all meetings of the proceeding board.
3. Two of the faculty members and three of the student members of the council shall constitute a quorum.
4. The vice president shall appoint a designee as a Student Conduct Council advisor whose duties shall be to:
 - a. Convene the council.
 - b. Advise the council during all meetings and hearings.

VI. Procedures for Proceeding Before the Campus Conduct Council

- A. When a case is referred to the Student Conduct Council the vice president shall forward to the council:
 1. A statement describing the alleged misconduct
 2. The name and address of the complainant
 3. The name and address of the student charged
 4. All relevant facts and statements

B. The secretary to the council shall call a special meeting of the council and arrange for a proceeding in the following manner:

1. The council shall determine the time and place of the proceeding, which shall be at least 10 days after delivery of written notice to the student. In the interest of timeliness and efficiency, upon the request of either the student or the vice president, this 10-day interval may be waived by the vice president, with the student's permission. Time and place shall be set to make the least inconvenience for all interested parties. The chair may change the time and place of the proceeding for sufficient cause.
 2. The council shall draw lots to determine a proceeding board consisting of five student names and three faculty names, with one student and one faculty serving as alternates to be available until the proceeding board has been constituted, and the chair who will act as the proceeding officer.
 3. No case shall be heard unless the full membership of the proceeding board is present.
 4. All cases will be heard de novo, whether the case be an appeal from a subsidiary conduct body or is heard as an original complaint.
- C. The secretary to the council shall send written notice by certified mail of the proceeding to the student's last known address. The notice shall contain:
1. A statement of the date, time, place, and nature of the proceeding
 2. To the extent known, a list of witnesses who will appear
 3. A summary description of any documentary or other physical evidence that would be presented by the university

D. The student shall have all authority possessed by the university to obtain information he or she specifically describes in writing and tenders to the council chair no later than two days prior to the proceeding or to request the presence of witnesses, or the production of other evidence relevant to the proceeding. However, the university shall not be liable for information requested by the student or the presence of any witnesses when circumstances beyond the control of the university prevent the obtaining of such information or the attendance of such witnesses at the proceeding.

E. Proceedings will ordinarily be held in closed session unless the proceeding board determines there is a compelling reason for the proceeding to be open, or the student requests an open proceeding. A closed proceeding shall include only members of the proceeding board, persons directly

involved in the proceeding as parties, and persons called as witnesses.

- F. The proceeding shall be audio tape recorded, and the tape shall be on file at the Office of the Vice President for a period of three years.
- G. The university shall be represented by the vice president who shall present the university's case against the student.
- H. The student may be accompanied by counsel, or another third party, who may offer advice. If the student utilizes an attorney as advisor, the student must give the vice president two days notice of intent to do so. If the student elects to be advised by an attorney, the vice president may elect to have the university advised by an Assistant Attorney General.
- I. The council chair shall insure that:
 1. The proceeding is held in an orderly manner giving full care that the rights of all parties to a full, fair, and impartial proceeding are maintained.
 2. The charges and supporting evidence or testimony shall be presented first, and that there is full opportunity for the accused student to challenge the testimony and/or evidence, and to cross examine appropriately.
 3. The student charged shall next present evidence or testimony to refute the charge, and that there is full opportunity for the accuser to challenge testimony and/or evidence, and to cross examine appropriately.
 4. Only those materials and matters presented at the proceeding will be considered as evidence. The presiding officer shall exclude incompetent, irrelevant, immaterial, and unduly repetitious evidence.
- J. Any person disruptive of the proceeding or any other procedure described in this document shall be excluded from the process by the chair of the Student Conduct Council or by the vice president using such means as are necessary to ensure an orderly process. Any student engaging in such interference shall be in contempt and may be summarily suspended from the university by the Student Conduct Council or the vice president immediately. The student shall be subject to a suspension or any lesser sanction as may be determined by the Student Conduct Council or the vice president at the time the interference takes place or within 15 working days thereafter.
- K. The student has a right to a fair and impartial proceeding, but the student's failure to cooperate with or attend a proceeding shall not preclude the council from making its finding of facts, conclusions, and recommendations. Failure by the student to cooperate may be taken into consideration by the Student

Conduct Council and the vice president in deciding the appropriate disciplinary action.

- L. Upon conclusion of the proceeding, the proceeding board in closed session shall consider all the evidence presented and decide by majority vote to exonerate the student or to impose one of the sanctions authorized by this document.
- M. The student shall be provided with a copy of the board's findings of fact and conclusions regarding whether the student did violate any rule or rules of the Student Conduct Code and the board's decision as to the appropriate sanction to be imposed.
- N. If a student charged with misconduct under this code has been charged with a crime for the same act or closely related acts by federal, state, or local authorities, or if it appears that such criminal charge is under consideration, the Student Conduct Council may postpone action on the complaint until there has been a disposition of the criminal charge or of the consideration of filing such charge. However, prior to action by other agencies, the council may proceed to hear and decide the case if in the judgment of the council, the nature of the alleged misconduct, and the circumstances surrounding it pose a serious risk to the health or well being of the student or other members of the university. If there is a determination of guilt by the council and if the subsequent criminal proceedings result in a judgment of acquittal, the student may petition the Student Conduct Council for a rehearing.

VII. Summary Suspension Proceedings

The vice president may summarily suspend any student from the university pending investigation, action, or prosecution of charges of an alleged proscribed conduct violation or violations, if the vice president has reason to believe that the student's physical or emotional safety and well-being, or the safety and well-being of other university community members, or the protection of property requires such suspension.

- A. If the vice president finds it necessary to exercise the authority to summarily suspend a student, the vice president shall:
 - 1. Give to the student an oral or written notice of intent to determine if summary suspension is an appropriate action.
 - 2. Give an oral or written notice of the alleged misconduct and violation(s) to the student.
 - 3. Give an oral or written explanation of the evidence in support of the charge(s) to the student.
 - 4. Determine a time for the summary suspension proceeding to be held within 36 hours.
 - 5. Give an oral or written notice of the time and place of the summary suspension proceeding before the vice president.
 - 6. Give an oral or written explanation of the summary suspension which may be imposed on the student.
- B. At the place and time designated for the summary suspension proceeding, the vice president shall:
 - 1. Consider the evidence relating specifically to the probability of danger to the student, to others on the campus, or to property.
 - 2. Provide the student with an opportunity to show why continued presence on campus does not constitute a danger to the physical and emotional well-being of self or others, or a danger to property.
 - 3. Give immediate oral notice of the decision to the student, followed by written notice.
 - 4. If summary suspension is warranted, summarily suspend the student for no more than 15 working days with a Student Conduct Council proceeding of the allegations to have commenced by the end of the suspension period.
- C. If a student has been instructed by the vice president to appear for summary suspension proceedings and then fails to appear at the time designated, the vice president may suspend the student from the university and shall give written notice of suspension to the student at the student's last address of record on file with the university.
- D. During the period of summary suspension, the suspended student shall not enter the campus of the university other than to meet with the vice president. However, the vice president may grant the student special permission for the express purpose of meeting with faculty, staff, or students in preparation for a proceeding before the Student Conduct Council.

VIII. Readmission After Suspension

Any student suspended from the university under the provisions of the Student Conduct Code may be readmitted upon expiration of the time period specified in the document of original suspension.

If circumstances warrant reconsideration of the suspension prior to its time of expiration, the student may be readmitted following approval of a written petition submitted to the vice president. Such petitions must state reasons which either provide new evidence concerning the situation which resulted in the suspension, or demonstrate

that earlier readmission is in the best interest of the student and the university. Approval for such readmission must be given by the vice president or by the Student Conduct Council.

Students who have been suspended and whose suspension upon appeal is found to have been unwarranted shall be provided full opportunity to reestablish their academic and student standing to the extent possible within the abilities of the university, including an opportunity to retake examinations or otherwise complete course offerings missed by reason of such action.

APPENDIX C

I. Academic Appeals

(Complete policy available in the Office of the Vice President for Student Affairs and Enrollment Management.)

A. Academic grievances are defined as any of the following:

- 1. A claim by the student that an assigned grade is the result of arbitrary or capricious application of otherwise valid standards of academic evaluation.
 - 2. A claim by the student that the standards for evaluation are arbitrary or capricious.
 - 3. A claim by the student that the instructor has taken an arbitrary or capricious action which adversely affects the student's academic progress.
 - 4. A claim by the student that a university department, program, or office has made a decision not in keeping with university policy or taken an arbitrary, capricious, or discriminatory action which adversely affects the student's academic progress.
- B. A student wishing to pursue an academic grievance must take the following steps to try to resolve the grievance prior to the filing of an official academic appeal:
- 1. The student shall first attempt to resolve the matter with the instructor.
 - 2. If resolution is not achieved between the student and instructor, the student shall ask the department chair to resolve the grievance.
 - 3. If resolution is not achieved at the department chair level, the chair shall forward a written summary to the dean of the school or college in a further effort to achieve resolution.
 - 4. If resolution is not achieved at this point, the student may petition for a hearing before the Board of Academic Appeals. (An appointment should be made to meet with the associate or assistant vice president for Student Affairs and Enrollment Management to obtain the necessary forms and information relative to filing the petition.)

APPENDIX D

Accommodation Policy and Procedures

I. Accommodation Policy for Students with Disabilities

Title II of the Americans with Disabilities Act of 1990, the Americans with Disabilities Amendment Act of 2008, the Washington State law against discrimination, RCW 49.60, RCW 28B.10.910- 914, and Section 504 of the Rehabilitation Act of 1973 prohibit discrimination against persons of disability on the basis of disability. Central Washington University is committed to providing reasonable accommodations to all qualified persons with disabilities to ensure equal access to programs, activities, and services.

A. Definitions

To be considered disabled, a student must have a physical or mental impairment that substantially limits one or more major life activities of such individual, a record of such an impairment or being regarded as having such an impairment.

A student is considered qualified if the student: 1) meets all eligibility criteria, 2) is able to (with or without accommodation) perform the essential functions of the program or activity, and 3) is able to benefit from a service.

The term *accommodation* means any change or adjustment that makes it possible for a student with a disability to participate in a program or activity or benefit from a service.

The term *reasonable* means that provision of the required accommodation will not result in: 1) an undue financial hardship, 2) an undue administrative hardship, or 3) a fundamental alteration to the nature of the program.

Please note that a decision not to provide accommodation must:

1. Take into consideration fiscal resources of the entire university.
2. Be explained in writing by the university president.
3. Be defended by the university if legally challenged.

II. Accommodation Procedures

The following procedures have been established in a sincere effort to accommodate students with disabilities:

A. Establishing Eligibility for Accommodation

1. **Requesting Accommodation:** Students wishing to request accommodation are responsible for initiating contact with the Center for Disability Services.

2. **Documentation:** The student is responsible for providing documentation of disability that includes the names and results of all tests used to diagnose the disability, describes the nature and extent of the disability, and identifies the disability-related functional limitations experienced by the student. This documentation is confidential medical information and will be maintained in separate files in the Center for Disability Services.

B. Provision of Academic Accommodations

1. The Center for Disability Services is responsible for:
 - a. Assessing the effect of a student's disability on his or her ability to access the educational process
 - b. Identifying accommodations that the university will provide to ensure that CWU's programs, activities, and services are accessible
 - c. Communicating procedures that 1) outline student and university responsibilities and 2) set time lines for requests and delivery of accommodations.
 - d. Providing services to help faculty and staff accommodate the needs of students.
2. The student is responsible for:
 - a. Making the appropriate people on campus aware of his or her need and eligibility for accommodation in a timely manner.
 - b. Working with the faculty, staff, and the Center for Disability Services to determine how the accommodation will be provided.
 - c. Following policies and procedures set forth by the university and by the Center for Disability Services.

NOTE:

1. The university has no obligation to accommodate a student who fails to establish eligibility with CWU's Center for Disability Services.
2. The university reserves the right to suspend accommodations to students who abuse services or fail to follow university policies and procedures.
3. If failure to use an accommodation results in damage to CWU equipment, the student will be held responsible for the repair or replacement of the damaged equipment.
4. Faculty and staff are responsible for:
 - a. Working with the student and the Center for Disability Services to identify an effective means of providing requested accommodations
 - b. Providing requested accommodations

NOTE:

To assist faculty and staff in the provision of requested accommodations, the Center

for Disability Services office has programs to provide print materials in alternative formats, administer alternative examinations, furnish sign language interpreters, etc. If, for any reason, the faculty or staff decides not to utilize service provided by the Center for Disability Services, the faculty or staff member and her or his department will assume administrative and fiscal responsibility for ensuring that the student's need for accommodations is met.

C. Determination of Qualified

1. The student must meet all prerequisite and eligibility criteria as set forth by the department unless that criteria is discriminatory on the basis of disability.
2. The student must be capable of performing the essential elements of the course, activity, or program. If in question, the student is responsible for working with the academic department, appropriate faculty or staff, and the CDS director to determine if he or she (with or without accommodation) can meet the eligibility criteria and technical standards of the course, activity, or program.
3. The academic department or faculty is responsible for:
 - a. Identifying the eligibility criteria and technical standards for each academic program or course. This should be done prior to the time that an academic program or course is offered. The eligibility criteria and technical standards of an academic program or course are the key skills, knowledge, or abilities that the program or course is designed to teach the student. When identifying the eligibility criteria and technical standards, faculty should focus on the desired outcome, not the process used to reach that outcome.
 - b. Working with the student and the CDS director to determine if a student's disability would prevent him or her from meeting (with or without accommodation) the eligibility criteria and technical standards of an academic program or course.
4. The CDS director is responsible for working with students, the academic department, and the faculty to:
 - a. Review the determination of a student's ability (with or without accommodation) to acquire the skills that comprise the eligibility criteria and technical standards of an academic program or course.
 - b. Review eligibility criteria and technical standards that present barriers to ensure that those elements are essential and not discriminatory against students of disability.

D. Grievance

Any student who believes that she or he has been discriminated against on the basis of disability may file a grievance in the Office for Equal Opportunity, room 211, Barge Hall (509-963-2205 or TDD 509-963-2007).

Grievances may be pursued either formally or informally. A list of state and federal agencies which investigate alleged violations of disability law is also available in the Office for Equal Opportunity.

APPENDIX E

Cooperative Education

I. Introduction

The Cooperative Education experience is offered through the Career Services department in conjunction with academic departments. The Cooperative Education Program is a credit-based educational plan designed to integrate classroom study with planned, supervised, and evaluated employment experience linking academic programs with students' career goals and interests.

Cooperative Education has a profound effect on the way learning takes place because it is interactive and reinforcing. Students ascribe new value to what is learned in the classroom because, either in principle or practice, they are applying it to the test of a real job. The added ingredient for learning is experience.

II. Qualifying Parameters for Student Participation

The following are the university's minimum requirements (departments may have additional requirements) for student participation:

- A. The student is enrolled and pursuing a degree at Central Washington University.
- B. The student is in good academic standing.
- C. The field experience is directly related to the student's major field of study and/or career goal.
- D. The student has completed the appropriate prerequisite courses and possesses the skills and knowledge required for placement in a suitable level of field experience as determined by the student's department.
- E. The student must have a department faculty cooperative education (co-op) advisor for enrollment in a Cooperative Education course.
- F. The student's field experience is a practical position where the student is actively engaged in hands-on learning, not just observing.

III. Program Enrollment

- A. Students must complete a formal learning agreement with a learning plan that contains relevant objectives and activities performed during the internship. The agreement form constitutes a field study plan that includes a description of academic requirements such as term papers or projects, assigned readings, research projects or theses, progress reports, final reports, etc. The Learning Agreement must be endorsed by the employer or supervisor, the student, the faculty co-op advisor, department chair, dean of the college, and the Associate Director of Cooperative Education.
- B. The student must submit a completed Cooperative Education Learning Agreement form with attached Student Release Form to Career Services to complete the registration process for enrollment in the Cooperative Education course.
- C. Cooperative Education courses are numbered 290, 490, and 590. Credits are variable 1-5 for 290, 1-12 for 490, and 1-8 for most 590-level courses. Course credits are subject to change, please verify with department.
- D. A freshman should complete at least 45 credits at CWU prior to enrolling in the Cooperative Education course. A transfer student should complete at least 15 credits at CWU and have a total of 45 credits, including transfer credits, prior to enrolling in the Cooperative Education course.
- E. The student should complete a minimum of 90 credit hours with 10 or more credits in his or her major to be eligible for enrollment in the 490 level course. Departments may have additional requirements for this level of experience.
- F. A student who desires a career exploration experience, or who has not declared a major, is limited to enrolling for the Cooperative Education course at the 290 level.
- G. The student may re-enroll for the Cooperative Education course, but, in no case will a student be allowed to count more than 10 credits at the 290 level, nor more than 20 total credits toward graduation requirements. No more than 10 credits are accepted in transfer. No more than eight credits may be applied to a graduate degree.
- H. Cooperative Education courses may be repeated if field experience learning objectives and activities are distinctly different from previous work or field experience.

IV. Awarding of Credits

- A. Cooperative Education credits are to be awarded on the basis of quality, magnitude, and the level of learning (learning plan, relevant objective, and activities) that take place during the field experience.
- B. For university standardization practice, credits are awarded using a minimum of 40 or more clock hours of approved field experience for each credit hour earned. Clock hours will include time spent to complete the work phase and the academic phase (term paper or project(s), journal or log, progress reports, assigned readings, final report, etc.) of the field experience.
- C. An appropriate means for evaluation (progress reports, performance evaluations, final report, etc.) of the learning is established between the student, the employer, and the faculty co-op advisor.
- D. The student will be awarded an S or U grade (letter grade optional with approval of faculty co-op advisor) for the Cooperative Education course.
- E. If the field experience is terminated by the employer or academic department, the student will not receive credit.
- F. Credit will not be given for previous field or work-study experience.
- G. Credit for the Cooperative Education course will be awarded for the quarter in which the majority of hours for the experience were acquired.
- H. If the student leaves the field experience prior to completion of the hours, objectives, and/or academic requirements, no credit will be received and a grade of Incomplete or Unsatisfactory will be awarded. Grading and award of credit is based solely on completion of the agreed-upon parameters set forth in the Learning Agreement.

V. Student Supervision and Coordination

- A. Daily supervision of the student is to be provided by the cooperating company supervisor who will be identified prior to the field experience.
- B. Cooperative Education courses shall be under the direct guidance, direction, and coordination of a faculty co-op advisor as part of the regular teaching load. Credit for faculty load shall comply with faculty code, Part 4, Section 7.20, B, 1, a, (3) of the current (1992) code. The faculty co-op advisor is available to the student in the field. The faculty advisor arranges and coordinates visitations or contacts with the employer or supervisor and the student a minimum of twice each quarter. The faculty co-op advisor keeps a file on each student's work (term paper or

project(s), final report, etc.) with his or her department office.

- C. The Career Services office is an academic support service which facilitates the advising of students in the placement and cooperative education process, maintaining direction, sustaining quality control for the program, conducting program research, assessment, and evaluation, and providing training and faculty co-op advisors and staff.
- D. The Career Services office staff can be available for field visitations or contacts when suitable faculty representation is not available or upon request of the faculty co-op advisor or department chair.

VI. Student Placement Process

- A. The placement process is intended to be a real-life job seeking experience for the student, including competition for positions.
- B. The Career Services office advises students in the placement process through the maintenance of past internship placements and current listings that are submitted by employers. In addition, the staff is available to provide assistance with resumes, cover letters, job search techniques, and interviewing tips.
- C. The student should check with their faculty advisor for internship leads as many departments have developed their own internship connections.
- D. Students may propose their own placement site to the Faculty Co-op advisor who determines the suitability of the placement with a given employer for Cooperative Education credit.
- E. Students may find a "regular" position that can double as a co-op experience if there is sufficient challenge and opportunity for learning that can justify university credit. Decisions on whether the experience warrants university credit rest with the academic department and the coordinating faculty.
- F. The placement must conform to affirmative action and EEO/Title IX/ADA guidelines.

VII. Position Description for Field Experience

The cooperating employer or agency must agree to provide a written description of field experience tasks, identify a field supervisor and submit his or her qualifications to the appropriate university department and the Office of Cooperative Education prior to approval of the Learning Agreement.

VIII. Student Compensation

- A. Paid field experience positions are sought where possible and practicable.
- B. Unpaid positions may be used but are limited to the equivalent of working full-time for one quarter (approximately 400 hours). Please see the Fair Standards Act Guidelines for unpaid internships in the for-profit sector: <http://www.dol.gov/whd/regs/compliance/whdfs71.htm>.
- C. Students should not be put in a position where they are exploited as a source of cheap labor, replace, or are in direct competition with regular employees.
- D. Participation in Cooperative Education unpaid experiences should not become an undue financial burden for the student or be the cause of the student withdrawing from the university for financial reasons.
- E. Health, accident, and disability insurance are the responsibility of the student, and if not provided by the employing agency, should be purchased individually. In most instances, the group coverage for students is adequate.
- F. Central Washington University is not responsible for liability or malpractice insurance for individual students. If such coverage is desired but is not provided by the co-op agency, students may wish to arrange individual coverage through Career Services, which is more reasonable than going through insurance agencies.
- G. Students receiving financial aid must check with the Financial Aid Office prior to accepting a paid placement. Students receiving financial aid must be sure their academic responsibilities for their co-op experience are completed by the end of the registered quarter. Any student with an "Incomplete" grade at the time of financial awards for the next quarter jeopardizes their position to receive their financial aid.
- H. If the student is receiving financial aid, Federal Law requires that any income be declared. If the student is employed and completes a W-4 form, this reporting will occur through regular employment withholding and a W-2 form at tax time. If the student does not complete a W-4 form for the employer, they must declare their income with the Financial Aid Office through a specific form that is available from the Financial Aid Office.

IX. Program Evaluation

Routine review of evaluations from employers, faculty, and students occur on a quarterly basis along with continuous review of field placement sites.

The Cooperative Education Program is subject to periodic review and assessment, completed at least once every five years.

APPENDIX F

Drug and Alcohol Policy

(A complete policy is available in the office of the Vice President for Student Affairs and Enrollment Management.)

(1) General Alcohol and Other Drug Statement - Any violations, on or off campus, of state or federal law regarding alcohol or other drugs by students, staff, or faculty are grounds for disciplinary action. Furthermore, according to the Student Conduct Code, students may be subject to disciplinary action for any action that violates state or federal law including but not limited to:

Minor in possession
 Minor in consumption
 Open container violations
 Driving while intoxicated
 Possessing or consuming alcohol in an alcohol free residence hall
 Providing alcohol to a minor
 Possession or sale of any narcotic or drug paraphernalia
 Selling alcohol without a license
 Misrepresenting ones age to gain access to alcohol

Students violating any state or federal law will result in immediate referral to the office of the Vice President for Student Affairs and Enrollment Management or designee for disciplinary action. Disciplinary action will range from a counseling session to expulsion, depending on the severity and number of violations.

(2) Policies and Procedures - The purpose of this section is to briefly summarize the key points of the university policy regarding the distribution, possession, and use of alcohol and other drugs. In order to comply with the requirements of the Drug-Free Schools and Communities Act and the Drug-Free Workplace Act, a complete description of the relevant laws, procedures, sanctions, and prevention information is provided in the addenda that follow this summary.

(A) Legal Issues - The university's policy regarding the possession and consumption of alcohol and other drugs on campus has been developed in keeping with Washington State law and the Governor's policy on alcoholism and drug dependency. Washington State laws are described in the Revised Code of Washington and the Washington Administrative Code. Members of the University community may review these documents at the University library. State laws regulate behavior such as the consumption of alcohol in public places, the furnishing of liquor to minors, the illegal purchase of alcohol, and the distribution of controlled substances, to name a few. A brief description of applicable local, and state, and federal laws is provided in CWUR 4-20-005.6. The university policy assumes that individuals of the University community have

read, understood, and agree to abide by these local, state, and federal laws.

(B) Proscribed Student Conduct - According to the Washington Administrative Code (WAC 106-120-027), a student shall be subject to disciplinary action or sanction upon violation of any of the following conduct proscriptions:

1. Possession, use, or distribution of any controlled substance as defined by the laws of the United States or the State of Washington except as expressly permitted by law.

2. Violation of the university policy on alcoholic beverages that states:

- (a) Persons 21 years of age or older may possess and/or consume alcoholic beverages within the privacy of certain designated 21 or older residence hall rooms or apartments. Washington State law provides severe penalties for the possession or consumption of alcoholic beverages by persons under 21 years of age and for persons who furnish alcoholic beverages to minors. All university students and staff should be aware of these laws and the possible consequences of violations. (b) The University does not condone the consumption of alcoholic beverages by minors at functions sponsored by Central Washington University organizations on or off campus. Organizations and advisors are held responsible for monitoring the conduct of their members at functions sponsored by the organization and for failure to comply with Washington state law and university policies. (c) The vice president for student affairs and enrollment management may place on probation any organization or prohibit a specific campus social function when the consumption of alcoholic beverages has become a problem of concern to the university.

3. Violation of clearly stated proscriptions in any published rule or regulation promulgated by any official campus committee, commission or council acting within the scope of its authority.

4. Violation on or off campus of any state or federal law. Official university action will be taken when violations of state law or university policy regarding alcohol and other illicit drug use occur. Repeated violations usually carry more significant consequences. The office of the vice president for student affairs and enrollment management may include in the sanction-mandated contact with the university drug and alcohol prevention specialist (the Director, Wildcat Wellness Center) and/or direct referral for assessment through a state licensed treatment agency. Please refer to CWUR 4-20-005.4 for licensed agencies in Kittitas County. If alcohol or other drug abuse is a related factor in the violation of other proscribed conduct, the same mandate may be considered appropriate. Official university sanctions range from "warning" to "expulsion" and are described in detail in CWUR 4-20-005.1.

(C) Proscribed Employee Conduct - As a condition of employment at the university, all employees will abide by the terms of the Drug Free Workplace Act of 1988 that prohibits the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance in the university workplace. This Act also requires that employees notify their supervisor of any criminal drug statute conviction for a violation occurring in the workplace no later than five days after the conviction.

In addition, university employees (i.e., faculty, staff, administrators, and student employees) are obligated to work effectively and cooperatively in their positions. Responsibility to improve substandard performance or to correct unacceptable work behavior rests with the individual employee, regardless of the underlying causative factors or circumstances that may be present. While alcoholism and/or other drug dependencies may be among the factors contributing to an employee's job performance problems, it remains the responsibility of the individual employee to seek appropriate treatment. Failure to correct unsatisfactory job performance or behavior, for whatever reason, will result in appropriate disciplinary action, up to and including termination of employment.

University employees are expected to be familiar with the University policies or codes that pertain to their employment on campus. Policies concerning the behavior of exempt and faculty employees are contained in the following sources: The Exempt Employees' Code, faculty contract, and/or the Faculty Code. Faculty members should be aware that the Alcohol and Other Drug Policy is an official university policy; as such, violations of this policy are subject to the sanctions described in Sections 10.20 and 10.25 of the Faculty Code or the applicable collective bargaining agreement. Sanctions for the willful violation by civil service employees of published institutional regulations are included in WAC 357-40 or the applicable collective bargaining agreement. Exempt personnel are referred to the Exempt Employees' Code for sanctions resulting from the willful violation of published institutional guidelines.

The Wildcat Wellness Center (WWC) is the primary campus location for alcohol and other drug education, prevention and counseling. Both students and staff are encouraged to contact the WWC (963-3213) for more detailed information.

(D) Employee Education and Referral for Alcohol and other Drug Issues - Alcoholism and drug dependency are defined as illnesses that may interfere with an employee's ability to perform assigned work satisfactorily or that adversely affect job behavior. Employees are encouraged to voluntarily seek expert assistance for alcoholism, alcohol abuse, drug dependency, or any other job-impairing

personal problem. Assistance is available through a variety of professional resources on campus and in the community. Questions regarding medical insurance coverage for professional services should be referred to the employee's medical plan provider. The university contracts for confidential employee assistance with EAP (Employee Assistance Program), 877-313-4455.

CWU encourages all faculty and staff to increase their awareness and identification of alcohol issues. Training is available for faculty and staff through Human Resources. For more information, go to <http://www.cwu.edu/~training/>.

Supervisors are required to identify, document, and attempt to correct all employee job performance and/or work behavior problems, using standard corrective action procedures outlined in WAC 357-40, the Faculty Academic Code, Exempt Employees' Codes, or applicable collective bargaining agreement. They should not diagnose alcoholism, drug dependency, or any other complex medical-behavioral problem. However, corrective efforts may include referral to professional treatment resources, after consultation with human resources or faculty relations. Supervisors are encouraged to share information regarding professional treatment services with employees on a regular basis. Pamphlets describing services are available from the CWU Human Resources Department or from the director of the CWU Wildcat Wellness Center. See CWUR 4-20-005.4 for a description of professional drug treatment and counseling resources.

(E) Serving Alcoholic Beverages on Campus - University departments and student organizations are encouraged not to involve alcoholic beverages in any sponsored function. If they choose to do so, they are urged to consider the effects and the responsibility they assume in making such decisions. If the members of the department or organization choose to include alcoholic beverages in their functions, they must comply with all local and state laws, as well as specified liquor guidelines. Violation of any local or state law or specified guideline may result in the department or organization's loss of ability to serve alcohol on campus in the future and staff disciplinary action up to and including termination of employment.

University departments and student organizations are prohibited from serving alcohol on campus during an employee's normal work shift, which typically would be 8 a.m. to 5 p.m. Monday through Friday, in accordance with WAC 296-800-11025, which prohibits alcohol or narcotics at the workplace. Employees may not consume alcohol or drugs during their work shift unless such drugs are prescribed by a physician or other appropriate healthcare provider or unless such over-the-counter medication as will not interfere with the employee's ability to perform his/her job.

All groups and organizations sponsoring social events held on the CWU campus and all recognized university groups holding events off campus which involve the serving and consumption of alcoholic beverages are obliged to comply with the procedures and guidelines outlined in CWUR 4-20-005.5 and use a social attendant. Contact the Scheduling Center at 963-1321 for more information on social attendants.

(F) Advertisement - There will be no marketing or advertising of alcoholic beverages on the Central Washington University campus, except as allowed by state law (RCW 66.28.160) or to promote an educational program.

The university prohibits advertising that encourages abusive alcohol consumption. The university also prohibits alcohol from being offered as an enticement, reward, benefit of attendance or membership, or as a prize.

(G) Policy Implementation and Application - This policy applies to all members of the Central Washington University community at all events, on or off campus, sponsored by the university, including clubs and organizations, and / or held in any university facility. The only exception to this policy is for the property of the president's residence and reception center.

ON-CAMPUS RESOURCES

Wildcat Wellness Center. 509-963-3213
 Student Health and Counseling
 Services 509-963-1391
 Community Psychological
 Services Center 509-963-2501

OFF-CAMPUS RESOURCES

Alcohol Drug Dependency
 Services 509-925-9821
 Central Washington
 Comprehensive Mental Health 509-925-9861
 Kittitas Valley Recovery
 Services 509-925-7227
 Washington State Employee
 Service 509-456-5000



APPENDIX G

Sexual Assault Policy

Central Washington University will not tolerate sexual assault or sexual misconduct in any form. The University affirms respect, responsibility and caring among all persons within the community. Federal law requires specific policies and procedures to address sexually assault behavior on the part of students. Allegations of sexual assault by students should be addressed through this policy, administered by the office of the Associate Vice President for Student Affairs, Bouillion Hall, room 204, 509-963-1515.

The university is committed to preventing all forms of sexual assault and to providing accessible, responsive services for dealing with such offenses. Sexual assault on the part of any student is clearly inconsistent with Central Washington University values. It is also considered a form of sexual harassment in violation of the university Student Rights and Responsibilities Policy, as well as a violation of state and federal law.

Individuals are responsible for their behavior when they are consuming alcohol or other controlled substances, and such consumption is not an excuse for unacceptable behavior. Sexual assault often occurs in the context of the use of alcohol or other controlled substances. Under these circumstances, individuals put themselves at increased risk for being a victim of sexual assault or of being accused as a perpetrator. Lack of consent can exist if a person is too intoxicated and/or is unable to freely agree to sexual intercourse or sexual contact. The university's highest concern is for the emotional and physical well being of sexual assault victims. The victim shall have access to the full complement of university services that can help students maintain emotional and psychological well-being and provide for the safety of the victim. These include, but are not limited to, assistance in changing academic and living arrangements if these changes are reasonably available. The University Sexual Assault Response Coordinator will be the official first point of contact (509-963-3233 or e-mail Andrea Easlick at aeaslicka@cwu.edu), other than police, for facilitating victim access to all needed services. Other departments, if contacted first, will make a referral to the Sexual Assault Response Coordinator.

Central Washington University encourages all members of the campus community who believe they are victims of sexual assault to immediately report the incident to the police agency of jurisdiction. Although reporting is not required, it is encouraged. If the assault occurs in the residence halls or apartments, the Office of University Housing and New Student Programs and the C.W.U. Public Safety and Police Services should be contacted, as well as the Sexual Assault Response Coordinator. Immediate reporting to the police is an important factor in successful investigation and prosecution of sexual assault cases.

Victims are not required to pursue prosecution just because they report a crime to a police agency. However, the reporting of sexual assault to the police agency may prevent others from being victims. If a victim has a complaint with a non-student member of the university community, they should contact the Office For Equal Opportunity at 509-963-2205 or by e-mail at oeo@cwu.edu.

Any member of the university community can file a third party report with the Sexual Assault Response Coordinator, Student Health and Counseling or C.W.U. Public Safety and Police Services detailing an incident involving sexual assault. It is important to note that the university cannot initiate student judicial action or a criminal complaint against the alleged perpetrator based on a third party report. The report is encouraged, none the less, as it can provide useful information for protecting the community-at-large and connecting similar reports while protecting the victim's anonymity.

Where there is sufficient evidence to believe that the university regulations prohibiting sexual assault have been violated, the university may pursue disciplinary action through its Student Rights and Responsibilities. Sanctions for persons found in violation of these policies may include suspension and / or expulsion from the university. Education, including violence prevention and awareness, may be required of the perpetrator. The university, through the office of Student Affairs, reserves the right to pursue disciplinary action in the case of an off-campus incident, when the alleged perpetrator is a student and the behavior involved threatens the health, safety, and / or property of the university and its staff and students. When proceedings are conducted on-campus in cases of alleged sexual assault, the accuser and the accused are entitled to: (a) the same opportunity to have an advocate present, and (b) be informed of the outcome of the proceeding. For a detailed description of due process see the Student Conduct code, sections V and VI. No victim of sexual assault shall be penalized or retaliated against in any way for his or her participation in the university's complaint process.

A victim has the right to avoid face-to-face interaction with the offender during any campus judicial hearings. She/he also has the right to appeal the findings of investigations conducted by the Office of the Student Affairs. A victim of sexual assault or misconduct has legal recourse outside the university, if she/he chooses. Campus authorities will assist victims in notifying proper law enforcement authorities, including CWU Public Safety and Police Services and local police. It is the victim's right to decide whether or not to file a complaint. Legal and medical advocacy is freely available through A.S.P.E.N., the local domestic violence/sexual assault agency. For the full sexual assault policy see www.cwu.edu/~wellness/sexualAssaultPolicy.html#policy.

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