

MILITARY SCIENCE

(Army Reserve Officers' Training Corps)

Faculty

Chair: **Rodney F. Laszlo, Lieutenant Colonel, Signal**
Peterson Hall 202

Professor

Rodney F. Laszlo, Lieutenant Colonel, Signal,
Command General Staff College, M.S.,
Information Systems Management

Assistant Professors

Debra(Debbie) C. Allen, Major, Transportation
Corps (Public Affairs), B.S., Public
Administration
DeAnna L. Bridenback, Captain, Aviation, B.S.,
Commercial Aviation Transportation
Tyler S. Oxley, Captain, Signal, B. A.,
Communications

Instructors

Tom G. SADBERRY, Jr., Master Sergeant, Infantry
Charles (Terry) T. Ragsdale, Sergeant First
Class, Air Defense Artillery

General Departmental Information

The Military Science Department courses are designed to prepare scholars, athletes and junior leaders for commissioning in the United States 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 the 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 (for the MSL 100 and MSL 200 classes only) and uniform items (for all class levels) 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, National Advanced Leadership Camp, 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 Reserves.

Additional information concerning the Military Science program may be obtained by writing: Central Washington University, Professor of Military Science, Peterson Hall, 400 E. 8th, Ellensburg, Washington 98926-7569, or by visiting the Military Science Department in Peterson Hall, Room 202 or by calling (509) 963-3518. You can email your questions to roo@cwu.edu.

POST BACHELOR'S 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 Military Science Department 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 (\$250 freshman, \$300 sophomore, \$350 junior, \$400 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 (5425),

completed the MSL 301, 302, 303 courses of study and the National Advanced Leadership Camp. 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 United States, 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	Credits
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	11

Option 2

Required Courses	Credits
**MSL 292, Leader's Training Course, Internship.	8
Select 3 credits from the list of approved electives	3
Military Science Core Total	11
**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 (5425)

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 Military Science Department, Peterson Hall.

Required Courses	Credits
MSL 301, Leadership and Problem Solving	3
MSL 302, Leadership and Ethics	3
MSL 303, Leadership and Small Group Tactics	3
MSL 401, Military Science and Tactics IV	4
MSL 402, Officership	4
MSL 403, Officership II	2
HIST 314, Military History of the US	5
Select from the following:	2-5
BSED 102, Computer Keyboarding Skill Building (2)	
IT 101, Computer Applications (3)	
CS, Any Course (4-5)	
Total	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, and Army values followed and "life skills" such as physical fitness and time management. Open to all students. Formerly MLS 101

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. Formerly MLS 103

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. Formerly MLS 104

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. Formerly MLS 205

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. Formerly MLS 210

MSL 211. Land Navigation (2). Prerequisite, permission of instructor. Principles of land navigation and orienteering with practical field applications. Formerly MLS 211

MSL 212. Leadership Laboratory (1). Prerequisites, permission of instructor. Practical experience in leadership and basic military skills. May be repeated. Formerly MLS 212

MSL 292. Leader's Training Course, Internship (8). Basic military skills and leadership techniques taught at Ft. Knox, KY, 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, KY. By permission only. Formerly MLS 292

MSL 293. Ranger Challenge Training (2). Prepares students to compete as a team member on the CWU Ranger Challenge team. Must be in good physical condition. Must be medically cleared for participation in collegiate-level sports. Recommend concurrent enrollment in PEF 118, Military Conditioning. By permission only. Formerly MLS 293

MSL 296. Individual Studies in Military Science (1-15). Formerly MLS 296

MSL 298. Special Topics (1-6).

MSL 301. Leadership and Problem Solving (3). Prerequisite, basic course or equivalent, or permission of Department Chair. 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. Formerly MLS 310.

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. Formerly MLS 310.1 and MSL 301.1.

MSL 302. Leadership and Ethics (3). Prerequisite, MSL 301 or permission of Department Chair. Students learn small group leadership methods with emphasis on problem solving and dealing with situational change required for Commissioning. Formerly MLS 311

MSL 302LAB. Military Science and Tactics III Laboratory (1). Requires concurrent enrollment in MSL 302. Practical experience and application in small unit leadership techniques, and small unit tactics. Formerly MLS 311.1 and MSL 302.1.

MSL 303. Leadership and Small Group Tactics (3). Prerequisite, MSL 302 or permission of Department Chair. Students learn and demonstrate small unit tactics, land navigation methods, while using advanced problem-solving techniques. Emphasis on decision-making and

communication skills. Required for Commissioning. Formerly MLS 312

MSL 303LAB. Military Science and Tactics III Laboratory (1). Requires concurrent enrollment in MSL 303. Practical experience integration of small unit tactics, land navigation, techniques of fire support and military skills. Formerly MLS 312.1 and MSL 303.1.

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. Formerly MLS/HIST 314.1.

MSL 392. National Advanced Leadership Camp Preparation (2). Prerequisite, MSL 302 or permission of Department Chair. Practical exercise in small unit leadership and tactics. Prepares the student for National Advanced Leadership Camp. Formerly MLS 392

MSL 398. Special Topics (1-6).

MSL 401. Leadership and Management (4). Prerequisite, MSL 303. 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. Formerly MLS 410

MSL 402. Officership (4). Prerequisite, MSL 401. 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. Formerly MLS 411.

MSL 403. Officership II (2). Prerequisite, MSL 402. Emphasis on analyzing case and situational studies which cover contemporary leadership problems. Required for Commissioning. Formerly MLS 412

MSL 492. National Advanced Leadership Internship (8-15). Prerequisites, MSL 301, 302, 303. Practical exercise in small unit leadership and tactics. Five-week camp at Ft. Lewis, WA. Required for Commissioning. Formerly MLS 492

MUSIC

Faculty

Chair: Peter Gries
Hertz Hall 101

Professors

Joseph Brooks, Clarinet, Saxophone,
Woodwind Methods
Larry D. Gookin, Bands, Low Brass, Music
Education, Conducting
Peter Gries, Piano, Theory, Counterpoint,
Analysis
Linda Marra, Voice, Opera, Diction, Literature,
Pedagogy
Mark Polishook, Composition, Theory,
Orchestration, Electronic/Computer Music
Carrie Rehkopf Michel, Violin, Chamber Music
John Michel, Cello, Chamber Music, Pedagogy
Hal Ott, Flute, Recorder, History, Literature
John F. Pickett, Piano, Theory, Music History
Jeffrey Snedeker, Horn, Brass Methods, Music
History

Associate Professors

Chris Bruya, Jazz Studies, Theory
Vijay Singh, Jazz Studies, Choir, Voice, Music
Business

Assistant Professors

Mark Babbitt, Trombone, Symphonic Band,
Theory
Mark Goodenberger, Percussion
John Harbaugh, Trumpet, Jazz Studies
Diane Reich, Voice, Opera
Linda Woody, Music Education

Piano Technician

Harry Whitaker

Instructors

David Asplin, Composition
Sarah Bahouddin, Oboe
Shirley Diamond, Saxophone, Woodwind
Methods
Jim Durkee, Guitar
Alan Futterman, Bassoon
Margret Gries, Upper Strings Class Methods,
Music History, Piano, Organ, Harpsichord,
Aesthetics
Jon Hamer, String Bass
Scott Hosfeld, Viola, Chamber Music
Marcia Kaufmann, Chamber Music
Sid Nesselroad, Voice
Barbara Pickett, Piano, Class Piano

Artist in Residence:

Paul-Elliott Cobbs, Orchestra Conductor

General Departmental Information

The Music Department of Central Washington University serves the academic community through offering of courses, cultural activities, and degrees relevant to the needs of its students. Within this comprehensive university, the Department

functions as the component of a liberal arts institution that provides education in the musical arts.

The Department offers undergraduate curricula leading to the Bachelor of Music and Bachelor of Arts degrees and graduate work leading to the Master of Music degree. The department seeks to provide the opportunity for all students to develop into self-sufficient, secure and well-informed musicians and to instill in them an aspiration for continual growth in knowledge and acquisition of skills. Academic coursework, ensemble experience and applied music study are directed to these goals. Rigorous expectations for academic achievement and applied proficiency are set within a nurturing environment that acknowledges the uniqueness of each student's background, goals and aptitude. It is the responsibility of the department to advise students of these expectations and help each to succeed; it is the student's responsibility to realize these expectations as fully as possible.

The Department of Music is an institutional member of the National Association of Schools of Music (NASM).

All entering students who plan to pursue either a major or minor in the Department of Music must demonstrate their performance ability before a faculty committee. Based on this audition, the Music Department will determine the student's admissibility into a specific major or minor area. Auditions are scheduled for specific dates each year. However, other dates are available through prior scheduling. Information regarding audition dates, schedules, and repertoire requirements can be obtained by contacting the music office. Students who do not qualify for admission into the Department may be placed on departmental probation. This will allow them to enroll in some basic musicianship classes and to pursue applied study on either the group or the secondary level. Probationary students may use the quarter ending jury as an audition for reconsideration of their admission. No student will be allowed to graduate without removing the probationary status and accruing credits on the level of college applied study.

A **keyboard proficiency** requirement must be met by all Music majors and music teaching minors. Students unable to demonstrate essential keyboard skills **must** enroll in MUS 154A, II, and III at the appropriate assigned level in the year of **entrance**. Upper division transfer students not meeting the required keyboard proficiency may enroll in upper division courses only if concurrently enrolled in MUS 154A. If a student cannot meet the proficiency requirements at the conclusion of three quarters, he or she must continue to register for piano study until this requirement is displayed. Music Education majors will not be placed or scheduled for student teaching until this proficiency is completed.

All Music majors, including B.M. and B.A. degrees, must register for a **major ensemble** which is appropriate to their major performance area during each quarter of

enrollment as a full time student. Piano and Guitar majors may, with permission of the applied instructor and approval of the Department Chair, substitute up to three quarters of chamber music experience (MUS 217, 417) for major ensemble credit. Music Education majors, during the quarter of student teaching, are exempt from this requirement. The major ensembles are Wind Ensemble, Choir, Chamber Choir, Symphonic Band, Marching Band, and University Orchestra. Only these ensembles will generate credit which will accrue for degree requirements.

All students majoring in Music, and those students who are non-majors and enrolled in secondary applied music study (MUS 171, 271, or 371), **must attend the student recital hour** on Tuesdays at 2 p.m., and attend faculty and student recitals and other university music functions in accordance with requirements set forth each quarter.

Any student who has been accepted into the Music Department as a Music major will enroll in "**Major Applied Area**" applied instruction (MUS 164, 264, 364, 464, 564) in compliance with their degree requirements. Music major students pursuing study in a secondary applied area and non-music major students will enroll in "Secondary Applied Area" (MUS 171, 271, 371) applied instruction. Enrollment for non-major performance area applied instruction will be available to students based on degree requirements and on a space available basis. Non-music major students must successfully complete an audition for a faculty committee to be considered for these lessons. An examination in performance (Jury) is required of all students who are enrolled in either a "Major Applied Area" (private lessons) or the MUS 371 "Non-Major Applied Area" at the conclusion of each quarter. Six hours practice per week is the minimum required for each 30 minutes of lesson time per week.

A **theory placement examination** is required for all Freshman Music students to determine their correct status in the theory program. This examination is given during the first class period of MUS 144. Transfer students who have not taken music theory courses must also take this examination.

Theory credits earned at accredited colleges and universities with a grade of C or better will be honored by the CWU Music Department, provided they reflect courses that have been deemed as equivalent in scope to those in the CWU curriculum. Students who have completed theory courses at a community college and want to have these requirements waived must petition the Music Department. If these courses are accepted and the requirements waived, students must still honor the total credit requirements for the chosen degree. Transfer students whose theory courses from a community college are accepted must also take a written diagnostic test in music theory during the first quarter in residence. Students will be informed as to their performance on the diagnostic test and advised of an appropriate course of action; this

advisement is for the student's benefit, but will not result in additional course requirements.

Admission to departmental honors program: The student must submit a letter of application to the Department Chair in the junior or senior year, stating: (a) the proposed honors project, date of completion, and name of the faculty advisor for the project; (b) current grade point average in music; (c) current overall grade point average.

The student must complete an interview with the honors committee and project advisor to establish: (a) preliminary course requirements essential to successful completion of the proposed project; (b) number of individual study credit hours (MUS 497, 1-12 credits) to be devoted to the project.

Projects Appropriate for Honors

Solo recital	
Original composition	
Arrangement (instrumental, choral, or combination)	
Supervision or direction of musical performance (This can include exceptional service as a teaching assistant under faculty supervision.)	
Scholarly research paper	
Major operatic role performance	
Major solo performance (concerto, oratorio, suite, cycle, etc.) with band, orchestra, choir, or chamber ensemble.	
Scholarly and musical requisites	
Cumulative overall grade point average of 3.00	
Music grade point average of 3.40	
Outstanding ability and superior musicianship demonstrated in completed project.	

Final Honors Project Acceptance Requirements

Approval of the completed project by the honors committee, after consultation with the faculty project advisor and Department Chair. Interested students are encouraged to consult with the honors advisor.

Music Core Requirements

All music majors must complete a sequence of courses that have been designated as Music Core Requirements.

Courses	Credits
MUS 104, Introduction to Musical Studies.....	3
MUS 144, 145, 146, First Year Theory*.....	9
MUS 244, 245, 246, Second Year Theory.....	9
MUS 372, 373, 374, Music History.....	12
MUS 341, 342, Conducting I and II.....	6

Core Total 39

*Students enrolled in the first year theory sequence (MUS 144, 145, 146) must have passed or be currently enrolled in the corresponding Class piano course (MUS 154A). A waiver of this

requirement can be obtained by demonstrating keyboard skills to any piano faculty member.

Bachelor of Music

Student advancement through performance levels (164-464) is determined by jury examination. In addition, an evaluation by an appointed faculty committee of the student's general musicianship and performance abilities will be conducted at the end of the sophomore year to determine status toward the Bachelor of Music degree. All Bachelor of Music performance majors must successfully complete eight credits at the 464 level, present a joint recital in the junior year and a full recital in the senior year.

Theory/Composition Major (5456)

Required Courses	Credits
Music Core Requirements.....	39
MUS 171A, Piano.....	3
If keyboard is the major applied area, select another applied area for study	
MUS 164, 264, Major Applied Area.....	12
MUS 340, 440, Analytical Techniques I and II.6	
MUS 343, 346, Counterpoint I and II.....	6
MUS 347, Electronic Music.....	6
Performance in approved ensembles.....	24
Must include 12-18 credits in large ensemble(s) AND	
6-12 credits in chamber ensembles	
MUS 120, 220, 320, 420, Composition.....	24
MUS 422A, Orchestration.....	3
Music electives.....	5

Total 128

Keyboard or Guitar Performance Major (5457)

Required Courses	Credits
Music Core Requirements.....	39
MUS 164-464, Major Applied Area (Individual Instruction).....	36
MUS 340, 440, Analytical Techniques I and II.....	6
MUS 343, Counterpoint I.....	3
MUS 425A (Keyboard) or MUS 425H (Guitar), Pedagogy (Studio).....	3
MUS 426A (Keyboard) or MUS 426H (Guitar), Literature (Studio).....	3
Performance in approved ensembles.....	21
Must include 6-12 credits in large ensemble(s) AND	
9-15 credits in chamber ensembles and for keyboard accompanying (minimum of 4 credits each.)	
Music electives.....	12

Total 123

Percussion Performance Major (5458)

Vocal Performance Major (5459)

Wind Performance Major (5460)

String Performance Major (5461)

Required Courses	Credits
Music Core Requirements.....	39
MUS 164-464*, Major Applied Area.....	36
MUS 340, Analytical Techniques I.....	3
MUS 343, Counterpoint I.....	3
MUS 425B-E,G**, Pedagogy (Studio).....	3
MUS 426B-E,G**, Literature (Studio).....	3
Performance in approved ensembles.....	30
Must include 10-12 quarters (20-24 credits) in large ensemble(s) AND	
6-10 credits in chamber ensembles	
Music electives.....	6

Total 123

*Prior to completion of the Bachelor's Degree, Vocal performance majors must:

- 1) be able to sing with correct pronunciation and inflection in French, German and Italian;
- 2) demonstrate the ability to translate musical texts in French and German;
- 3) demonstrate competency in French or German equal to the successful completion of French or German 153.

**Select the performance area specific to your major: Vocal: B; String: C; Wind: D or E; Percussion: G.

Bachelor of Arts

Music Business Major (5470)

This major will develop musicians who are knowledgeable in the areas of business. Musicians who complete this major may pursue careers in retail and wholesale music sales, arts management, arts promotion, recording operations, copyright and licensing works, and other areas related to the business side of music.

Required Courses	Credits
Music Core Requirements.....	36
MUS154A, Class Piano.....	3
*MUS 164/264, Major Performance Area.....	12
Major Ensembles.....	22

Music/Business Required Courses	Credits
MUS 490, Cooperative Education.....	2-10
**MUS or BUS upper division electives.....	0-10

Business Required Courses	Credits
ACCT 301, Financial Accounting Analysis OR	
ACCT 251, Accounting I.....	5
MUS 482, Music Business.....	3
BUS 241, Legal Environment of Business.....	5
COM208, Introduction to Media Writing.....	4
OMIS 221, Introduction to Business Statistics.....	5
MGT 380, Organizational Management.....	5
HRM381, Management of Human Resources	
OR MGT481, Organizational Behavior.....	5

MKT360, Principles of Marketing.....	5
Business electives.....	7

Total 122

*Must include at least 4 credits at the MUS 264 level.

**Credits for MUS 490 and MUS and/or BUS electives must total at least 12, with a minimum of 2 credits of MUS 490.

Music Education Major (5455) with Specialization

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 are required to complete the professional education program requirements offered through the Curriculum and Supervision Department.

Broad Area Specialization (5451)

This major satisfies the endorsements for Music-General, Music-Instrumental, and Music-Choral.

Qualifies for teaching elementary, junior high and senior high instrumental and choral music. Completion of this major will result in recommendation for endorsement in music K-12, instrumental music (K-12), and choral music (K-12). To qualify for student teaching, the following courses must be completed: MUS 323, 325, 329, 341, 342.

Required Courses	Credits
Music Core Requirements.....	39
MUS 154A, Class Instruction (Piano).....	2
MUS 154B, Class Instruction (Voice).....	2
MUS 254C, Class Instrumental Methods (Strings).....	2
MUS 254D, Class Instrumental Methods (Woodwinds).....	2
MUS 254E, Class Instrumental Methods (Brass).....	2
MUS 254G, Class Instrumental Methods (Percussion).....	1
MUS 323, 325, 329, Music Education.....	10
MUS 343, Counterpoint.....	3
Major Ensemble participation each quarter in residence (6 credits must be in ensemble of secondary instrument).....	22
Major Applied Study including a minimum of four credits of MUS 364 level.....	12

Total 97

Instrumental Music Specialization (5463)

This major satisfies the endorsement for Music-Instrumental.

Qualifies to teach elementary, junior high and senior high instrumental/general music. Completion of this specialization will result in recommendation for endorsements in instrumental music K-12. To qualify for student teaching, the following courses must be completed: MUS 325, 329, 341, 342.

Required Courses	Credits
Music Core Requirements.....	39
MUS 154B, Class Instruction (Voice).....	2
MUS 254C, Class Instruction (Strings).....	2
MUS 254D, Class Instrumental Methods (Woodwinds).....	2
MUS 254E, Class Instrumental Methods (Brass).....	2
MUS 254G, Class Instrumental Methods (Percussion).....	1
MUS 325, 329, Music Education.....	7
MUS 343, Counterpoint.....	3
Major Ensemble participation each quarter in residence.....	22
Major Applied Study including a minimum of four credits of MUS 364 level.....	12

Total 92

Choral Music Specialization (5462)

This major satisfies the endorsement for Music-Choral.

Qualifies to teach elementary, junior high and senior high choral/general music. Completion of this specialization will result in recommendation for endorsements in choral music K-12. To qualify for student teaching, the following courses must be completed: MUS 323, 329, 341, 342.

Required Courses	Credits
Music Core Requirements.....	39
MUS 154A, Class Instruction (Piano).....	2
MUS 230, Diction.....	3
MUS 323, 329, Music Education.....	7
MUS 343, Counterpoint.....	3
MUS 425B, Voice Pedagogy.....	3
Major Choral Ensemble participation each quarter in residence.....	22
Major Applied Study including a minimum of four credits of MUS 364 level*.....	12

Total 91

*Instrumentalists pursuing this major must enroll for three credits of MUS X71A (applied voice).

Bachelor of Arts

Music Major (5450)

Required Courses	Credits
*Music Core Requirements.....	36
**MUS X71/64, Applied Instruction.....	10
MUS 343, Counterpoint I.....	3
OR MUS 440, Analysis of 20th Century Music (3)	
MUS 359, 379, 382, 385, 386 (pick any 2)...	6
Appropriate Major Ensemble.....	6
MUS 495, Senior Project.....	2
***Music Electives.....	6

Total 69

*MUS342 (Conducting II) is not required as part of this major

**Must include at least two quarters of MUS 264

***Selective credits should represent an area of concentration that relates to the Senior Project chosen. Suggested areas include performance, composition, theory, history and jazz studies.

Music Minor (5450)

Required Courses	Credits
MUS 144, 145, 146, First-year Theory.....	9
MUS 104, Introduction to Musical Studies.....	3
Ensemble (large ensemble or chamber ensemble).....	6
MUS 379, Philosophy of Music OR MUS 359, Survey of Music in Cross-Cultural Perspectives.....	3
MUS X71 or X64, Applied Music.....	6
Music electives.....	6

Total 33

MUS 154A I, II and III (Class Piano) may be used to satisfy both co-requisite requirements for MUS 144, 145 and 146 and elective requirements.

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). The evolution of jazz and the development of Black music in White America.

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). Prerequisite, Departmental acceptance as theory/composition major or permission of instructor. Beginning study in composition. May be repeated for a total of three credits.
- 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 towards a Music degree.
- MUS 144, 145, 146. First-year Theory** (3,3,3). Prerequisites, Students must be concurrently enrolled in MUS 154A (Class Piano I), or demonstrate equivalent proficiency, or by permission of Department Chair. Courses must be taken in sequence. The melodic, rhythmic, and harmonic elements of music through ear-training, sight-singing, writing, analysis, and keyboard work. Two hours lecture and two hours laboratory per week.
- MUS 154. Class Instruction** (1). Each course prerequisite to the next numeral. (A.) Piano I, II, III; (B.) Voice I, II; (H.) Guitar I, II. May be repeated for credit.
- MUS 164. Major Applied Area (Individual Instruction)** (1, 2 or 4). By permission of instructor. May be repeated for credit. 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 must attend the weekly recital hour, 7th period, Tuesdays. Instruction available in performance areas A-I, K.
- MUS 171. Secondary Applied Area (Individual Instruction)** (1). Prerequisite, Permission of instructor. One credit any quarter, may be repeated. 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, K.
- MUS 198. Special Topics** (1-6).
- MUS 210. Vocal Jazz Choir** (1). By permission of instructor. May be repeated for credit. Must attend all scheduled rehearsals and performances. For freshmen and sophomores.
- MUS 211, Women's Choir** (1). May be repeated for credit. Two hours rehearsal per week plus all scheduled rehearsals and performances. For freshmen and sophomores. By permission of instructor.
- MUS 213. Flute Choir** (1). Previous experience in flute performance and permission of instructor. May be repeated for credit. Two hours of rehearsal per week plus all scheduled rehearsals and performances. For freshmen and sophomores.
- MUS 214. Brass Choir** (1). By permission of instructor. May be repeated for credit. Two hours rehearsal per week plus all scheduled rehearsals and performances. For freshmen and sophomores.
- MUS 215. Chamber Orchestra** (1). By permission of instructor. May be repeated for credit. Two hours rehearsal per week plus all scheduled rehearsals and performances. For freshmen and sophomores.
- MUS 217. Chamber Music Ensemble** (1). By permission of instructor. May be repeated for credit. One hour coaching plus two hours rehearsal per week plus all scheduled rehearsals and performances. Instruction available in performance areas A-I, K, L.
- MUS 220. Composition** (2). Prerequisite, a minimum of three credits in MUS 120 or permission of instructor. Intermediate study in composition. May be repeated for a total of 6 credits.
- MUS 228. Men's Choir** (1). May be repeated for credit. Two hours rehearsal per week plus all scheduled rehearsals and performances. For freshman and sophomores. By permission of instructor.
- MUS 229. Percussion Ensemble** (1). By permission of instructor. May be repeated for credit. Two hours rehearsal per week plus all scheduled rehearsals and performances. For freshmen and sophomores.
- MUS 230. Diction in Singing Foreign Languages** (3). Covers Italian, French, and German pronunciation for the undergraduate voice student.
- MUS 232. Stage Band** (1). By permission of instructor. May be repeated for credit. Must attend all scheduled rehearsals and performances. For freshmen and sophomores.
- MUS 235. Laboratory Choir** (1). By permission of instructor. May be repeated for credit. Two hours rehearsal per week plus all scheduled rehearsals and performances. Open to all students to participate as singers.
- MUS 244, 245, 246. Second-year Theory** (3,3,3). Prerequisites, MUS 146, 154A (Class Piano III, or equivalent proficiency), or permission of Department Chair. Courses must be taken in sequence. 20th-century musical resources.
- MUS 253C. Class Instrumental Methods Strings I** (1). Lower Strings (Cello and bass). Techniques and methods in applied instruction for Music Education.
- MUS 253D. Class Instrumental Methods Woodwinds I** (1). Lower Woodwinds (single reeds). Techniques and methods in applied instruction for Music Education.
- MUS 253E. Class Instrumental Methods Brass I** (1). Lower Brass (Trombone and Tuba). Techniques and methods in applied instruction for Music Education.
- MUS 253G. Class Instrumental Methods Percussion I** (1). Techniques and methods in applied instruction for Music Education.
- MUS 254C. Class Instrumental Methods Strings II** (1). Upper Strings (Violin and Viola). Techniques and methods in applied instruction for Music Education.
- MUS 254D. Class Instrumental Methods Woodwinds II** (1). Upper Woodwinds (Flute). Techniques and methods in applied instruction for Music Education.
- MUS 254E. Class Instrumental Methods Brass II** (1). Upper Brass (Horn and Trumpet). Techniques and methods in applied instruction for Music Education.
- MUS 254G. Class Instrumental Methods Percussion II** (1). Techniques and methods in applied instruction for Music Education.
- MUS 255. Keyboard Harmony and Improvisation** (1). Prerequisite MUS 254 or permission of instructor. Designed for instrumental, choral, and studio teachers providing practical and working knowledge of keyboard harmony, chord voicing, bass line construction, and improvisation. Particularly applicable to jazz and pop idioms.
- MUS 261. Opera Workshop** (1). A class leading to the performance of scenes, single acts from opera. May be repeated for credit. By permission of instructor.
- MUS 262. Opera Performance** (1). A class leading to performance of a complete opera. May be repeated for credit. By permission of instructor.
- MUS 264. Major Applied Area (Individual Instruction)** (1, 2 or 4). Instruction available in performance areas A-I, K.
- MUS 266. Wind Ensemble** (1-2). May be repeated for credit. 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. One credit if offered one term only during summer session.
- MUS 267. Choir** (1-2). May be repeated for credit. 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.
- MUS 268. Chamber Choir** (2). May be repeated for credit. Open to all students by audition. Three hours rehearsal per week plus all scheduled rehearsals and performances.
- MUS 271. Secondary Applied Area (Individual Instruction)** (1). Prerequisite, permission of instructor. One credit any quarter, may be repeated. 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 in performance areas A-I, K.

- MUS 277. Orchestra** (1-2). May be repeated for credit. Open to all students proficient on orchestral instruments by permission of director. Five hours rehearsal per week plus all scheduled rehearsals and performances. One credit if offered one term only during summer session.
- MUS 287. Marching and Concert Band** (2) Fall quarter only. May be repeated for credit. Five hours 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. For freshmen and sophomores.
- MUS 288. Symphonic Band** (2) Winter and spring quarters only. Five hours 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. For freshmen and sophomores.
- MUS 292. Accompanying Practicum** (1-3). May be repeated for credit. By assignment of instructor. Minimum three hours rehearsal weekly per credit plus performances. For freshmen and sophomores.
- MUS 296. Individual Study** (1-6). Prerequisite, permission of instructor. May be repeated.
- MUS 298. Special Topics** (1-6).
- MUS 299. Seminar** (1-5). May be repeated.
- 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** (2). Prerequisite: a minimum of 6 credits in MUS 220 or permission of the instructor. Advanced study in composition. May be repeated for a total of 6 credits.
- MUS 322. Basic Music Skills for Teachers** (2). For the general classroom teacher (not for music majors or minors). Basic theory; development of the singing voice and ability to play accompanying instruments.
- MUS 323. Choral Music Education** (3). Prerequisite, MUS 341. Philosophy, methods and materials. Individual research and presentation of teaching unit in class.
- *MUS 325. Instrumental Music Education** (3). Prerequisite, suitable conducting and performance skill in piano or instrument. Philosophy and psychology of music education through methods and materials; observation of teachers in the rehearsal, individual research.
- *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.
- *Enrollment is subject to you being fully admitted to the Teacher Education Program. If you register and are not admitted, you will be dropped. You will be required to present your orange "Admit to Teacher Education Program" card on the first day of your attendance in class.
- MUS 329. General Music Methods** (4). Prerequisite, MUS 146. Materials, methods, and instructional techniques for general music, grades K-12.
- MUS 340. Analytical Techniques I** (3). Prerequisites, MUS 246, 282, keyboard proficiency requirements. Analysis of the structure of tonal music.
- MUS 341. Conducting I** (3). Prerequisite, MUS 146. Open to Music majors and minors only. Fundamental principles of baton techniques, practical experience in conducting.
- MUS 342. Conducting II** (3). Prerequisite, MUS 341. A continuation of MUS 341, conducting literature of junior-senior high school performing groups.
- MUS 343. Counterpoint I** (3). Prerequisite, MUS 244. 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.
- MUS 344. Theory Review** (3). Prerequisite, MUS 246. A complete review of traditional harmony from rudiments of music through chromatic harmony.
- MUS 346. Counterpoint II** (3). Prerequisites, MUS 343. Three-voice counterpoint, imitation in three voices, the three-voice invention, and the trio sonata.
- MUS 347. Electronic Music** (2). Prerequisite, MUS 246 or permission of instructor. Study of contemporary technologies and techniques as used to compose music. May be repeated for credit.
- MUS 355. Jazz Improvisation** (3). Prerequisites, MUS 246, MUS 255, or permission of instructor. Basic jazz improvisational techniques for upper division wind instruments, percussion (mallet), guitar, acoustic bass and keyboards who have demonstrated proficiency on their applied instrument as well as basic jazz keyboard skills.
- MUS 356. Jazz Styles** (3). Prerequisite, MUS 355 or permission of instructor. Overview of jazz history as it has impacted the evolution of instrumental jazz styles. Class activities include transcription and performance of recorded improvisations in an imitative style.
- MUS 357. Jazz Composition and Arranging** (3). Prerequisites, MUS 355 and MUS 356. Development of skills in songwriting, melody and chord progression, construction, and arranging in the jazz idiom through student projects and score analysis.
- MUS 358. Commercial Songwriting** (1). Prerequisites, MUS 246, MUS 255, or permission of instructor. Theoretical and formal analysis of popular songs, ear training and creative exercises in popular music composition. Two hours laboratory per week.
- MUS 359. Survey of Music in Cross-Cultural Perspectives** (3). An introduction to ethnomusicology: the cultural context of music with emphasis on Africa, Asia, Native North and South America, Oceania. MUS 359 and ANTH 359 are equivalent courses. Students may not receive credit for both.
- MUS 364. Major Applied Area (Individual Instruction)** (1,2, or 4). Instruction available in performance areas A-I, K.
- MUS 365. Advanced Keyboard Skills** (2). Prerequisites, MUS 264 and permission of instructor. Laboratory instruction designed to include skills such as sight reading, accompanying, harmonization, score reading, and ensemble playing. May be repeated for credit.
- MUS 371. Secondary Applied Area (Individual Instruction)** (1). Prerequisite, permission of instructor. One credit any quarter, may be repeated. 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-I, K.
- MUS 372. Music History to 1600** (4). Prerequisites, MUS 104, 146, 154A (Class Piano III, or equivalent proficiency. Formerly MUS 280. Students may not receive credit for both.
- MUS 373. Music History, 1600 to 1800** (4). Prerequisites, MUS 244, 372. Formerly MUS 281. Students may not receive credit for both.
- MUS 374. Music History, 1800 to the Present** (4). Prerequisites, MUS 245, 373. Formerly MUS 282. Students may not receive credit for both.
- 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 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 410. Vocal Jazz Choir** (1). By permission of instructor. May be repeated for credit. For juniors and seniors. See MUS 210 for description.
- MUS 411. Women's Choir** (1).
- MUS 413. Flute Choir** (1). Previous experience in flute performance and permission of instructor. May be repeated for credit. Two hours of rehearsal per week plus all scheduled rehearsals and performances. For juniors and seniors.
- MUS 414. Brass Choir** (1). By permission of instructor. May be repeated for credit. For juniors and seniors. See MUS 214 for description.
- MUS 415. Chamber Orchestra** (1). By permission of instructor. May be repeated for credit. For juniors and seniors. See MUS 215 for description.
- MUS 417. Chamber Music Ensemble** (1). By permission of instructor. May be repeated for credit. One hour coaching plus two hours rehearsal per week plus all scheduled rehearsals and performances. Instruction available in performance areas A-I, K, L.
- MUS 420. Composition** (3). Prerequisite: a minimum of 6 credits in MUS 320 or permission of the instructor. May be repeated.
- MUS 422A. Orchestration** (3). Prerequisites, MUS 246, 282, keyboard proficiency requirements. Instrumentation. Formerly MUS 422.1.
- MUS 422B. Orchestration** (3). Prerequisite, MUS 422A. Scoring for woodwind, brass, string and percussion ensembles. Introduction to keyboard transcription. formerly MUS 422.2.
- MUS 422C. Orchestration** (3). Prerequisite, MUS 422B. Scoring for full orchestra. Transcriptions of keyboard music. Score analysis. Formerly MUS 422.3.
- MUS 424. Jazz Music Education** (3). Prerequisite, Admittance into the Teacher Education Program and completion of two-year theory sequence or permission of the instructor. Course is designed to give music educators the tools and knowledge to direct a jazz program in a public school setting.
- MUS 425. Pedagogy (Studio)** (3). Prerequisite, permission of instructor. Teaching methods and materials. Instruction available in performance areas A-H.
- MUS 426. Literature (Studio)** (3). Prerequisite, permission of instructor. Literature related to the specific applied area for teaching and performance purposes. Instruction available in performance areas A-H.
- MUS 428. Men's Choir** (1).
- MUS 429. Percussion Ensemble** (1). By permission of instructor. May be repeated for credit. For juniors and seniors. See MUS 229 for description.
- MUS 432. Stage Band** (1). By permission of instructor. May be repeated for credit. For juniors and seniors. See MUS 232 for description.
- MUS 435. Laboratory Choir** (1). By permission of instructor. May be repeated for credit. For juniors and seniors. See MUS 235 for description.
- MUS 440. Analytical Techniques II** (3). Prerequisite, MUS 340. Emphasis on 20th Century music, including contemporary extrapolations from Schenker's methods, pitch class and parametric analysis techniques.
- MUS 441. Conducting III** (3). Prerequisite, MUS 342. A continuation of Conducting II with emphasis on score reading and rehearsal techniques.
- MUS 444. Canon and Fugue** (3). Prerequisite, MUS 346. Invertible counterpoint, canonic devices, fugal procedures.
- MUS 453. Musical Direction of Broadway Musicals** (3). Prerequisites, permission of instructor and MUS 246 or equivalent. Techniques and methods of musical direction of Broadway musicals for the secondary school teacher. Choosing a work, preparing rehearsals, making a schedule, working with singers. MUS 453 and MUS 553 are equivalent courses. Students may not receive credit for both.
- 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 of instructor.
- MUS 462. Opera Production** (1-2). A class leading to performance of a complete opera. MUS 462 and MUS 562 are equivalent courses. May be repeated for credit. By permission of instructor.
- MUS 464. Major Applied Area (Individual Instruction)** (1, 2 or 4). Instruction available in performance areas A-I, K.
- MUS 466. Wind Ensemble** (1-2). By permission of the instructor. May be repeated for credit. See MUS 266 for description. For juniors and seniors. One credit if offered one term only during summer session.
- MUS 467. Choir** (1-2). May be repeated for credit. 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.
- MUS 468. Chamber Choir** (2). May be repeated for credit. See MUS 268 for complete description.
- MUS 477. Orchestra** (1-2). May be repeated for credit. Open to all students proficient on orchestral instruments by permission of director. Five hours rehearsal per week plus all scheduled rehearsals and performances. One credit if offered one term only during summer session.
- MUS 480. Reed Making for Double Reed Instruments** (1).
- MUS 481. Instrument Repair** (1). Reed, woodwind, string and percussion, minor repairs.
- MUS 482. Music Business** (3). Prerequisites, MUS 372 and 10 credits of business requirements or permission of the instructor. A survey and overview of the business of music including licensing, copyright, production, management, marketing and arts administration.
- MUS 484. Band Arranging I** (3). Prerequisites, MUS 246, 372 and keyboard proficiency fulfillment. For public school band directors; full band orchestration, small bands, including marching groups.
- MUS 485. Choral Arranging** (3). Course will focus skills needed to write and arrange music junior and senior high school vocal ensembles.
- MUS 486. Stage Band Arranging** (3). Prerequisite, MUS 246 and keyboard proficiency fulfillment. For public school band directors; full band orchestration, small bands, including marching groups.
- MUS 487. Marching and Concert Band** (2). Fall quarter only. See MUS 487 for description. For juniors and seniors. May be repeated for credit.
- MUS 488. Symphonic Band** (2). Winter and spring quarters only. See MUS 288 for description. May be repeated for credit. For juniors and seniors.
- 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. Prior approval required. May be repeated. Grade will be S or U.
- MUS 491. Workshop or Clinic** (1-6).
- MUS 492. Accompanying Practicum** (1-3). May be repeated for credit. By assignment of instructor. Minimum three hours rehearsal weekly per credit plus performances. For juniors and seniors.
- MUS 495. Senior Project** (2). Students are required, as a senior project, to present a recital, composition, or piece of research.
- MUS 496. Individual Study** (1-6). Prerequisite, permission of instructor. May be repeated.
- MUS 497. Honors** (1-12). Prerequisite, admission to department honors program.
- MUS 498. Special Topics** (1-6).
- MUS 499. Seminar** (1-5). May be repeated.

Music Foreign Studies Courses

- MFST 220. Second Year Composition** (1-3). Offered only in study abroad programs. Courses must be taken in sequence, although a student may enroll in more than one at a time. May be repeated for credit.
- MFST 320. Third Year Composition** (1-3). Offered only in study abroad programs. Courses must be taken in sequence, although a student may enroll in more than one at a time. May be repeated for credit.
- MFST 364. Applied Performance A** (2-4).

Offered only in study abroad programs. Courses must be taken in sequence, although a student may enroll in more than one at a time. May be repeated for credit.

MFST 420. Fourth Year Music Composition (1-3). Offered only in study abroad programs. Courses must be taken in sequence, although a student may enroll in more than one at a time. May be repeated for credit.

MFST 443. Advanced Theory (3). Offered only in study abroad programs. May be repeated for credit.

MFST 464. Applied Performance B (2-4). Offered only in study abroad programs. course must be taken in sequence, although a student may enroll in more than one at a time. May be repeated for credit.

MFST 489. Ensemble Performance (2). Offered only in study abroad programs. Courses must be taken in sequence, although a student may enroll in more than one at a time. May be repeated for credit.

Undergraduate Courses/Programs on Reserve

The following courses/programs are on reserve and may be offered subject to program needs: MUS 221. Suzuki Pedagogy I (3); MUS 222. Suzuki Pedagogy II (3); MUS 228. Men’s Glee Club (1); MUS 234. Central Swingers (1); MUS 289. Pep Band (1); MUS 293. String Practicum (3); MUS 395. Suzuki Pedagogy: Practicum (2); MUS 428. Men’s Glee Club (1); MUS 489. Pep Band (1).

OCCUPATIONAL EDUCATION

Faculty

- Jan Bowers, Family and Consumer Science
- Bob Lupton, Information Technology and Administration Management
- V. Wayne Klemin, Information Technology and Administration Management
- Bob Wiekig, Industrial Education Technology

Vocational-Technical Education Competency Certificate Program

Individuals entering teaching in approved vocational-technical programs on the basis of their business or industry work experience are required to demonstrate performance of the general standards for all vocational-technical teacher certificate candidates pursuant to WAC 180-77-041.

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. www.cwuce.org/careertech

Prerequisites:

1. Current Career and Technical Education Probationary Teaching Certificate OR
2. 6000 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 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 Washington State Residency Permit or professional teacher certification.

Required Courses

Credits

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 and Issues Related to Abuse.	2

Total 24

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.

OCED 310A. Vocational-Technical Teaching Methods (4). An introduction to teaching pedagogy and application of occupational skills, knowledge and practice to a vocational classroom setting.

OCED 310B. Vocational-Technical Occupa-

tional Analysis (4). 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 (4). 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 (2). 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 (4). 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 (4). 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 (2). Advanced teaching pedagogy, history and philosophy of vocational education, school law and issues related to abuse, leadership, and work-based learning.

OCED 410. Vocational School to Work Programs (4). Prerequisite, admission to the teacher education program. Work-based learning, student leadership, advisory committees, program promotion, and professional responsibilities in vocational education.

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. Formerly IET 432. Students may not receive credit for both.

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.

OCED 492. Practicum (3-15). Prerequisite permission of Department Chair. Grading will be S/U.

PHILOSOPHY

Faculty

Chair: **Chenyang Li**
 Language and Literature Building 337

Professors

Peter M. Burkholder, Ethics, Epistemology,
 Modern Philosophy
 Webster F. Hood, Existentialism,
 Existentialism, Phenomenology, 19th
 Century and Contemporary Philosophy
 Chenyang Li, Asian Philosophy, Comparative
 Philosophy, Ethics, and Philosophy of
 Language

Assistant Professors

Cynthia Coe, Continental Philosophy, Feminist
 Philosophy
 Jeffrey Dippmann, Asian Religion and
 Philosophy, World Religions, Chinese
 Religion, Buddhist and Taoist Philosophy,
 Heidi Szpek, Hebrew Bible, Western Religious
 Traditions, World Religions, Ancient
 Studies and the Bible

Lecturers

Matthew Altman
 Sharron Connors
 Karen Gerrard
 Kristin Klamm-Donneen
 Gayle Young-Dohrman

Emeritus Professors

Jay E. Bachrach
 Robert Goedecke
 Raeburne S. Heimbeck
 Chester Z. Keller
 John Utzinger

General Departmental Information

The original meaning of the word philosophy is "the love of wisdom." As such it represents not a body of doctrines to be learned but an ongoing process of critical and speculative inquiry into questions which represent people's deepest concerns, such as the meaning of human existence, the nature of reality, the justifications of human knowledge, and the search for the grounds of human conduct.

The Department of Philosophy has three main objectives. 1. To acquaint general education students with the basic questions which have concerned philosophers over the past 2,500 years and to give them some skills and methods for developing their own answers to these questions. 2. To offer service courses for students in other disciplines, such as the social sciences, history, speech, science, etc. 3. To teach students who have elected Philosophy as their major.

Students majoring in Philosophy, or in the Philosophy Religious Studies specialization, must complete an end-of-major assessment. They should consult their major advisor about

this assessment at least three quarters before finishing their work for the major.

Bachelor of Arts

Philosophy Major

45-59 credits (6045)

60 credits (6050)

Students may choose either a 45-59 credit major (6045) or a 60 credit major (6050). In order to graduate, a student who completes the 45-59 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.

Required Courses

	Credits
*PHIL 201, Introduction to Logic.....	5
PHIL 302, Ethics.....	5
PHIL 352, Western Philosophy I.....	5
PHIL 353, Western Philosophy II.....	5
PHIL 354, Western Philosophy III.....	5
PHIL 355, Contemporary Thought.....	5
PHIL 494, Undergraduate Thesis Preparation.....	2
PHIL 495, Undergraduate Thesis.....	3
PHIL 499, Seminar.....	5
Philosophy electives.....	5-20
45-59 credit major (5-19 credits)	
60 credit major (20 credits)	
Select from all other PHIL courses	

Total 45-60

*If a student uses PHIL 201, Introduction to Logic, to satisfy the basic requirement for general education, he/she may not include it in the Philosophy major. He/she should substitute an additional five credit elective for it.

Religious Studies Specialization

50-59 credits (6055)

60 credits (6060)

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. This study of religion is set in a frame of philosophy courses; thus the student will graduate with a major in Philosophy with a specialization in Religious Studies. In addition, the student may range into other disciplines to see the practices and influences of religion in various fields of human culture. Some courses in other academic departments are suggested below.

The major provides a liberal education of an interdisciplinary yet focused character. It, as well as the minor, combines well with another major in the humanities or in the social sciences. The student is also prepared for graduate work in the humanities, social sciences, or religious studies itself, as well as for employment in the religious and social

science fields.

Students who specialize in Religious Studies may choose either a 50-59-credit specialization (6055) or a 60-credit specialization (6060). In order to graduate, a student who completes the 50-59-credit specialization must also have a minor or second major in another discipline. A student who completes the 60-credit specialization is not required to have a minor or second major.

Required Courses

	Credits
RELS 101, Introduction to Religion.....	5
RELS 201, Sacred Books of the World.....	5
RELS 301, Man in Religious Thought.....	5
RELS 351, Religions of Asia.....	5
RELS 353, Judaism, Christianity, Islam	5
RELS 488, Senior Seminar.....	5
Select from the following:.....	10-20
PHIL 351, Medieval Philosophy (5)	
PHIL 352, Western Philosophy I (5)	
PHIL 353, Western Philosophy II (5)	
PHIL 354, Western Philosophy III (5)	
Select from the following:.....	5-10
PHIL 310, Philosophies of India (5)	
PHIL 445, Chinese Philosophy (5)	
Select from the following:.....	5-20
PHIL 302, Ethics (5)	
PHIL 305, Philosophy of Religion (5)	
PHIL 359, Mysticism (5)	
PHIL 376, Contemporary Religious Thought (5)	
*Electives.....	0-25
50-59-credit specialization (0-9 credits)	
60-credit specialization (10-25 credits)	

Total 50-60

*Electives may be selected from any upper division philosophy or religious studies course. Students may strengthen their preparation by taking additional upper division courses from anthropology, art, English, history, music, political science, or sociology. See Department for a complete listing of approved upper division electives.

Philosophy Minor (6050)

Required Courses

	Credits
PHIL 101, Introduction to Philosophy.....	5
*PHIL 201, Introduction to Logic.....	5
Philosophy electives.....	10-18
Select from PHIL courses; at least 10 credits at 300 level or above.	

Total 20-28

*If a student uses PHIL 201, Introduction to Logic, to satisfy the basic requirement for general education, he/she may not include it in the Philosophy minor. He/she should substitute an additional five credit elective for it.

Religious Studies Minor (6800)

Required Courses

	Credits
RELS 101, Introduction to Religion.....	5
RELS 201, Sacred Books of the World OR RELS 301, Man in Religious Thought OR	

PHIL 305, Philosophy of Religion.....5
 RELS 351, Religions of Asia OR
 RELS 353, Judaism, Christianity, Islam.....5
 Department-approved electives.....5

Total 20

Philosophy and Religious Studies Courses

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.

PHIL 308. Philosophy of Ecology (5). Philosophical issues pertaining to the maintenance and enhancement of ecosystems.

PHIL 310. Philosophies of India (5).

PHIL 312. Applied Logic (5). Principles of sound reasoning in practical human situations.

PHIL 348. Social and Political Philosophy (5). An examination of the philosophical foundations of major modern social and political systems - classical conservatism, liberalism, socialism, fascism, anarchism.

PHIL 351. Medieval Philosophy (5). Latin, Arabic and Jewish traditions.

PHIL 352. Western Philosophy I (5). Origins through Plato, Aristotle and Plotinus.

PHIL 353. Western Philosophy II (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 (5). 19th, early 20th century. Hegel, Schopenhauer, Mill, Marx, Nietzsche, Kierkegaard and Bergson.

PHIL 355. Contemporary Thought (5). 20th century; James, Russell, Whitehead, Dewey, Ayer, Sartre and Jaspers.

PHIL 356. American Philosophy (5). Colonial period to the present.

PHIL 357. Race, Class, and Gender in American Philosophy (5). An examination of historical and contemporary American writings that address race, ethnicity, class, gender and sexual orientation from philosophical perspectives, emphasizing material usually excluded from the accepted philosophical canon.

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 360. Introduction to Symbolic Logic (5). Principles, methods and techniques of modern logic. The propositional calculus, truth tables, methods of proof and an introduction to some higher-order functional calculi.

PHIL 362. Continental Rationalism (5). Descartes, Spinoza and Leibniz.

PHIL 363. British Empiricism (5). Locke, Berkeley and Hume.

PHIL 372. Philosophy of Technology (5). A critical examination of the dimensions of technology: the nature of tools and

machines, the distinction between pure and applied research, artificial intelligence, and the emergence of the industrial state as a political unit.

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.

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 398. Special Topics (1-6).

PHIL 420. Kant (5).

PHIL 445. Chinese Philosophy (5). Selected philosophical topics in classical Chinese literature.

PHIL 450. Philosophy of History (5). Nature of historical inquiry. Representative interpretations of history.

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 461. Theory of Knowledge (5). Evidence, perception and the physical world, apriori knowledge, meaning, the analytic-synthetic distinction, theories of truth.

PHIL 463. Philosophy of Mind (5). Philosophical implications of recent approaches to mind.

PHIL 465. Advanced Ethics (5). Contemporary ethical theory. Ethical disagreement, moral truth, value concepts, moral reasoning, normative sentences.

PHIL 470. Philosophy of Language and Communication (5). A critical study of the nature and functions of language through analysis of concepts such as meaning, reference, truth, signs and symbols.

PHIL 480. Philosophy of Science (5). A critical study of the aims, structure, and methodology of the sciences. Explanation, prediction, reduction, theories, laws, and confirmation.

PHIL 481. Philosophy of the Social Sciences (5). A critical study of basic assumptions, distinctive methods and explanations, and value and normative considerations in the social sciences. PHIL 481 and SOC 481 are equivalent courses. Students may not receive credit for both.

PHIL 487. Philosophy of Law (5). Basic irrational and rational factors in social interaction with regard to maintenance of free society; history of law, different kinds of law and legal philosophy, from ancient deliberations to the present.

PHIL 490. Cooperative Education (1-6). 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. Prior approval required. May be repeated. Grade will be S or U.

PHIL 494. Undergraduate Thesis Preparation (2). Prerequisites, advanced standing and permission of instructor. Grade will be S or U. Formerly PHIL 4891.

PHIL 495. Undergraduate Thesis (3). Prerequisites, 494, Junior/Senior standing and permission of instructor. Complete thesis as part of major graduation requirements. Formerly PHIL 4892.

PHIL 496. Individual Study (1-6). Prerequisite, GPA of 3.0 in philosophy and a cumulative GPA of 3.0 plus approval of the instructor and Chair of the Department.

PHIL 498. Special Topics (1-6).

PHIL 499. Seminar (5). A seminar on a selected topic or figure. Prerequisites: Junior/Senior standing or permission of instructor.

Religious Studies Courses

RELS 101. Introduction to Religion (5). Religions of humanity through the ages. Beliefs, practices, symbols, and institutions. Human experiences and needs from which religions arise.

RELS 201. Sacred Books of the World (5). Comparative study of religious thought and literature from classics eastern and western: 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 351. Religions of Asia (5). Historical development of Hinduism, Buddhism, Taoism, Confucianism and Shinto from their origins to the present.

RELS 353. Judaism, Christianity, Islam (5). Historical development of the three dominant western religions from their origins to the present.

RELS 363. Yoga (5). History, philosophy, and psychology of Yoga in India, China, and America. Postures, breathing, meditation, and parallel western techniques.

RELS 365. Meditation (5). History, philosophy,

and psychology of meditation in the Buddhist, Hindu, and Islamic traditions. New developments in secular and radical meditation. Survey and exploration of techniques.

RELS 398. Special Topics (1-6).

RELS 488. Senior Seminar (5).

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. Prior approval required. May be repeated. Grade will be S or U.

RELS 491. Workshop (1-6). Task oriented approach to special topics.

RELS 496. Individual Study (1-6). Prerequisite, GPA of 3.0 and/or approval of the instructor and program director.

RELS 498. Special Topics (1-6).

RELS 499. Seminar (3-5).

Undergraduate Courses/Programs on Reserve

The following courses are on reserve and may be offered subject to program needs: PHIL 468. Logic (5)

Physical Education, Health Education and Leisure Services

See Health, Human Performance and Recreation

PHYSICS

Faculty

Chair: Bruce Palmquist

Lind Hall 201

509-963-2727

www.cwu.edu/~physics

Associate Professors

Michael Braunstein, Nuclear Physics,

Astronomy

Bruce Palmquist, Science Education

Assistant Professors

David Laman, Atomic Molecular and Optical

Physics

Andrew A. Piacsek, Acoustics

Sharon L. Rosell, Nuclear Physics

General Departmental Information

Physics is a fundamental science in the sense

that its ultimate goal is to understand and explain the structure of our universe. It is also a practical subject, and physicists continue to participate and contribute in many fields of human endeavor.

The Physics majors at Central emphasize the fundamental and practical nature of physics. Our students pursue the intellectual excitement of beginning to understand the structure of matter itself and the widely applicable experiences of problem solving, quantitative reasoning, and acquiring manipulative skills. Throughout our majors, stress is placed on careful development of key concepts and skills in a logical sequence, often from a historical perspective. This emphasis is intended to produce the habits of independent study and self improvement essential to success after graduation.

The particular major followed by any student will be determined by that student's own career objective. The B.A. major is for students wishing a broad liberal education with an emphasis in physics. The B.S. Physics majors are designed for individuals planning careers in physics and related technical fields or in areas where a knowledge of basic scientific principles is useful. The Physics minor is for students who want an introduction to the ideas of classical and modern physics.

All Physics majors require four quarters of calculus, and this sequence must be started at least concurrently with PHYS 181. Thus, it is vital that prospective Physics majors consult a departmental advisor early in their careers to plan efficient schedules. Failure to do so could mean requiring an additional year to complete degree requirements.

Bachelor of Arts Physics Major (6250)

Required Courses	Credits
PHYS 181, 181LAB, 182, 182LAB, 183, 183LAB,	
General Physics.....	15
CHEM 181, 181LAB, 182, 182LAB, General	
Chemistry.....	10
MATH 172, 173, 272, 273, Calculus.....	20
PHYS 317, 318, Modern Physics.....	8
PHYS 331, Laboratory Practices and	
Techniques.....	3
PHYS 333, Modern Physics Laboratory.....	3
PHYS 381, 382, 383 Electromagnetic	
Theory.....	12
PHYS 495, Undergraduate Research.....	2
Department approved electives.....	6
MATH 265, Linear Algebra I.....	4

Total 83

This major satisfies the criteria for an endorsement in physics. This major qualifies students to teach physics at the high school level and the middle or junior high school levels. Students should seriously consider

working toward endorsement in a second area such as biology, chemistry, earth science, general science, or mathematics. Students taking this major are required to complete the Professional Education Program requirements offered through the Curriculum and Supervision Department. Students completing this program after August 31, 2005 will be required to pass the WEST-E exam for physics to receive a physics endorsement.

Bachelor of Science Physics Major (6250)

Required Courses	Credits
PHYS 181, 181LAB, 182, 182LAB, 183, 183LAB, General Physics.....	15
CHEM 181, 181LAB, 182, 182LAB, General Chemistry.....	10
MATH 172, 173, 272, 273, Calculus.....	20
PHYS 317, 318, Modern Physics.....	8
PHYS 331, Laboratory Practices and Techniques.....	3
PHYS 333, Modern Physics Laboratory.....	3
PHYS 342, Thermodynamics.....	4
PHYS 351, 352, Analytical Mechanics.....	6
PHYS 361, Computational Physics.....	4
PHYS 363, Physical Optics.....	4
PHYS 381, 382, 383, Electromagnetic Theory.....	12
PHYS 474, Quantum Mechanics.....	5
PHYS 495, Undergraduate Research.....	4
MATH 265, Linear Algebra I.....	4
MATH 376, Elementary Differential Equations.....	3
Department approved electives.....	5
Total	110

Students who intend to pursue graduate studies in Physics are strongly recommended to include the following courses in their electives:

- MATH 377, Elementary Differential Equations (3)
- PHYS 475, Quantum Mechanics (5)

Bachelor of Science Physics Major (6252) Physics - Engineering Specialization (6252)

This is a joint five-year program leading to a degree from CWU and an Engineering degree from another institution.

Completion of the three-year program specified below will generally prepare the student to enter the third and fourth year courses of most engineering curricula, but it is solely the student's responsibility to apply and gain admission to an institution offering degrees in Engineering. Early consultation with Central's pre-engineering advisor is mandatory to ensure that specific additional requirements of particular pre-engineering curricula are also

satisfied. After transfer to an accredited engineering program, completion of 26 credits of upper division engineering courses in that program, completion of Central's basic and breadth requirements, and a minimum total of 180 acceptable credits will satisfy remaining requirements for the B.S. degree at CWU with a major in Physics. It is the individual student's responsibility to submit an official transcript of the work completed after leaving CWU and to request awarding of this degree.

Required Courses	Credits
PHYS 181, 181LAB, 182, 182LAB, 183, 183LAB, General Physics.....	15
CHEM 181, 181LAB, 182, 182LAB, General Chemistry.....	10
MATH 172, 173, 272, 273, Calculus.....	20
PHYS 317, 318, Modern Physics.....	8
PHYS 331, Laboratory Practices and Techniques.....	3
PHYS 351, 352, Analytic Mechanics (3,3) OR IET 311, Statics (4) and MET 327, 327LAB Technical Dynamics (5).....	6-9
PHYS 381, 382, 383, Electromagnetic Theory.....	12
MATH 265, Linear Algebra I.....	4
MATH 376, Elementary Differential Equations.....	3
Select upper-division engineering courses in an approved engineering discipline in any accredited engineering program.....	26
Total	107-110

Physics Minor (6250)

Required Courses	Credits
PHYS 181, 181LAB, 182, 182LAB, 183, 183LAB, General Physics.....	15
PHYS 317, 318, Modern Physics.....	8
PHYS 333, Modern Physics Laboratory.....	3
MATH 172, 173, Calculus.....	10
Select one of the following:.....	3-6
PHYS 331, Laboratory Practices and Techniques (3)	
EET 312, Basic Electronics (4)	
PHYS 342, Thermodynamics (4)	
CHEM 381, Physical Chemistry (5)	
PHYS 492, Laboratory Experience in Teaching Physics AND SCED 324, Science Education in the Secondary Schools (6)	
Total	39-42

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, or earth science.
- The student passes the WEST-E exam for physics.
- The student successfully completes SCED 324 and PHYS 492. SCED 324 requires admission to the Teacher Education

Program.

Astronomy Minor (1350)

Astronomy minors may not use any courses in this minor as physics major electives.

Required Courses	Credits
PHYS 101, 101LAB and PHYS 102, Introductory Astronomy of the Solar System.....	9
PHYS 111, 111LAB, 112, 112LAB, 113, 113LAB, Introductory Physics OR PHYS 181, 181LAB, 182, 182LAB, 183, 183LAB, General Physics.....	15
PHYS 301, Stellar Astrophysics.....	4
PHYS 317, Modern Physics.....	4
PHYS 492, Laboratory Experience in Teaching Physics OR PHYS 495, Undergraduate Research.....	2
MATH 172, 173, Calculus.....	10
Total	44

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, or earth science.
- The student passes the WEST-E exam for physics.
- The student successfully completes SCED 324 and PHYS 492. SCED 324 requires admission to the Teacher Education Program.

Physics Courses

PHYS 101. Introductory Astronomy of Stars and Galaxies (4). An introduction to the variety of celestial objects and the phenomena associated with them. The course will also emphasize how we know and can continue to learn about the universe. The class along with PHYS 101LAB will meet for six hours per week for lectures, labs, and evening observation sessions. Must be taken concurrently with PHYS 101LAB.

PHYS 101LAB. Astronomy Laboratory (1). Labs and evening observation sessions will meet once a week. Must be taken concurrently with PHYS 101. Formerly PHYS 101.1.

PHYS 102. Introductory Astronomy of the Solar System (4). Must be taken concurrently with PHYS 101LAB. Students taking both PHYS 101 and PHYS 102 are only required to take PHYS 101LAB a single time. An introduction to the sun, planets and other components of the solar system emphasizing what we know and how we know it.

PHYS 103. Physics of Musical Sound (3). Basic physical principles of sound, of how musical instruments produce sound, and how humans hear music. Three lectures and two hours laboratory per week. Must be taken

concurrently with PHYS 103LAB.

PHYS 103LAB. Physics of Musical Sound Laboratory (1). Must be taken concurrently with PHYS 103. Formerly PHYS 103.1.

PHYS 105. Processes in Physical Science - Physics (4). An introductory lecture-laboratory course in concepts of physics applicable to teaching in elementary school (K-6). Four class meetings and two hours laboratory per week. Must be taken concurrently with PHYS 105LAB.

PHYS 105LAB. Processes in Physical Science-Physics Laboratory (1). Must be taken concurrently with PHYS 105. Formerly PHYS 105.1.

PHYS 111, 112, 113. Introductory Physics (4, 4, 4). Courses must be taken in sequence. Prerequisites, high school algebra and trigonometry. A broad coverage of physical topics including mechanics, heat, electricity and magnetism, waves, and light. Four class meetings and two hours laboratory per week. Not open to students with credit in PHYS 181, 183, 183. Must be taken concurrently with PHYS 111LAB, 112LAB 113LAB.

PHYS 111LAB, 112LAB, 113LAB. Introductory Physics Laboratory Must be taken concurrently with PHYS 111, 112, 113. Formerly PHYS 111.1, 112.1, and 113.1.

PHYS 181, 182, 183. General Physics (4,4,4). Pre or corequisites, MATH 172 (for PHYS 181) and MATH 173 (for PHYS 182). Must be taken concurrently with PHYS 181LAB, 182LAB, 183LAB. Introduction to principles of Physics using calculus. Intended primarily for students in science and engineering disciplines. PHYS 181 emphasizes kinematics, dynamics and conservation principles; 182 emphasizes rotational dynamics, macroscopic systems and wave mechanics; 183 emphasizes electromagnetic fields and related phenomena. Formerly PHYS 211, 212, 213. Students may not receive credit for both.

PHYS 181LAB, 182LAB, 183LAB. General Physics Laboratory (1,1,1). Must be taken concurrently with PHYS 181, 182, 183. Introduction to the process of science primarily through experimental investigation. Formerly PHYS 211.1, 212.1, 213.1. Students may not receive credit for both.

PHYS 296. Individual Study (1-6). Prerequisite, permission of instructor.

PHYS 298. Special Topics (1-6).

PHYS 301. Stellar Astrophysics (4). Prerequisites, PHYS 101, 101LAB, PHYS 317, MATH 173. Application of physical principles to understanding processes and phenomena associated with stars.

PHYS 317, 318. Modern Physics (4,4). Prerequisites, PHYS 113 or PHYS 183. PHYS 318 requires PHYS 317, MATH 173. In 317, students will learn about relativity, particle physics, and history of modern physics. In 318, students will learn about quantum

physics and atomic structure. Formerly PHYS 314, 315, 316. Students may not receive credit for both.

PHYS 331. Laboratory Practices and Techniques (3). Prerequisite, PHYS 183. One class meeting and six hours laboratory per week.

PHYS 333, 334. Modern Physics Laboratory (3,3). Prerequisites or corequisites, PHYS 318, PHYS 331 or by permission. One class meeting and six hours laboratory per week.

PHYS 342. Thermodynamics (4). Prerequisite or corequisite, PHYS 318. The laws of thermodynamics and its application to macroscopic systems.

PHYS 351, 352. Analytical Mechanics (3,3). Courses must be taken in sequence. Prerequisites, PHYS 183/183LAB, MATH 273, MATH 376.

PHYS 361. Computational Physics (4). Prerequisite, PHYS 351. Numerical methods of studying physical properties of realistic systems. FORTRAN, IMSL/MATH Library, and MATHEMATICA will be introduced.

PHYS 363. Physical Optics (4). Prerequisites, PHYS 183/183LAB, MATH 273. Three class meetings and two hours laboratory per week.

PHYS 381. Electromagnetic Theory (4). Prerequisites, PHYS 183/183LAB, MATH 273, MATH 265.

PHYS 382. Electromagnetic Theory (4). Prerequisite, PHYS 381.

PHYS 383. Electromagnetic Theory (4). Prerequisite, PHYS 382.

PHYS 396. Individual Study (1-6). Prerequisite, permission of instructor.

PHYS 398. Special Topics (1-6).

PHYS 474, 475. Quantum Mechanics (5,5). Courses must be taken in sequence. Prerequisites, PHYS 318, 352. Methods of quantum mechanics and applications to physical systems. Examples from nuclear, atomic and molecular physics. Formerly PHYS 471, 472, 473. Students may not receive credit for both.

PHYS 481. Topics in Contemporary Physics (1). Prerequisite, permission of instructor. May be repeated for credit.

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. Prior approval required. May be repeated. Grade will be S or U.

PHYS 491. Workshop (1-6). Prerequisite, permission of instructor.

PHYS 492. Laboratory Experience in Teaching Physics (2). Prerequisite, permission of instructor. May be repeated for a total of six credits. Formerly PHYS 393.

PHYS 495. Undergraduate Research (2). Prerequisite, permission of instructor. May be repeated for a total of 12 credits. Formerly PHYS 494.

PHYS 496. Individual Study (1-6). Prerequisite, permission of instructor.

PHYS 498. Special Topics (1-6).

PHYS 499. Seminar (1). May be repeated for credit.

POLITICAL SCIENCE

Faculty

Chair: Jim Brown

Psychology Building 414

Professors

Jim Brown, Political Thought, Middle East Politics, Russian Politics, American Political Culture

Michael A. Launius, Comparative Politics, Asian Politics, International Political Economy, International Politics

Rex Wirth, Public Administration and Public Policy, International Politics, Western Europe

Bang-Soon Yoon, Comparative Politics, Public Policy, Women and Politics, Korean Politics, Political Development

Associate Professor

Todd M. Schaefer, American Politics, Public Opinion, Congress, Campaigns and Elections, African Politics, American Presidency

Assistant Professor

Mathew Manweller, Constitutional Law, American Political Thought, American Political Economy, Direct Democracy

Instructor

Stefanie Wickstrom, Latin America

Emeritus Professor

Robert C. Jacobs, American Law and Politics

General Departmental 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.

Graduates of the Department enter career fields such as federal or state government, other public service vocations, secondary

school teaching, business, public relations, and the like; or they continue on to graduate study in law or political science.

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.

Political Science Core Requirements	Credits
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 20

Bachelor of Arts

Political Science Major

47 credits (6295)

62 credits (6300)

Students may choose either a 47 credit major (6295) or a 62 credit major (6300). Those who have a second major or who have a minor in another discipline may opt for the 47 credit major.

Required Courses	Credits
Political Science Core Requirements.....	20
Select from the following:.....	5
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)	
POSC 489, Senior Assessment.....	2
Electives.....	20 or 35
47 credit major (20)	
62 credit major (35)	
Select from any other courses in this Department. (Any transfer political science electives must be approved by the Department.)	

Total 47 or 62

Political Science Minor (6300)

Required Courses	Credits
Political Science Core Requirements.....	20
Electives.....	10
Select from any other courses in this department. (Any transfer political science electives must be approved by the Department.)	

Total 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 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. Formerly POSC 220. Students may not receive credit for both.

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 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 368. Chinese Politics (5). Institutions, processes, policies and personalities of contemporary China.

POSC 369. Korean Politics (5). Political systems, institutions and processes of contemporary North and South Korea.

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 (3). Political problems of management and development in the global economy and the prospects for creating improved mechanisms at the international level and for the less developed countries.

POSC 398. Special Topics (1-6).

POSC 429. Research Seminar in Public Policy

(3). Prerequisites, POSC 320 and POSC 325. Review of theory and methods, proposal for Policy Analysis, preparation and presentation of policy analysis.

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 once for a maximum of six 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 once for a maximum of six credits.

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 489. Senior Assessment (2). Required course for Political Science majors. Open only to seniors. A "capstone" course designed to assess students' mastery of fundamental knowledge of politics and of writing and analytical skills.

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. Prior approval required. May be repeated. Grade will be S or U.

POSC 496. Individual Study (1-6). Prerequisite, permission of instructor.

POSC 498. Special Topics (1-6).

POSC 499. Seminar (1-5).

Undergraduate Courses/Programs on Reserve

The following courses are on reserve and may be offered subject to program needs. POSC 345 Government, Science and Technology (5); POSC 474 International Law (3).

PRIMATE BEHAVIOR AND ECOLOGY PROGRAM

Contact: Lixing Sun, Science Building 236B

Bachelor of Science Primate Behavior and Ecology Major (6400)

This program is designed to provide majors with interdisciplinary perspectives on the behavior and ecology of non-human primates in both captive and free-ranging settings. It will serve as background for graduate study in the behavior, ecology or phylogeny of primates, as well as for caregiving careers with primate laboratories, zoos or other captive facilities.

A double major is REQUIRED. Students must complete the requirements for the primate behavior and ecology major as well as the requirements for a 45-70 credit major in Anthropology, Biology, or Psychology.

Required Courses	Credits
Introductory Level	
ANTH 110, 110LAB, Introduction to Biological Anthropology.....	6
PSY 101, General Psychology.....	5
BIOL 110, Basic Biology.....	5
BIOL 111, Plant Biology.....	5
BIOL 112, Animal Biology.....	5

Core Requirements	
ANTH 313, Primate Social Behavior.....	4
BIOL 360, General Ecology.....	5
PSY 300, Research Methods in Psychology.....	5
PSY 301, Learning (5) OR BIOL 465, Biology of Animal Behavior (4).....	4-5
PSY 362, Introductory Statistics.....	4
PRIM 220, Introduction to Primate Lab Procedures.....	2
PRIM 320, Lab OR ANTH 485, Method and Theory OR PSY 495, Directed Research OR BIOL 496, Research.....	3
Select two from the following three courses:...	8
ANTH 412, Long Term Primate Studies (4)	
ANTH 416, Pongid Behavior (4)	
ANTH 418, Primate Evolution (4)	
ANTH/BIOL/PSY 499, Seminar OR PSY 442, Evolutionary Psychology.....	2-4
Electives by Advisement.....	6-8

Primate Behavior and Ecology Required Coursework Total.....69-74

Additional credits required to complete a major in Anthropology, Biology or

Psychology.....28-51

Total 97-125

Primate Studies Courses

PRIM 220. Introduction to Primate Laboratory Procedures (2). Laboratory procedures to ensure physical, social and psychological well being of captive non-human primates: sanitation, safety, medical care, diet, USDA requirements, and socio-psychological factors. Requires 1 hour meeting and 4 hours of lab per week plus an organizational meeting and up to 8 hours of weekend lab over the quarter.

PRIM 320. Laboratory Work in Primatology (1-3). Prerequisite PRIM 220 and permission of instructor. Laboratory research and/or practical experience under the supervision of a program professor. May be repeated up to a maximum of 6 credits; may be taken concurrently with and as a supplement to other 300-400 level ANTH/BIOL/PSY/PRIM courses. Graded S or U.

PSYCHOLOGY

Faculty

Chair: Warren R. Street
Psychology Building 421

Professors

Terry L. DeVietti, Physiological Psychology, Experimental
James L. Eubanks, Organization Development, Performance Management and Training, General Experimental
Roger S. Fouts, General Experimental, Language Acquisition, Primate Behavior, Comparative Psychology
Eugene R. Johnson, School Psychology, Psychological and Educational Evaluation, Exceptional Children
Susan D. Lonborg, Counseling Psychology, Psychotherapy Research, Psychology of Women, Substance Abuse, Sports Psychology
Wayne S. Quirk, Sensation and Perception, Neuroscience
Stephen B. Schepman, Organization Development, Work Motivation, Personality Theories
John L. Silva, Emeritus, Clinical, Counseling, Testing
Anthony J. Stahelski, Organization Development, Social Psychology, Small Group Interaction
Stephanie Stein, School Psychology, Behavior Disorders in Children, Lifespan Development, Psychopathology
Elizabeth M. Street, Educational Psychology, Learning Theory, Exceptional Children, Behavioral Analysis
Warren R. Street, Social Psychology, History of Psychology, General Experimental.
Philip Tolin, Sensation and Perception, Human

Factors, Experimental
 Lisa L. Weyandt, School Psychology, Developmental Neuropsychology, Attention Deficit-Hyperactivity Disorder

Associate Professors

W. Owen Dugmore, Counseling, Psychology of Adjustment
 Marte Fallshore, Human Learning and Memory, Development of Expertise, Statistics, Cognition, Humor
 Jeffrey M. Penick, Counseling Psychology, Health Psychology, Adult Development
 Terrence J. Schwartz, Educational Psychology, Counseling Psychology, Statistical Analysis
 Wendy A. Williams, General Experimental, Operant Conditioning and Animal Behavior

Assistant Professors

Neal A. Bowen, Multicultural Counseling, Treatment of Trauma, Migration Issues
 J. Phillip Diaz, School Psychology, Educational Psychology, Pediatric Neuropsychology
 Andrew M. Downs, Counseling Psychology, Disorders of Childhood.
 Megan D. Matheson, General Experimental, Primate Behavior, Comparative Psychology

Lecturers:

Karen R. Hendricks, Forensic Psychology, Domestic Violence, Child Abuse and Neglect, Neuropsychology
 Mark Soelling, Clinical, Educational, Developmental Psychology
 Robert Sorrells, Cognitive Experimental Psychology, Psycholinguistics

General Departmental Information

The Department of Psychology 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. Psychology courses also provide students in other majors knowledge and skills that are instrumental to effective action in their chosen area. 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. More information about our department is available on our Web site, www.cwu.edu/~psych.

Admission Requirements

Students wishing to apply for admission to the Psychology major or minor are required to register with and be advised by a member of the department faculty. Contact the department office for current admission requirements. The Department reserves the right to change requirements as circumstances warrant. Application forms may be obtained

from the department office.

Students who have not met the admission criteria may be admitted conditionally. However, only students who are fully admitted to the major or minor are eligible to enroll in PSY 301, PSY461, or PSY 490.

Departmental Honors

The eligibility requirements for admission to the psychology department 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.

Requirements for PSY 490, Cooperative Education

PSY 490 is a contracted field experience with a business, industry, government, or social service agency. In addition to the university requirements for a contracted field experience, the Department of Psychology has additional requirements that must be met if permission is to be granted to enroll in PSY 490. These requirements are as follows:

1. Senior standing
2. Full admission to a 60-credit Psychology major
3. A cumulative GPA of 3.0 or higher or three letters of recommendation from Psychology faculty.

Bachelor of Arts Psychology Major

45 credits (6485)

60 credits (6490)

The Psychology major is intended for students who wish a liberal arts background in behavioral science or who intend to pursue graduate study in psychology. A faculty advisor can recommend electives appropriate to the student's objectives.

Students may choose either a 45 credit major (6485) or a 60 credit major (6490). Those who have a second major or who have a minor in a

related discipline may opt for the 45 credit major.

Required Courses	Credits
PSY 101, General Psychology.....	5
PSY 300, Research Methods in Psychology.....	5
PSY 301, Learning.....	5
PSY 362, Introductory Statistics.....	4
PSY 363, Intermediate Statistics.....	4
PSY 461, History and Systems of Psychology.....	5
Select one or more courses from each of the following clusters:	
Cluster I.....	4
PSY 346, Social Psychology (4)	
PSY 444, Tests and Measurements (4)	
PSY 456, Industrial and Organizational Psychology (4)	
Cluster II.....	3-4
PSY 313, Developmental Psychology (4)	
PSY 447, Psychology of Adolescence (3)	
PSY 452, Adult Development and Aging (4)	
Cluster III.....	4-5
PSY 450, Sensation and Perception (4)	
PSY 460, Cognitive Psychology (5)	
PSY 473, Psychology of Thought and Language (4)	
PSY 478, Physiological Psychology (4)	
Cluster IV.....	4-5
PSY 445, Clinical, Counseling and Community Psychology (5)	
PSY 449, Abnormal Psychology (4)	
PSY 453, Theories of Personality (5)	
*Electives.....	0-17
45 credit major (0-2)	
60 credit major (14-17)	
*May include a maximum of five lower division credits	
Total	45-60

Psychology Minor (6500)

Required Courses	Credits
PSY 101, General Psychology.....	5
*PSY 300, Research Methods in Psychology....	5
PSY 303, Analysis of Everyday Behavior.....	4
PSY 346, Social Psychology	4
Upper division Psychology electives	11
Total	29

*Students who have taken the research methods course required for their major in Law and Justice, Sociology, or Social Service may substitute another upper-division course for PSY 300.

Psychology Courses

PSY 101. General Psychology (5). An introduction to the science of behavior.
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. By permission of instructor only.

PSY 295. Laboratory Experience in Psychology (1-5). Permission of Department Chair required. PSY 101 recommended. May be repeated. Not more than 5 credit hours may be applied to a psychology major. Grade will be S or U.

PSY 298. Special Topics (1-6).

PSY 299. Seminar in Psychology (3).

PSY 300. Research Methods in Psychology (5). Prerequisites, PSY 101 and MATH 130. It is recommended that PSY 362 be taken concurrently. Four hours lecture plus 2 hours laboratory each week.

PSY 301. Learning (5). Prerequisites, PSY 300, 362 and admission to the Psychology major or minor. It is recommended that PSY 363 be taken concurrently. Conditioning, memory and cognitive processes. Four hours lecture per week plus 20 hours of laboratory.

PSY 303. Analysis of Everyday Behavior (4). Prerequisite, PSY 101. Environmental, cognitive, and biological influences on behavior in daily life.

PSY 304. Effective Thinking (4). The nature, function, and limits of intelligence; interactions with emotions and values; analyzing and constructing arguments; problem solving techniques; conflict management; group processes and leadership.

PSY 313. Developmental Psychology (4). Prerequisite, PSY 101. Students may not receive credit for both PSY 313 and PSY 314.

PSY 314. Human Development and the Learner (4). Development through the life cycle. Prerequisite, admission to teacher education program or on a space available basis with permission of the Chair, and PSY 101. Student may not receive credit for both PSY 314 and PSY 313.

PSY 315. Educational Psychology (4). Prerequisites, PSY 313 or PSY 314, and either admission to the teacher education program or on a space available basis with permission of the Chair. Learning theories, instructional principles, evaluation processes, classroom management.

PSY 340. Teaching of Psychology (3). Prerequisites, completion of course in which teaching or assisting is to be done and approval of Department Chair. May be taken twice for credit. Grade will be S or U.

PSY 346. Social Psychology (4). Recommended

prerequisite, PSY 101. Social influences on individual behavior.

PSY 350. Sleep and Dreaming (3). Prerequisite, PSY 101 with PSY 300 recommended. Research and theory concerning the functions and dysfunctions of sleep and dreaming. Theories of dream interpretation and control.

PSY 355. Environmental Psychology (4). Behavioral responses to everyday natural and artificial environments.

PSY 362. Introductory Statistics (4). Prerequisite, MATH 130 or equivalent course in mathematics. Descriptive statistics and introduction to inferential statistics.

PSY 363. Intermediate Statistics (4). Prerequisite, PSY 362. Analysis of variance and selected non-parametric techniques.

PSY 396. Individual Study (1-6). Prerequisite, permission of the instructor. May not be repeated, except by honor students.

PSY 398. Special Topics (1-6).

PSY 401. Psychology of Sport (4). Prerequisite PSY 101. Current theory and research on sports psychology; application of psychological interventions in sports and fitness.

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 442. Evolutionary Psychology (4). Application of principles of evolution to understanding of human and nonhuman behavior and cognition. PSY 442 and PSY 542 are equivalent courses. Students may not receive credit for both.

PSY 444. Tests and Measurements (4). Prerequisite, PSY 315 or 362. Psychological and educational tests, theory and practice. PSY 444 and PSY 544 are equivalent courses. Students may not receive credit for both.

PSY 445. Clinical, Counseling and Community Psychology (5). Prerequisite, PSY 101 with PSY 449 recommended. History, current trends, fields of employment, professional ethics, methods of psychological diagnosis and treatment.

PSY 447. Psychology of Adolescence (3). Prerequisite, PSY 101. Physiological, cognitive, and social aspects of maturation; problems of vocational choice and of increasing autonomy.

PSY 448. Sexual Behavior (4). Prerequisite, PSY 101. The scientific study of the learned and innate bases of sexual behavior in humans and lower animals.

PSY 449. Abnormal Psychology (4). Prerequisite, PSY 101. Symptoms, etiology and treatment of psychopathology and behavior problems.

PSY 450. Sensation and Perception (4). Prerequisites, PSY 300 with BIOL 201 recommended. Research, theoretical models

of sensory and perceptual processes.

PSY 452. Adult Development and Aging (4). Prerequisite, PSY 313 or 314 recommended. 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). Prerequisite, PSY 101.

PSY 454. The Helping Interview (3). Theory and practice of supportive interviewing skills.

PSY 455. Behavioral Medicine and Health Psychology (4). Prerequisite, PSY 101; and PSY 300 recommended. 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).

PSY 456. Industrial and Organizational Psychology (4). Prerequisite, PSY 101 or permission of instructor. Application of psychological principles to personnel and organizational problems in labor, industry, government, education, and the military.

PSY 460. Cognitive Psychology (5). Prerequisite, PSY 300. Methods and theories of human cognition and information processing.

PSY 461. History and Systems of Psychology (5). Prerequisites, PSY 301 and admission to the Psychology major or minor.

PSY 465. Psychology and the Law (3). How the discipline of psychology contributes to our understanding of matters related to the law.

PSY 467. Child Psychopathology (3). Prerequisite, PSY 313 or 314 or permission of instructor. 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.

PSY 473. Psychology of Thought and Language (4). Prerequisite, PSY 101. Symbolic processes, concept formation, problem solving, language development. Formerly PSY 373. Students may not receive credit for both.

PSY 476. Drugs (4). Common drugs, psychotherapeutic agents and hallucinogens. Behavioral effects and physiological mechanisms.

PSY 478. Physiological Psychology (4). Prerequisite, BIOL 201 or permission of instructor. Problems, methods and techniques of neurophysiology and the physiology of human and infrahuman behavior patterns. PSY 478 and PSY 588 are equivalent courses. Students may not receive credit for both.

PSY 483. Psychology of Women (3). Prerequisite, PSY 101 or permission of

instructor. The psychology of women from a social psychological perspective, which examines gender and situation and male-female interaction.

PSY 484. Violence and Aggression (3). Prerequisite, PSY 101 with PSY 346 recommended. Violence and aggression directed toward self, others, and society. Problems of prevention and treatment, related ethical and legal issues.

PSY 487. Group Processes and Leadership (3). Human relations in group situations. Grade will be S or U. PSY 487 and EDCS 487 are equivalent courses. Students may not receive credit for both.

PSY 490. Cooperative Education (1-12). Prerequisite, contact the Department office. 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. Prior approval required. May be repeated. Grade will be S or U.

PSY 491. Workshop (1-6).

PSY 495. Directed Research (1-5). Prerequisite, permission of instructor. May be repeated. Not more than four hours of PSY 295 and PSY 495 combined may be applied to a 45-credit Psychology major, and not more than 10 hours combined, to a 60-credit major. Grade will be S or U.

PSY 496. Individual Study (1-6). Prerequisite, permission of instructor. May be repeated by honors students only.

PSY 497. Undergraduate Honors Thesis (2-6). Prerequisite, admission to the Departmental Honors Program. May be repeated up to a total of six credits. By invitation of Department Chair. Research supervised by three-member committee of the Department of Psychology.

PSY 498. Special Topic (1-5). Prerequisite, permission of instructor. Student- and faculty-initiated courses. Topics published in quarterly class schedule. May be repeated.

PSY 499. Seminar (1-5). May be repeated.

Undergraduate Courses/Programs on Reserve

The following courses are on reserve and may be offered subject to program needs: PSY 302, Principles of Applied Psychology (4); PSY 425, Advanced Chemical Dependency Counseling (3); PSY 437, Diagnosis and Assessment of Chemical Dependency (3); PSY 446, Experimental Personality and Social Psychology (4); PSY 457, Psychology of Exceptional Children (3); PSY 462, Computer Methods for Social Science (4); PSY 464, Emotional Growth of Children (3); PSY 488, Group Dynamics and the Individual (3).

PUBLIC POLICY

Coordinator: Rex Wirth
Psychology Building 481

Public Policy Major

The Public Policy program is interdisciplinary. It consists of a major in one of the participating disciplines and an interdisciplinary Public Policy major built around a core sequence drawn from Economics, Geography and Political Science. The purpose of the program is to better prepare majors from the three departments to enter the public sector work force or to pursue advanced specialized study.

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) or 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.

**Bachelor of Science
Public Policy Major (6600)**

The Public Policy program is interdisciplinary. It consists of a disciplinary major and an interdisciplinary Public Policy major built around a core sequence drawn from Economics, Geography and Political Science. The purpose of the program is to better prepare students majoring in one of the participating disciplines to enter the public sector work force or pursue advanced specialized study.

Public Policy is not a free standing major.

Public Policy Core	Credits
ECON 201, Principles of Economics Micro.....	5
ECON 202, Principles of Economics Macro.....	5
ECON 332, Public Finance.....	5
GEOG 303, Introductory Cartography and 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	

Sub Total 35

Research Tool Elective.....	4-5
OMIS 221, Introductory Business Statistics (5)	
PSY 362, Introductory Statistics (4)	

MATH 311, Statistical Concepts and Methods (5)
SOC 364, Data Analysis in Sociology (5)

Department Approved Electives in
Economics, Geography, or Political
Science.....12-15

Total 51-55

**RELIGIOUS STUDIES
See Philosophy**

SCIENCE EDUCATION

Faculty

Program Director: Martha J. Kurtz
SCI 302F

Associate Professors

Martha J. Kurtz, Chemistry and Science
Education

Bruce Palmquist, Physics and Science
Education

Assistant Professor

Ian J. Quitadamo, Biological Sciences and
Science Education.

General Departmental Information

The primary function of the Science Education Program 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 Program 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 Program has the following goals. An effective science teacher:

- Exhibits a breadth and depth of understanding of natural sciences necessary for their grade level endorsement as summarized in the Washington State Academic Learning Requirements for Science
- Demonstrates critical thinking skills by:
 - a. developing age-appropriate lessons using auditory, visual and kinesthetic components
 - b. developing age-appropriate lessons which relate science and technology to the everyday lives of students based on students' needs, interests and abilities
 - c. selecting appropriate modeling, discussion and laboratory exercises to

help students learn science
d. problem solving in science

- Demonstrates competence in the appropriate uses of educational technology which support science learning
- Analyzes and evaluates her or his own teaching behavior and effectiveness and implements change based on these observations
- Fosters a positive attitude toward teaching and learning science, toward continual professional development in the sciences, and can compare and contrast science with other ways of knowing.

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 must obtain a teaching major in one or more of the following areas: Biology, Chemistry, Earth Sciences 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.

Science Education - Broad Area Science Teaching Minor (7145)

This minor prepares students with majors in Biology Teaching (1602), Chemistry Teaching (1851), Earth Science Teaching (2600) or Physics Teaching (6250) to teach middle school or junior high science and leads to a Broad Area Science Endorsement (WAC 180-82-355). 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 shown below. Completion of this minor and a Biology, Chemistry, Earth Science or Physics teaching major leads to a Broad Area Science Endorsement. If you are interested in this minor, please see a science education advisor as soon as possible. This program may result in students taking more than four years to complete their degree (depending on advising, high school preparation and degree choice).

Required Courses **Credits**
(Complete all three areas not covered in major program)

Biology	
BIOL 110, General Biology.....	5
BIOL 111, Plant Biology.....	5
BIOL 112, Animal Biology.....	5
Subtotal	15

Chemistry	
CHEM 181, 181LAB, General Chemistry.....	5
CHEM 182, 182LAB, General Chemistry.....	5

CHEM 183, 183LAB, General Chemistry.....	5
Subtotal	15

Earth Science

Earth Science	
GEOL 101, Physical Geology OR	
GEOL102, Geology of National Parks.....	4
GEOL 101LAB, Physical Geology Lab.....	1
GEOL 350, Northwest Geology.....	4
GEOL210, Introduction to Geologic Field Methods (4) OR	
PHYS 101, 101LAB, Astronomy (5).....	4-5
Subtotal	12-13

Physics

Physics	
PHYS 111, 112, 113, Introductory Physics OR	
PHYS 181, 181LAB, 182, 182LAB, 183, 183LAB, General Physics.....	15
Subtotal	15
Total	42-45

Science Education - Elementary Education Minor (7150)

Admission to this minor is limited to students majoring in elementary education (2870), early childhood education (2550), or special education (7810 or 7820). This minor does not lead to endorsement as a specialized science teacher.

There are three main goals for this minor. Students who complete this minor will:

1. develop a deeper understanding of the earth, life and physical sciences,
2. build an appreciation for the variety of methods in different fields of science, and
3. acquire skills and knowledge leading to quality teaching of a variety of science subjects.

Required Courses **Credits**

Three lower division science course with labs (select a course from three of the following five areas: biology, chemistry, physics, earth science, and astronomy).....		13-15
SCED 322, Science Education in Elementary School		3
SCED 420, Inquiry Activities for Elementary School Science.....		3
SCED 422, Advanced Teaching Strategies in Elementary Science		3
SCED 301, Interdisciplinary Science Inquiry.....		5
Total		27-29

Middle Level Math/Science Teaching Minor (7160)

This minor is designed for students who wish to teach science and/or math at the middle level (grades 5-8). Completion of this minor results in a Middle Level Math/Science endorsement. The coursework provides experiences in math and science content and pedagogy including field experience. Students will learn about math, science, and the

psychology of adolescents in addition to the more generalized coursework in their major. This minor is open only to students working on or currently holding teaching endorsements in Elementary Education, Biology, Chemistry, Earth Science, Mathematics, or Physics. Students interested in this minor should see an advisor as soon as possible to discuss overlapping requirements with the General Education Program (potentially 25 credits of this minor could satisfy General Education requirements).

Required Courses **Credits**
(Complete all three areas not covered in major program)

Science

Three introductory science courses with lab (1 life science, 1 earth science/ astronomy, and 1 physical science required.).....		15
SCED 301, Interdisciplinary Science Inquiry...5		

Math

MATH 130, Finite Mathematics I.....	5
MATH 164, Foundations of Arithmetic I.....	5
MATH 250, Intuitive Geometry for Elementary Teachers.....	4
EDEL 468, Problem-solving Techniques for Middle Level.....	3

Other

SCED 323/MATH 323, Teaching Experience in Math and Science.....	3
EDEL 477, Middle School Students and Their Environment.....	4
EDCS 482, Instruction and Assessment for the Middle Level.....	3

In Addition:

Elementary Education Majors must take:.....		3
EDCS 424, Reading in the Content Fields (3)		
Secondary Science Majors must take:		
EDEL 323, Teaching Elementary School Mathematics (323)		
Secondary Math Majors must take:		
SCED 322, Science in the Elementary Schools (3)		

Total 50

Science Education Courses

SCED 301. Interdisciplinary Science Inquiry (5). Prerequisites, three lower division science courses with labs (select a course from three of the following five areas: biology, chemistry, physics, earth science and astronomy. Students will use concepts from biology, chemistry, earth science and physics to actively investigate the world and learn specific science processes. Six lecture/lab hours per week.

***SCED 322. Science Education in the Elementary School (3).** Techniques, selection of materials and appropriate subject matter for the various grade levels. Demonstrations and student investigative activities for use in classroom science teaching.

***SCED 323. Teaching Middle School Mathematics and Science** (3). Prerequisites: MATH 324 or EDEL 323 and SCED 324 or SCED 322. 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.

***SCED 324. Science Education in the Secondary Schools** (4). Prerequisite, EDCS 311. Should be taken before student teaching. Techniques and materials appropriate for teaching science at the secondary level. Demonstration and experiments for use in teaching.

SCED 398. Special Topics (1-6).

SCED 420. Inquiry Activities for Elementary School Science (3). Prerequisite, SCED 322. An inquiry-based course which approaches science teaching from the standpoint of the processes of science and their utilization.

SCED 422. Advanced Teaching Strategies in Elementary Science (3). Prerequisite, SCED 322 or permission of instructor. This course is designed to give students experience and training in the preparation of unique materials and teaching strategies in the area of science, as well as perfect techniques already possessed by the teacher.

SCED 442. Development of Special Materials (2). Prerequisite, permission of instructor.

SCED 491. Workshop (1-6).

SCED 495. Science Education Research (1-3). Prerequisite, SCED 324 or concurrent enrollment. 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.

SCED 496. Individual Study (1-6). Prerequisite, permission of instructor.

SCED 498. Special Topics (1-6).

*Enrollment is subject to being fully admitted to the Teacher Education Program.

Undergraduate Courses/Programs on Reserve

The following program is on reserve and may be offered subject to program needs: B.S. Science-Mathematics Education Major.

SOCIAL SCIENCE

Program Coordinator: Karen Blair
L&L 100

General Program Information

Social Science programs are designed to provide students with a study of human society which is interdisciplinary in nature. Major areas of study are carefully constructed from the disciplines of anthropology, economics, geography, history, political science, psychology, and sociology. Professional methodology courses in the teaching of the social sciences are offered for those students preparing to teach.

Social Science credits obtained in international programs may be used in major programs either as elective credits or as substitutions for required courses. In either case, however, consent for such application must be obtained in writing from both the academic department concerned and the Social Science program coordinator or designee prior to the experience being obtained.

The program coordinator will assist students with individual problems. Students are encouraged to seek advice from the coordinator when designing programs of study. Any deviation from program requirements as listed in the catalog requires approval of the program coordinator and the Dean of the College of Arts and Humanities.

Internship and contracted field experiences are available through various Social Science Departments. For further information, see the appropriate Social Science Chair.

**Bachelor of Arts
Social Science Major (7400)**

Students graduating from this program must attain a 2.5 GPA in the major and complete an exit survey upon graduation.

Required Courses	Credits
ANTH 130, Cultural Anthropology.....	5
PSY 101, General Psychology.....	5
SOC 107, Principles of Sociology.....	5
ECON 202, Principles of Economics Macro.....	5
GEOG 308, Cultural Geography.....	5
HIST 302, Introduction to History.....	3
POSC 210, American Politics.....	5
Electives.....	27
Select upper division courses from only one of the following disciplines: Anthropology, Economics, Geography, History, Political Science, Psychology, Sociology	

Total 60

**Social Science: Teaching
Secondary Major (7403)**

This major satisfies the endorsement for

Social Studies.

Designed for social studies teaching at the junior high, middle school, and high school levels. Transfer students must take at least 10 credit hours of work in approved social science courses at CWU prior to application for endorsement for student teaching. Students taking this major are required to complete the professional education program requirements offered through the Curriculum and Supervision Department.

Required Courses Credits

ANTH 107, General Anthropology OR	
ANTH 120, Introduction to Archaeology..	5
ECON 101, Economic Issues, OR	
ECON 102, World Economic Issues OR	
ECON 201, Principles of Economics	
Micro, OR	
ECON 202, Principles of Economics	
Macro.....	5
GEOG 108, Introduction to Human	
Geography OR	
GEOG 304, Economic Geography OR	
GEOG 308, Cultural Geography.....	5
GEOG 215, Concepts of GIS.....	3
GEOG 352, Geography of	
North America, OR	
GEOG 366, Geography of the	
Middle East OR	
GEOG 355, Geography of the Pacific	
Northwest	
GEOG 371, Geography of Europe, OR	
GEOG 415, Geography of Oceania, OR	
GEOG 450, Geography of Arid Lands, OR	
GEOG 451, Mountain Environments, OR	
GEOG 470, Geography of South	
America OR	
GEOG 471, Geography of Middle	
America OR	
GEOG 474, Geography of China OR	
GEOG 475, Geography of Asia.....	3-5
*HIST 101, 102, 103 (Select 2 courses), World	
Civilization.....	10
HIST 143, 144, United States History.....	10
HIST 301, Pacific Northwest History.....	3
HIST 338, Conquest and Compromise:	
Indians and Europeans in	
North America OR	
HIST 342, History of Black America	
to 1865 OR	
HIST 343, History of Black America	
since 1865 OR	
HIST 346, Women in American	
History OR	
HIST 354, American Environmental	
History OR	
HIST/ECON 348, Economic History of	
the United States OR	
ECON/HIST 388, Economic History of	
Europe Since 1760 OR	
ECON 346, Comparative Economic	
Systems.....	5
HIST/SOSC 421, Methods and Materials	
in the Social Sciences, Secondary	3
POSC 210, American Politics.....	5
SOC 107, Principles of Sociology.....	5

Electives in Upper Division courses in only one of the above areas.....15
 Students shall complete an exit survey tailored to the program as a final assessment of their performance in the program.

Total 77-79

*Western Civilization may be substituted.

Social Science Courses

SOSC 298. **Special Topics** (1-6).

SOSC 399. **Seminar** (1-5).

SOSC 421. **Methods and Materials in the Social Studies- Secondary** (3). Prior completion of EDCS 311 recommended. SOSC 421 and HIST 421 are equivalent courses. Students may not receive credit for both.

SOSC 491. **Workshop** (1-6).

SOSC 496. **Individual Study** (1-6).

SOSC 498. **Special Topics** (1-6).

SOSC 499. **Seminar** (1-5).

SOCIOLOGY

Faculty

Chair: Kirk Johnson
 Farrell Hall 409

Professors

Laura L. Appleton, Sex Roles, Social Movements, Social Theory
 John R. Dugan, Statistics, Methodology, Social Psychology
 Kirk A. Johnson, Criminology, Delinquency, Victimization, Organizations, Methods

Associate Professors

Delores Cleary, Criminology, The Life-Course, American Society, Minorities, Ethnic Studies
 Nelson Pichardo, Ethnic Studies, Social Movements
 Nancy Wessel, Link Project, Family, Child Abuse, Social Change

Assistant Professor

Hong Xiao, Social Stratification, Comparative Sociology, China Studies

General Departmental Information

Through its curriculum, the Department of Sociology provides opportunities for students to understand the major conceptual and methodological tools used by sociologists and others to understand society. Students will be encouraged to: 1) see society as a concrete, day-to-day behavior of human beings; 2) grasp the relationship between history, society and the individual's own life; 3) realize that social patterns are tools for the accomplishment of

human ends and are not necessarily unalterable facts of life; and 4) develop the ability to observe critically and analyze social phenomena.

In providing these intellectual skills, the Sociology major is relevant to a wide variety of academic and occupational pursuits and is concerned with developing skills of analytic thought and practice in areas including the social services profession, labor and business organization, personnel work, government program administration and graduate study.

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 is available in the Department office. Students must complete an end of major assessment prior to graduation.

Honors in Sociology

1. The Sociology Department's honors program is designed for students who wish to explore a particular research problem in depth.
2. The program is open to Sociology majors who have completed 20 credit hours in sociology and have achieved a junior standing.
3. The student: (a) selects an honors advisor and designs a research project in consultation with him/her; (b) writes a letter of application to the Chair of the Department; and, (c) if accepted, completes a research paper that is approved and supervised by his/her honors advisor and a second member of the department.
4. Credit for this paper may be obtained through Sociology 497.

**Bachelor of Arts
 Sociology Major (7595)**

Required Courses	Credits
SOC 107, Principles of Sociology.....	5
SOC 350, Social Theory.....	5
SOC 363, Methods of Social Research	5

Select one course from each of the following categories:.....14-20

Deviance and Social Control

- SOC 343, Child Abuse (4)
- SOC 344, Juvenile Delinquency (4)
- SOC 345, Deviance (5)
- SOC 346, Criminology (5)
- SOC 348, Wpmen and Crime (4)
- SOC 352, Punishment and Corrections (5)

Social Differentiation and Inequality

- SOC 325, Aging (4)
- SOC/ETS 354, Minority Experience (5)
- SOC 365, Minority Groups (5)
- SOC 386, Seminar in Racism (5)

- SOC 388, Women in Management (3)
- SOC 442, Social Welfare Policy (4)
- 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 (4)
- SOC 349, Law and Society (4)
- SOC 351, Sociology of Work (5)
- SOC 357, Sociology of Families (4)
- SOC 367, Sociology of Religion (5)
- SOC 373, Social Groups (5)
- SOC 459, Organizations (5)

Social Change and Global Issues

- SOC 302, International Links (4)
- SOC 326, Demography of Contemporary World Populations (4)
- SOC 362, Social Movements (5)
- SOC 370, Social Change (5)
- SOC 375, Sociology of Conflict (5)
- SOC 380, Social Ecology (5)
- SOC 382, Sociology of the Future (5)
- SOC 385, Comparative Sociology (5)

Sociology Total 30-35

*Approved Electives in Sociology10-15

Total 45

*A maximum of 5 credits of elective lower-division coursework may be counted toward the major. PSY 363, Intermediate Statistics, is an approved elective.

Bachelor of Arts

Sociology Major (7600)

Required Courses	Credits
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

Select one course from each of the following sub-fields:

Deviance and Social Control

- SOC 343, Child Abuse (4)
- SOC 344, Juvenile Delinquency (4)
- SOC 345, Deviance (5)
- SOC 346, Criminology (5)
- SOC 348, Women and Crime (4)
- SOC 352, Punishment and Corrections (5)

Social Differentiation and Inequality

- SOC 325, Aging (4)
- SOC/ETS 354, Minority Experience (5)
- SOC 356, Sex Roles in Society (5)
- SOC 388, Women in Management (3)
- SOC 365, Minority Groups (5)
- SOC 386, Seminar in Racism (5)
- SOC 442, Social Welfare Policy (4)
- SOC 445, Social Inequality (5)

Social Structure and Institutions

- SOC 307, Individual and Society (5)
- SOC 320, Death and Dying (5)
- SOC 327, Dociology of Health (4)
- SOC 349, Law and Society (4)
- SOC 351, Sociology of Work (5)

SOC 357, Sociology of Families (4)
SOC 367, Sociology of Religion (5)
SOC 373, Social Groups (5)
SOC 459, Organizations (5)
Social Change and Global Issues
SOC 302, International Links (4)
SOC 326, Demography of Contemporary World Populations (4)
SOC 362, Social Movements (5)
SOC 370, Social Change (5)
SOC 375, Sociology of Conflict (5)
SOC 380, Social Ecology (5)
SOC 382, Sociology of the Future (5)
SOC 385, Comparative Sociology (5)

Sociology Core Total 35-40

*Approved Electives in Sociology.....20-25

Total 60

*A maximum of 5 credits of elective lower-division coursework may be counted toward the major. PSY 363, Intermediate Statistics, is an approved elective.

Bachelor of Science

Sociology Major (7600)

This major is suggested for students preparing for graduate study.

Required Courses	Credits
SOC 107, Principles of Sociology.....5	
SOC 350, Social Theory I.....5	
SOC 363, Methods of Social Research5	
SOC 364, Data Analysis in Sociology, or equivalent.....5	
SOC 450, Social Theory II.....5	
SOC 464, Applied Data Analysis.....4	
SOC 495, Sociological Research5	
Subtotal 34	

Select one course from each of the following categories:

Deviance and Social Control

SOC 343, Child Abuse (4)
SOC 344, Juvenile Delinquency (4)
SOC 345, Deviance (5)
SOC 346, Criminology (5)
SOC 348, Women and Crime (4)
SOC 352, Punishment and Corrections (5)

Social Differentiation and Inequality

SOC 325, Aging (4)
SOC / ETS 354, Minority Experience (5)
SOC 356, Sex Roles in Society (5)
SOC 365, Minority Groups (5)
SOC 386, Seminar in Racism (5)
SOC 388, Women in Management (3)
SOC 442, Social Welfare Policy (4)
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 (4)
SOC 349, Law and Society (4)
SOC 351, Sociology of Work (5)
SOC 357, Sociology of Families (4)
SOC 367, Sociology of Religion (5)

SOC 373, Social Groups (5)
SOC 459, Organizations (5)
Social Change and Global Issues
SOC 302, International Links (4)
SOC 326, Demography of Contemporary World Populations (4)
SOC 362, Social Movements (5)
SOC 370, Social Change (5)
SOC 375, Sociology of Conflict (5)
SOC 380, Social Ecology (5)
SOC 382, Sociology of the Future (5)
SOC 385, Comparative Sociology (5)

Subtotals 49-54

*Approved Electives in Sociology21-26

Total 75

*A maximum of 5 credits of elective lower-division coursework may be counted toward the major. PSY 363, Intermediate Statistics, is an approved elective.

Social Services Major (7420)

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 course work 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 studies, community health and the like.

Required Courses Credits

Practice Area	Credits
SOC 301, Introduction and History of Social Service Agencies.....4	
SOC 310, Social Service Methods and Casework3	
PSY 454, The Helping Interview3	
***SOC 490, Cooperative Education4	
Analytic Area	
**SOC 350, Social Theory I.....5	
SOC 363, Methods of Social Research5	
SOC 364, Data Analysis in Sociology.....5	
SOC 487, Senior Capstone Seminar4	
Macro Considerations in Social Services	
SOC 411, Comparative Social Service System 4	
SOC 442, Social Welfare Policy.....4	
Social Organization Area	
Choose one course.....4	
SOC 415, Urban Society (4)	
SOC 460, Community Structure and Organization (4)	
Contemporary Society Area	
Choose one course.....5	
SOC 365, Minority Groups (5)	

SOC 356, Sex Roles in Society (5)
SOC 386, Seminar on Racism (5)
**SOC 445, Social Inequality (5)

*Approved Electives in Sociology.....12

Total 62

*A maximum of 5 credits of elective lower-division coursework may be counted toward the major. PSY 363, Intermediate Statistics, is an approved elective.

**SOC 107 is prerequisite for SOC 350 and 445.

***Additional credits in SOC 490 may count toward graduation.

Sociology Minor (7600)

Required Courses	Credits
SOC 107, Principles of Sociology.....5	
*Approved Electives in Sociology.....20	

Total 25

*SOC 490, Cooperative Education, and SOC 496, Individual Study, does not count toward the minor. A maximum of 5 credits of elective lower-division coursework may be counted toward the minor.

Social Services Minor (7420)

Required Courses	Credits
SOC 301, Introduction to the Social Services...4	
SOC 310, Social Service Methods and Casework.....3	
SOC 442, Social Welfare Policy OR SOC 460, Community Structure and Organization.....4	
PSY 454, The Helping Interview.....3	
*Electives in Sociology16	

Total 30

*SOC 490, Cooperative Education, and SOC 496, Individual Study, does not count toward the minor. A maximum of 5 credits of elective lower-division coursework may be counted toward the 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 and 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 205. 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.

SOC 265. Computer Applications in the Social Sciences (3). Computer skills for effective social science research and report

- writing; internet searches, home pages, graphical and textual transfers, spreadsheets from imported data and CD-ROM use. Two hours of lecture and two hours of lab.
- SOC 271. Sociological Analysis** (3). The logic of sociological investigation and explanation.
- SOC 291. Workshop** (1-6).
- SOC 296. Individual Study** (1-6). Prerequisite, permission of instructor.
- SOC 299. Seminar** (1-5). Prerequisite, permission of instructor.
- SOC 301. Introduction and History of Social Service Agencies** (4). Introduction to the fields of social welfare, health services and corrections; organization and function of agencies. Formerly SOC 201, student may not receive credit for both.
- SOC 302. International Links** (4). Prerequisite, participation in the Link program. An orientation course for students participating in the Link program who will be going to Mexico.
- SOC 303. Sociology of Disaster** (5). The ways in which human communities bring about, prepare for, and respond to calamitous environmental change.
- SOC 307. Individual and Society** (5). An analysis of the relationship between social structure and the individual.
- SOC 310. Social Service Methods and Casework** (3). Prerequisite, SOC 301 or permission of instructor. Casework interviewing techniques and skills, traditional and contemporary methods, emphasis upon developing a personal casework style.
- 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** (4). 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** (4). Demographic analysis, fertility and the birth control movement, mortality and life expectancy, and migration. Involves use of computers.
- SOC 327. Sociology of Health** (4). The social causes of disease and illness behavior, organization of medical care and comparative health systems.
- SOC 330. Sociology of Leisure** (5). The emergence of leisure as a major social institution and its impact on society, culture and personality.
- SOC 331. Sociology of Sport** (3). 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** (3). 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** (4). 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** (4). Prerequisite, SOC 107. 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). Prerequisite, SOC 346. This course will critically assess the current theoretical and empirical literature on female criminality and social control.
- SOC 349. Law and Society** (4). Prerequisite, SOC 107. Origin, maintenance and change of legal structures and processes in society with particular emphasis on legal institutions in American society.
- SOC 350. Social Theory I** (5). Prerequisite, SOC 107 or permission of instructor. An introduction to social theory through study of early social thinkers, emphasizing the works of Durkheim, Marx, and Weber.
- 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. Formerly ETS 355.
- SOC 356. Sex Roles in Society** (5). A review and analysis of the development, maintenance, and consequences of masculine and feminine social roles.
- SOC 357. Sociology of Families** (4). Theory and research about familial interaction and society.
- SOC 362. Social Movements** (5). Causes, organizational problems, and consequences of revolutions, and political, religious and social movements.
- SOC 363. Methods of Social Research** (5). Principles and applications of social research methods. Formerly SOC 465. Students may not receive credit for both.
- SOC 364. Data Analysis in Sociology** (5). Prerequisite, SOC 363.
- SOC 365. Minority Groups** (5). Prerequisite, SOC 107 or ETS 101 or permission. Study of the social formation of minority groups in American society, their historical development, current conditions, and issues.
- 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** (3). Relationship of the mass media to social institutions; including philosophy, responsibilities, regulations and criticism. Same as COM 369, students may not receive credit for both.
- SOC 370. Social Change** (5). Social processes, institutional development and revolutions.
- SOC 373. Social Groups** (5). Principles of social behavior within and between groups.
- 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 385. Comparative Sociology** (5). Structural similarities and differences in family, religious, economics, and political institutions among societies.
- SOC 386. Seminar on Racism** (5). Prerequisite, one of the following: SOC 101, 107, 365, or ETS 101. 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. Formerly SOC 399.1. Students may not receive credit for both.
- SOC 388. Women in Management** (3). An examination of the ways in which American sex roles, together with corporate cultural practices and organization structures, affect women's attainment of and performance in managerial roles within business, educational, and professional organizations.

SOC 388 and MGT 388 are equivalent courses. Formerly SOC/MGT 368. Student may receive credit for one course only.

SOC 393. Field Experience in Sociology (1-15). Prerequisite, SOC 363 and permission of instructor. Supervised field experience at a location to be selected by the instructor and the students. The instructor will accompany students into the field, help in the selection of a project, and assist in evaluation of student work. Formerly SOC 392. Students may not receive credit for both.

SOC 398. Special Topics (1-6).

SOC 399. Seminar (1-5). May be repeated.

SOC 411. Comparative Social Service Systems (4). Prerequisite, major in Social Services and SOC 301 or permission of instructor. A cross-culture comparison of social service programs and policies in various countries. Students may not receive credit for both SOC 311 and SOC 411.

SOC 415. Urban Sociology (4). Prerequisite, SOC 107 and 10 credits of 300 level sociology, or permission of the instructor. Growth, structure, and functions of the city; their relationships to surrounding and rural areas, urban ecological patterns, planning, and the problems of urban living.

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 (4). 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). Prerequisite, SOC 107. The distribution of wealth, power and prestige in society.

SOC 450. Social Theory II (5). Prerequisite, SOC 350. Study of selected modern social theories, including structural functionalism, conflict theory, exchange theory, symbolic interactionism, ethnomethodology and the dramaturgical school.

SOC 459. Organizations (5). Theory and research on the structure and development of organizations.

SOC 460. Community Structure and Organization (4). Prerequisite, SOC 107 and 10 credits of 300 level sociology work. 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.

SOC 464. Applied Data Analysis (4). Prerequisite, SOC 364 or equivalent. Application of the principles of research methodology and statistical analysis to the

collection and analysis of social data.

SOC 470. Contemporary Social Thought (4). Prerequisite, SOC 450 or permission of instructor. Prospects for sociology theory.

SOC 481. Philosophy of the Social Sciences (5). A critical study of basic assumptions, distinctive methods and explanations, and value and normative considerations in the social sciences. SOC 481 and PHIL 481 are equivalent courses. Students may not receive credit for both.

SOC 487. Capstone in Social Service (4). Prerequisite, senior standing or permission. This capstone course is designed for social service majors in the sociology program as a final course in their major. Course integrates theoretical and substantive issues and prepares students for a job search in related fields or graduate school pursuits. Grade will be S or U. Formerly SOC 489.1. Students may not receive credit for both.

SOC 488. Colloquy (1-3). Prerequisite, one course in Sociology issues. Current literature in sociology. May be repeated up to a total of 10 credits.

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. Prior approval required. May be repeated. Grade will be S or U.

SOC 491. Workshop (1-6).

SOC 492. Sociology Teaching Experience (1-5). Prerequisite, senior status Sociology majors only. Experience in the classroom and/or laboratory teaching. May be repeated up to a total of 10 credits. Formerly SOC 495.

SOC 494. Research Practicum (1-5). Prerequisite, senior status Sociology majors only. Supervised experience in qualitative research. May be repeated for a total of 10 credits.

SOC 495. Sociological Research (1-15). Prerequisites, SOC 350, 364, 465 and permission of instructor. Individual research project. This course may be repeated up to a maximum of 15 credits. Formerly SOC 493.

SOC 496. Individual Study (1-6). Prerequisite, 10 hours or more in sociology.

SOC 497. Honors Thesis (1-5). Prerequisite, admittance to Honors Program. May be repeated up to a total of 5 credits.

SOC 498. Special Topics (1-6).

SOC 499. Seminar (1-5).

Undergraduate Courses/Programs on Reserve

The following courses are on reserve and may be offered subject to program needs. SOC 466. Social Service Program Evaluation (3).

STEP PROGRAM

For information contact:

Lisa Ely
Dept of Geological Sciences, Lind 220

General Program Information

The Science, Technology and Mathematics Talent Enhancement Program (STEP) is an innovative program designed to prepare and retain students in majors and careers in science, technology and mathematics. It consists of an integrated sequence of classes, enrichment activities and student research opportunities in which students gain hands-on experience in modern scientific research methods, explore theme-based interdisciplinary scientific issues, and develop mentoring relationships with CWU science faculty. Application to the program is open to new freshman students with an interest in and aptitude for Science, Technology, and Mathematics fields. The core of the STEP program at CWU is a three-quarter long Science Seminar Series for freshmen. Students who participate in the Science Seminar courses, STEP 101, 102 and 103, will be eligible to apply for and participate in a NSF-funded research internship with a CWU faculty member during their sophomore year. STEP also includes a Summer Science Institute for high-school students at CWU.

The pilot STEP program at CWU is funded through a grant from the National Science Foundation. The program involves faculty members from six academic departments in the College of the Sciences: Biological Sciences, Chemistry, Computer Science, Geological Sciences, Mathematics, and Physics. More information about the program and participating faculty members is available on the STEP Web site at www.cwu.edu/~step/.

STEP Program Courses

STEP 101. Science Seminar I: Research Experience (2). Prerequisite, must be a freshman student accepted into STEP and enrolled in coordinated special section of UNIV 101 course. 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.

STEP 102. Science Seminar II: Interdisciplinary Research Theme (2). Prerequisite, STEP 101 and must be freshman student accepted into STEP. Second course in three-quarter freshman science series. Students will take an interdisciplinary approach toward a class research project centered on a single theme.

STEP 103. Science Seminar III: Current Topics (2). Prerequisite, STEP 101, 102 and must be freshman student accepted into STEP. 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.

THEATRE ARTS

Faculty

Chair: George W. Bellah
McConnell 106

Professor

Brenda J. Hubbard, Production Artistic
Director, Acting, Directing, Theatre History
and Literature
Wesley Van Tassel, Acting, Directing, Theatre
Management, Theatre History, playwriting
and Literature

Associate Professors

Scott R. Robinson, Scenic, Lighting, and
Costume Design, Costume Technology,
Stage Management
George W. Bellah, Acting, Directing, Stage
Movement, Stage Combat
Michael J. Smith, Acting, Directing, Voice,
Literature

Assistant Professors

Derek Lane, Production Manager, Scenic and
Lighting Design and Technology, Stage
Management
Christina Barrigan, Lighting Design and
Technology

Lecturers

Dave Barnett, McConnell Stage Manager,
Technical Director, Scene Technology,
Drafting.
Paulette Bond, Costume Shop Manager,
Costume Technology and Make-up

General Departmental Information

The Theatre Arts major offers students classroom instruction and practical production opportunities in a lively and disciplined setting. Upon completion of the major, students are prepared to pursue theatre as a career, to teach theatre at the secondary level, or to continue studies in a graduate program. Students without primary interest in theatre arts are also encouraged to participate in the program. Many of the classes serve students majoring in other disciplines.

Theatre Arts offers minors in six specializations: Teaching Theatre K-12, Theatre Generalist, Performance, Design and Technology, Youth Drama and Theatre Management.

Admission to any theatre arts course which has prerequisites requires either a suitable placement test score or a grade of C- or better in each listed prerequisite to that course. Students must check course catalog for all prerequisites.

Theatre Arts Core Requirements	Credits
TH 107, Introduction to Theatre.....	4
TH 166, Theory of Play Production.....	3
TH 261, Costume Technology.....	2
TH 267, Scene Technology.....	2

TH 268, Lighting Technology.....	2
TH 244, Basic Acting.....	2
TH 301, 401, Production Application.....	9
TH 329, Directing I.....	3
TH 363, 364, Theatre History.....	8
TH 393, 493, Theatre Laboratory.....	6
TH 495, Senior Research Project.....	2
TH 363.3, Theatre History III (4) OR TH 330, Playwriting (4) OR TH 430, Playwright's Workshop (4).....	4
Dramatic literature electives.....	4

Theatre Arts Core Total 51

NOTE: Electives in all specializations must have prior approval by student's theatre advisor.

Bachelor of Arts

Theatre Arts Major (8450) with Specialization

Theatre Generalist Specialization (8455)

Courses	Credits
Theatre Arts Core Requirements.....	51
Generalist electives.....	24
A minimum of 9 credits of electives must be in 301, 401, and 332.	

Total 75

Performance Specialization (8456)

Courses	Credits
Theatre Arts Core Requirements.....	51
TH 245, Basic Acting: Movement.....	2
TH 246, Basic Acting: Voice.....	2
TH 344, 345, Intermediate Acting.....	6
TH 301, 401, Production Application.....	9
Specialization Electives.....	5

Total 75

Design and Technology Specialization (8457)

Courses	Credits
Theatre Arts Core Requirements.....	51
TH 266, Theatre Drafting.....	2
TH366, Elements of Theatre Design and Rendering Technique.....	3
Select from:.....	3
TH 361, Stage Costuming (3) TH 367, Stage Scenery (3) TH368, Stage Lighting (3)	
Select from:.....	4
TH 461, Costume Design (4) TH 467, Scenic Design (4) TH 468, Lighting Design (4)	
TH 301, 401, Production Application.....	9
Specialization elective:.....	3

Total 75

Youth Drama Specialization (8458)

Courses	Credits
Theatre Arts Core Requirements.....	51
TH 312, Creative Dramatics in School and Leisure.....	3
TH 313, Children's Theatre.....	3
TH 420, Drama in the Classroom.....	5
Select from:.....	6
TH 301, 401, Production Application OR TH 492, Practicum in Producing and Touring Theatre (3)	
Specialization electives:.....	7

Total 75

Theatre Management Specialization (8459)

Courses	Credits
Theatre Arts Core Requirements.....	51
TH 350, Theatre Management.....	3
TH 351, Theatre Management.....	3
ACCT 251, Basic Accounting OR ACCT 301, Financial Accounting Analysis.....	5
ECON 101, Economic Issues OR ECON 201, Principles of Economics Micro.....	5
HRM 381, Management of Human Resources OR MKT 360, Principles of Marketing OR MGT 380, Organizational Management.....	5
Select from:.....	3
TH 301, 401, Production Application OR TH 332, New Play Production	

Total 75

Theatre Arts : Teaching K-12 (8452)

This major satisfies the endorsement for Drama. A student should have a minor leading to endorsement in English, language arts, or music. Also, see University requirements for teacher certification. Students taking this major are required to complete the professional education program requirements offered through the Curriculum and Supervision Department.

Required Courses	Credits
TH 107, Introduction to Theatre.....	4
TH 166, Theory of Play Production.....	3
TH 207, Introduction to Child Drama.....	3
TH 261, Costume Technology.....	2
TH 267, Scene Technology.....	2
TH 268, Lighting Technology.....	2
TH 244, Basic Acting.....	2
TH 245, Basic Acting: Movement.....	2
TH 246, Basic Acting: Voice.....	2
TH 312, Creative Dramatics.....	3
TH 313, Children's Theatre.....	3
TH 329, Directing I.....	3
TH 361, Stage Costuming OR	

TH 367, Stage Scenery OR	
TH 368, Stage Lighting.....	3
TH 363, TH 364, OR TH 365, Theatre History	
(4,4,4).....	8
TH 393, 493, Theatre Laboratory.....	6
TH 420, Drama in the Schools K-12.....	5
TH 429, Directing II.....	3
Department approved Dramatic Literature	
elective.....	4

Total 60

Theatre Arts Minor

Required Core	Credits
TH 107, Introduction to Theatre.....	4
TH 166, Theory of Play Production.....	3
TH 244, Basic Acting I.....	2
TH 301, 401, Production Application OR	
TH 393, 493, Theatre Laboratory.....	3
Specialization Electives:.....	18

Total 30

Electives for both majors and minors. Electives must be selected from the approved list of courses in the specializations. **All minors require a minimum of 30 credits.**

Teaching Grades K-12 Specialization Electives: (Minor Only) (8452)

Take TH 312, Creative Dramatics, PLUS select from any electives in Performance (8456), Design and Technology (8457), or Youth Drama (8458). Also see University Requirements for endorsement.

Theatre Generalist Specialization Electives (8455)

Select from any electives in Performance (8456), Technology and Design (8457), Youth Drama (8458), or Theatre Management (8459).

Performance Specialization Electives (8456)

TH 245, Basic Acting: Movement (2)
TH 246, Basic Acting: Voice(2)
TH 270, Theatrical Makeup (2)
TH 301, Production Application (3+)
TH 312, Creative Dramatics (3)
TH 329, Directing I (3)
TH 330, Playwriting (4+)
TH 332, New Play Production (3+)
TH 333, Stage Combat (2)
TH 342, Voice and Dialects (2)
TH 343, Singing for Actors (1+)
TH 350, Theatre Management I (3)
TH 351, Theatre Management II (3)
TH 352, Stage Dance (2#)
TH 360, Stage Management (3)
TH 344, Intermediate Acting I (3)

TH 345, Intermediate Acting II (3)
TH 401, Production Application (3+)
TH 429, Directing II (3)
TH 430, Playwright's Workshop (4+)
TH 444, Acting Styles (4+)
TH 445, Audition Techniques (2)
TH 475, Acting for Film and Television (3)
Th 492, Practicum in Producing and
Touring Theatre (3#)

Total 30

+may be repeated for credit
#maximum credits in specialization

Design and Technology Specialization Electives (8457)

TH 261, Costume Technology (2)
TH 266, Theatre Drafting (2)
TH 267, Scene Technology (2)
TH 268, Lighting Technology (2)
TH 270, Theatrical Makeup (2)
TH 301, Production Application (3*)
TH 332, New Play Production (3)
TH 350, 351, Theatre Management I, II (3, 3)
TH 353, Stage Properties (3)
TH 354, Scene Painting(3)
TH 356, Theatre Sound (3)
TH 360, Stage Management (3)
TH 361, Stage Costuming (3)
TH 366, Elements of Theatre
Design and Rendering (3)
TH 367, Stage Scenery (3)
TH 368, Stage Lighting (3)
TH 384, Puppetry (3)
TH 401, Production Application (3+)
TH 461, Costume Design (4)
TH 465, Costume and Fashion Drawing (3)
TH 467, Scenic Design (4)
TH 468, Lighting Design (4)
TH 489 Career and Portfolio (3)

Total 30

*May be repeated for credit

Youth Drama Specialization Electives (8458)

TH 207, Introduction to Children's Drama (3)
TH 245, Basic Acting: Movement (2)
TH 246, Basic Acting: Voice (2)
TH 301, Production Application (3)
TH 312, Creative Dramatics (3)
TH 313, Children's Theatre (3)
TH 330, Playwriting (4)
TH 332, New Play Production (3)
TH 333, Stage Combat (2)
TH 342, Voice and Dialects (2)
TH 350, 351, Theatre Management I, II (3, 3)
TH 352, Stage Dance (2)
TH 360, Stage Management (3)
TH 344, 345, Intermediate Acting I, II (3, 3)
TH 384, Puppetry (3)

TH 401, Production Application (3)
TH 420, Drama in the Schools, K-12 (5)
TH 429, Directing II (3)
TH 430, Playwright's Workshop (4)
TH 444, Acting Styles (4)
TH 492, Practicum in Producing and
Touring Theatre (3 #)

#Maximum in specialization

Theatre Management Specialization Electives (8459) (Minor Only)

Take these courses:

TH 261, Costume Technology (2) OR
TH 267, Scene Technology (2) OR
TH 268, Lighting Technology (2)
TH 350, Theatre Management (3)
TH 351, Theatre Management (3)
TH 360, Stage Management (3)

PLUS select two from the following courses:

ECON 101, Economic Issues (5)
ADMG 146, Basic Accounting (5)
ECON 201, Principles of Economics:
Micro (5)
ACCT 301, Financial Accounting
Analysis (5)
MKT 360, Principles of Marketing (5)
MGT 380, Organizational Management (5)
HRM 381, Management of Human
Resources (5)

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 166. Theory of Play Production (3). Theories of production are examined through basic script analysis, protocol procedures, job descriptions, and communication.

TH 207. Introduction to Children's Drama (3). Prerequisite, TH 166 or permission of instructor. History and aesthetics of children's drama: includes storytelling, improvisational theatre, production techniques, touring theatre, and puppetry. Appropriate for students in education, leisure services, and theatre.

TH 244. Basic Acting (2). Theory and practice of essentials of acting craft, including subtext, objectives, and beginning character and play analysis. Two hours lecture and two hours laboratory per week. Formerly DR 269 and TH 269.1. Students may not receive credit for both.

- TH 245. Basic Acting: Movement (2).** Prerequisite, TH 244 or permission of instructor. Exploration of various basic physical characterization techniques and movement skills, including observation and imitation, physical improvisation, and mask work. Two hours lecture and two hours laboratory per week. Formerly TH 269.2. Students may not receive credit for both.
- TH 246. Basic Acting: Voice (2).** Prerequisite: TH 245 or permission of instructor. Exploration of basic principles and practice of vocal production, including relaxation, support, resonance, range, interpretation, and articulation. Two hours lecture and two hours laboratory per week. Formerly TH 269.3. Students may not receive credit for both.
- TH 261. Costume Technology (2).** Prerequisite, TH 166 or permission. 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.
- TH 266. Theatre Drafting (2).** Prerequisites, TH 107, TH 166, and permission of instructor. Supervised study and practice drafting theatrical sets and properties. Formerly TH 355. Student may not receive credit for both.
- TH 267. Scene Technology (2).** Prerequisites, TH 166 or permission of instructor. Scene construction, rigging, painting and shifting techniques. Participation in production work is required.
- TH 268. Lighting Technology (2).** Applied study of lighting instruments, lighting accessories, hanging, cabling, focusing, lighting control systems, safety, maintenance and inventory control. Participation in production work is required.
- TH 270. Theatrical Makeup (2).** Prerequisite, TH 107 or permission of instructor. The history, functions, materials and techniques of makeup as a theatrical art. Production application required.
- TH 298. Special Topics (1-6).**
- TH 300, 400. Rehearsal and Performance (1-2)** Open only to non-majors participating in Theatre Arts productions. May be repeated for credit.
- TH 301, 401. Production Application (3,3).** 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 for a total of 15 credits each.
- 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. Children's Theatre (3).** Prerequisite, TH 107 or permission of instructor. Elements of creating and producing the theatre event for the child audience. Play production for children, improvisation in playwriting and story theatre. Formerly DR 473. Students may not receive credit for both.
- TH 329. Directing I (3).** Prerequisites, TH 107, TH 166, and TH 244. Basic theories, script analysis and fundamentals of directing the play.
- TH 330. Playwriting (4).** Prerequisite, TH 107 or permission of instructor. Fundamentals and practice in dramatic writing techniques and styles. May be repeated to a maximum of eight credits. Formerly DR 410. Students may not receive credit for both.
- TH 332. New Play Production (3).** Prerequisite, permission of instructor. 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 (2).** Prerequisite, TH 244 or permission of instructor. 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.
- TH 342. Voice and Dialects (2).** Prerequisite, TH 246. Advanced voice training for the actor. Study of phonetics, scansion, phrasing, and dialects.
- TH 343. Singing for Actors (1).** Prerequisite TH 246 or permission of instructor. Study of the mechanics of singing as applied to presentation of theatrical show music. May be repeated to a maximum of 6 credits.
- TH 344. Intermediate Acting I (3).** Prerequisites, TH 107 and TH 246 or permission of instructor. Character interpretation and scene study through script analysis and scene work. Formerly DR 369 and TH 369.1. Students may not receive credit for both. TH 344 and TH 345 to be taken in sequence.
- TH 345. Intermediate Acting II (3).** Prerequisites, TH 107 and TH 344 or permission of instructor. Character interpretation and scene study through script analysis and scene work. Courses are to be taken in sequence. Formerly TH 369.2. Students may not receive credit for both.
- TH 350. Theatre Management (3).** Prerequisites TH 107 and TH 166 or permission of instructor. Courses are to be taken in sequence. Policy and practice of theatre administration including budgets, contracts, box office, purchasing, staffing, marketing and audience development. Formerly TH 350.1 and DR 460. Students may not receive credit for both.
- TH 351. Theatre Management (3).** Prerequisites TH 107 and TH 166 or permission of instructor. Courses are to be taken in sequence. Policy and practice of theatre administration including budgets, contracts, box office, purchasing, staffing, marketing and audience development. Formerly TH 350.2 and DR 460. Students may not receive credit for both.
- TH 352. Stage Dance (2).** Study and directed practice of individual and group dance in modern musical and opera productions. Open to all students participating in dramatic productions. Formerly DR 310. Students may not receive credit for both.
- TH 353. Stage Properties (3).** Prerequisite, TH 107, TH 166, and TH 267 or permission of instructor. Research, methodology, design and construction of stage props and furniture.
- TH 354. Scene Painting (3).** Study in the methodology and skills of scene painting, materials, and techniques.
- TH 356. Theatre Sound (3).** Prerequisite, TH 166. Design, operation and technology of theatrical sound systems.
- TH 360. Stage Management (3).** Prerequisites, TH 166 and 269.1 or permission of instructor. Techniques, communication methodology, resources, practices and technical training for the stage manager.
- TH 361. Stage Costuming (3).** Prerequisite, TH 261 or permission of instructor. Further study of construction and fabrication for the stage. Emphasis on patterning, dyeing, and distressing costumes for the stage.
- TH 363. Theatre History I (4).** Prerequisite, TH 107 or permission of instructor. From origins to the Elizabethan Era. Formerly TH 363.1. Students may not receive credit for both.
- TH 364. Theatre History II (4).** Prerequisite, TH 107 or permission of instructor. From the Elizabethan period to Ibsen. Formerly TH 363.2. Students may not receive credit for both.
- TH 365. Theatre History III (4).** Prerequisite, TH 107 or permission of instructor. From Ibsen to the present. Formerly TH 363.3. Students may not receive credit for both.
- TH 366. Elements of Theatre Design and Rendering Techniques (3).** Prerequisite, permission of instructor. Study of line, color, movement, texture, mass and proportion in theatre design and conceptualization. Rendering techniques for stage design in a wide range of media.
- TH 367. Stage Scenery (3).** Prerequisites, TH 166 and TH 267. Advanced stage scenery construction techniques are studied and applied.
- TH 368. Stage Lighting (3).** Prerequisites, TH 266 and TH 268 or permission of instructor. Study of electricity, optics, color, distribution, projecting, drafting, lighting paperwork, and methods for lighting

productions.

TH 371. Greek and Roman Drama (4). Prerequisite, TH 107 or permission of instructor. Major playwrights and plays related to historical and social trends.

TH 373. American Drama (4). Prerequisite, TH 107 or permission of instructor. Major playwrights and their works.

TH 375. Asian Theatre (4). Prerequisite, TH 107 or permission of instructor. 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.

TH 377. Staging Gender (4). Concepts of gender and their historical development are examined through analysis of dramatic literature, films and contemporary performance culture.

TH 381. British Drama (4). Prerequisite, TH 107 or permission of instructor. Origins to present. TH 381 and ENG 381 are equivalent courses. Students may not receive credit for both.

TH 382. Ethnic Drama (4). Study of contemporary American multi-cultural plays by people of color and other ethnic groups.

TH 383. Contemporary World Drama (4). Prerequisite, TH 107 or permission of instructor. Selected Post First World War plays from around the world are studied. Formerly DR 470. Students may not receive credit for both.

TH 384. Puppetry (3). Prerequisite, TH 166 or permission of instructor. Survey of puppetry principles and their application to the classroom, recreational facility and theatre. Production techniques. Analysis of literature adaptable to theatre form.

TH 393, 493. Theatre Laboratory (1,1). Prerequisite, permission of instructor. Practical experience in all aspects of theatre production to better prepare for career opportunities. Each may be repeated for a total of three credits to a maximum of six credits.

TH 398. Special Topics (1-6).

TH 400. Rehearsal and Performance (1-2). Open only to non-majors participating in Theatre Arts productions. May be repeated for credit.

TH 401. 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 for a total of 15 credits.

TH 420. Drama in the Schools K-12 (5). Prerequisite, TH 107 and TH 166. Theatre appreciation, play production, curriculum development, verbal and non-verbal skills, traditions and trends in the application of

drama education in the K-12 classroom are explored and practiced.

TH 429. Directing II (3). Prerequisites, TH 329 and permission of instructor. Script study emphasizing the specific artistic and logistical preparation involved in directing a play. Culminates in directing selected scenes.

TH 430. Playwright's Workshop (4). Prerequisite, TH 330 or permission of instructor. Practice in dramatic writing through staged reading or workshop production of an original work. May be repeated to a maximum of eight credits.

TH 444. Acting Styles (4). Prerequisites, TH 344 and permission of instructor. Performance skills applied to special texts, especially Shakespeare, and including other heightened texts and stylized comedy. TH 444 and TH 544 are equivalent courses. Student may not receive credit for both. May be repeated for a maximum of 8 credits.

TH 445. Audition Techniques (2). Prerequisite, TH 344. Exploration and practice of advanced techniques and materials required for professional auditions. Formerly TH 345. Students may not receive credit for both.

TH 452. History of Fashion (5). 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 461. Costume Design (4). Prerequisites, TH 261, TH 361, and TH 366 or permission of instructor. 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. Formerly DR 361 and DR 461. Students may not receive credit for more than one.

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). Prerequisites, TH 267, TH 366 and TH 367 or permission of instructor. Study, research, practice and applied use of scenic design techniques and theory.

TH 468. Lighting Design (4). Prerequisites, TH 366 and TH 368 or permission of instructor. Conceptualization, design and application of theatrical lighting using contemporary stage lighting practices.

TH 475. Acting for Film and Television (3). Prerequisite, TH 344. Study and practice of the techniques of performing for the camera and of recording voice-overs. May be repeated for credit.

TH 487. Theatre Pedagogy (4). Prerequisite, permission of the instructor. Student will be given individualized instruction in teaching practices and will participate in journal writing, critiquing, counseling, coaching, advising, leading discussion and grading. May be repeated for credit up to 8 credits. TH 487 and TH 587 are equivalent courses.

TH 489. Career & Portfolio Preparation (3). Prerequisites, declared Theatre major, junior or senior status. Techniques and practice in preparation of professional portfolio, resumes and letters of application for employment in the entertainment industry.

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. Prior approval required. May be repeated. Grade will be S or U.

TH 491. Workshop (1-6).

TH 492. Practicum in Producing and Touring Theatre (3, 6, 12.) Prerequisite, permission of instructor. Lecture, demonstration, and participation in producing and touring a show. A maximum of 3 credits may be applied to the specialization.

TH 495. Senior Research Project (2). Prerequisite, permission of advisor and majority consent of the theatre faculty. Senior students shall present a research paper in a major area of interest. May be repeated one time for credit.

TH 496. Individual Study (1-6). Prerequisite, TH 107 or permission of instructor.

TH 498. Special Topics (1-6).

TH 499. Seminar (1-5).

UNIVERSITY STUDIES

University Studies incorporates three distinct areas. 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 44 or fewer transfer credits.

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. College Survival Skills (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. Formerly OCED 110, Career Exploration.

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. Formerly OCED 110.

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.

UNIV 297. Enrichment Course (1). Enrichment course on various topics for freshmen and sophomores to broaden their interest areas. Grade will be S or U.

UNIV 497. Enrichment Course (1). An enrichment course on varying topics for upper-division students to explore more deeply issues of academic interest. Grade will 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. Grade will be S or U.

The third area includes courses dedicated to academic service learning experiences.

UNIV 109. Introduction to Service Learning (2). The student will use volunteer service to identify and explore career interests and meet community needs.

UNIV 309. Service Learning (2). Student will use program of study content knowledge to improve a community situation. UNIV 309 and EDCS 309 are equivalent courses. Formerly FCSSG. May be repeated for credit.

WOMEN STUDIES

Director: Bang-Soon Yoon
Psychology Building 473

General Program Information

Women Studies is an interdisciplinary program which provides a frame of reference for understanding the contemporary and historical experience, roles, and contributions of both women and men. With the increasing participation rate of women in the labor force and politics, this subject is becoming increasingly important in preparing all students for life and work in the 21st Century and beyond. The objectives of women studies are:

1. To explore existing knowledge about women in a variety of disciplines.
2. To critically assess the traditional disciplines in the light of new data concerning women.
3. To provide an academic foundation for students planning careers in women studies or related fields.
4. To promote research about women within existing disciplines.

Women Studies offers an interdisciplinary minor as described below. With approval of the Director of Women Studies, the student will select appropriate electives to meet personal and professional goals.

With faculty advisement, interested students may construct individualized majors in Women Studies through the interdisciplinary major program.

Women Studies Minor (8650)

Required Courses	Credits
WS 201, Introduction to Women Studies.....	5
Select from the following:.....	11-15
ANTH 356, Gender Roles in Cross-Cultural Perspective (4)	
ENG 335, Studies in Women's Literature (4)	
HIST 346, Women in American History (5)	
POSC 311, Women and Politics (5)	
PSY 483, Psychology of Women (3)	
(Prerequisite, PSY 101 (5))	
SOC 356, Sex Roles in Society (5)	
Department approved electives. Electives may include courses not selected as requirements from the list above. Possible electives are ENG 230, SOC 388, as well as special topics, individual study, and seminar courses in women studies and related departments.....	5-9

Total 25

Women 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 491. Workshop (1-6).

WS 496. Individual Study (1-6). May be repeated.

WS 498. Special Topics (1-6).

WS 499. Seminar (1-5) May be repeated.

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 catalog of the institution from which they expect to earn a degree, select courses required by that institution.

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; Pre-Veterinary.

Pre-Dentistry

Advisor: Dr. Linda Raubeson
Department of Biological Science
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 ADA web site www.ada.org/prof/ed/index.asp 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. Information on the DAT is also available on the ADA web site. Courses marked below with an asterisk (*) 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	Credits
CHEM 181, 181LAB, 182, 182LAB, 183, 183LAB, General Chemistry.....	15
CHEM 361, 361LAB, 362, 363, 363LAB, Organic Chemistry.....	8-13
PHYS 111, 111LAB, 112, 112LAB, 113, 113LAB, General Physics.....	15
BIOL 110, 111, 112, 220, General Biology.....	20

Required at Some Dental Schools:

Required Courses	Credits
CHEM 431, 431LAB, 432, Biochemistry.....	8
MATH 153, 154, Pre-Calculus.....	10
BIOL323, Microbiology.....	5
One additional quarter of Microbiology, e.g., BIOL 426, Medical Microbiology	

Recommended

BIOL 321 (Genetics).....	5
BIOL 354, General Vertebrate Embryology.....	5
BIOL 355 AND BIOL 356, Human Anatomy & Physiology OR	
BIOL 455, Zoophysiology.....	10-11
Additional coursework in biology, e.g. BIOL 421, BIOL 422, BIOL 423, BIOL 425, and/or BIOL 454	

Pre-Dietetics

Advisor: Dr. Ethan Bergman RD, CD, FADA
Department of Family and Consumer
Sciences
Michaelsen Hall 135, (509) 963-2366

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 approved or accredited four-year undergraduate program. The B.S. in Food Science and Nutrition (Nutrition and Dietetics specialization) is a developmentally accredited program. In addition, the individual must complete a 900+ 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

Advisors:

Associate Professor Michael Braunstein
Lind Hall 203D, (509) 963-2761
Assistant Professor Sharon Rosell
Lind Hall 203C, (509) 963-2757
Department of Physics

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 a community college, at CWU, or at another university. Then the student must transfer to the engineering school of his or her choice and apply for admission to the particular engineering program wanted. He or she 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 the 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 Department of Mathematics, 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 Chair, Department of Physics, or Pre-Engineering Advisors for additional information about this program.

First Year Courses	Credits
PHYS 181, 181LAB, 182, 182LAB, 183, 183LAB.....	15
MATH 172, 173, 272.....	15
IET 165.....	4
CS 177.....	4
ENG 101, 102.....	8
Electives.....	5

Total 51

Pre-Law

Advisor: Professor Mathew Manweller
Department of Political Science
Psychology Building 481, (509) 963-2396

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. During the final undergraduate year, the student aspiring to pursue a career in law should plan to take the Law School Admission Test (LSAT) and make application to law schools.

Law schools do not require a particular major

or courses as a condition for admission. About half of those admitted to law school have taken degrees in Political Science because that is the discipline which deals most directly with the institutions that make and enforce law. Other common undergraduate majors found in the law school population are History, English, Economics, and Business. The pre-law student should seek a course of study which enhances his or her verbal comprehension and expression and which helps attain a critical understanding of the human institutions and values with which the law deals.

The Political Science Department offers an advisory program designed to assist students in choosing and gaining admission to law schools. The pre-law student should carefully plan his or her program in close consultation with a pre-law advisor.

Pre-Medicine

Advisor: Dr. Sheldon Johnson
Department of Biological Sciences
Science Building 338H, (509) 963-2800

This program prepares students for entering professional schools of medicine (M.D. or D.O.). 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 and science major is acceptable. Regardless of their academic major, pre-medicine students must work closely with the Pre-Med 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-Occupational Therapy

Advisor: Dr. David Darda
E-mail: dardad@cwu.edu
Department of Biological Sciences
Science Building 236E, (509) 963-1333

The Pre-Occupational Therapy program is a 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 Biological Sciences.

Pre-Optometry

Advisor: Dr. Linda Raubeson
 Department of Biological Sciences
 Science Building 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 web site:

<http://www.opted.org>.

Commonly Required Courses

BIOL 110, 112, 220 (or 320), 323.....	20
BIOL 355, 356.....	10
CHEM 181, 181LAB, 182, 182LAB, 183, 183LAB.....	15
CHEM 361, 361LAB, 362.....	8
PHYS 111, 111LAB, 112, 112LAB, 113, 113LAB.....	15
PSY 101.....	5
1 quarter calculus.....	5
1 quarter statistics.....	5

To earn a B.A. in biology the following courses would also be required:

BIOL 111, 321, 499S.....	11
1 quarter of ecology.....	5

(BIOL 360 or 420 or 464)

Pre-Pharmacy

Advisor: Dr. Carin Thomas
 Department of Chemistry
 SCI 302G, (509) 963-2815
 Fax: (509) 963-1050, e-mail: cthomas@cwu.edu

A pre-pharmacy program of study prepares students for admission into professional programs at any university granting a pharmacy doctoral degree (Pharm-D). Central Washington University does not offer a degree program in pharmacy, but does offer all prerequisite courses necessary for admission to

pharmacy programs at other universities.

An example pre-pharmacy program of study designed to satisfy prerequisites for admission into the University of Washington School of Pharmacy is listed below. For information regarding admission prerequisites for other universities, or for more details, contact the pre-pharmacy advisor.

Required Courses	Credits
BIOL 110, 111, 112, and 220 or 320, General Biology.....	20
BIOL 323, Microbiology.....	5
CHEM 181, 181LAB, 182, 182LAB, 183, 183LAB, General Chemistry.....	15
CHEM 361, 361LAB, 362, 363, 363LAB, Organic Chemistry.....	13
ENG 101, 102, and 301, English Composition.....	11
MATH 170, Intuitive Calculus OR MATH 172, Calculus.....	5
MATH311, Statistical Concepts and Methods.....	5
Minimum Humanities electives.....	10
Minimum Social Sciences electives.....	10
Other electives.....	varies

Minimum Pre-pharmacy credits for admission 94

Pre-Physical Therapy

Advisor: Dr. David Darda
 E-mail: dardad@cwu.edu
 Department of Biological Sciences
 Science Building 236E (509) 963-1333

The Pre-Physical Therapy program is a 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.

Pre-Veterinary

Advisor: Dr. Patrick Bryan
 Department of Biological Sciences
 Science Building 338K, (509) 963-3590

A Pre-Veterinary program at Central Washington University 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 B.A. or B.S.)

Required Courses	Credits
BIOL 110, 111, 112, 220, General Biology.....	20
BIOL 321, Genetics.....	5
CHEM 181, 181LAB, 182, 182LAB, 183, 183LAB, General Chemistry.....	15
CHEM 361, 361LAB, 362, Organic Chemistry.....	8
CHEM 431, 432, Biochemistry.....	6
MATH 153, 154, Pre-Calculus.....	10
PHYS 111, 111LAB, General 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 115

