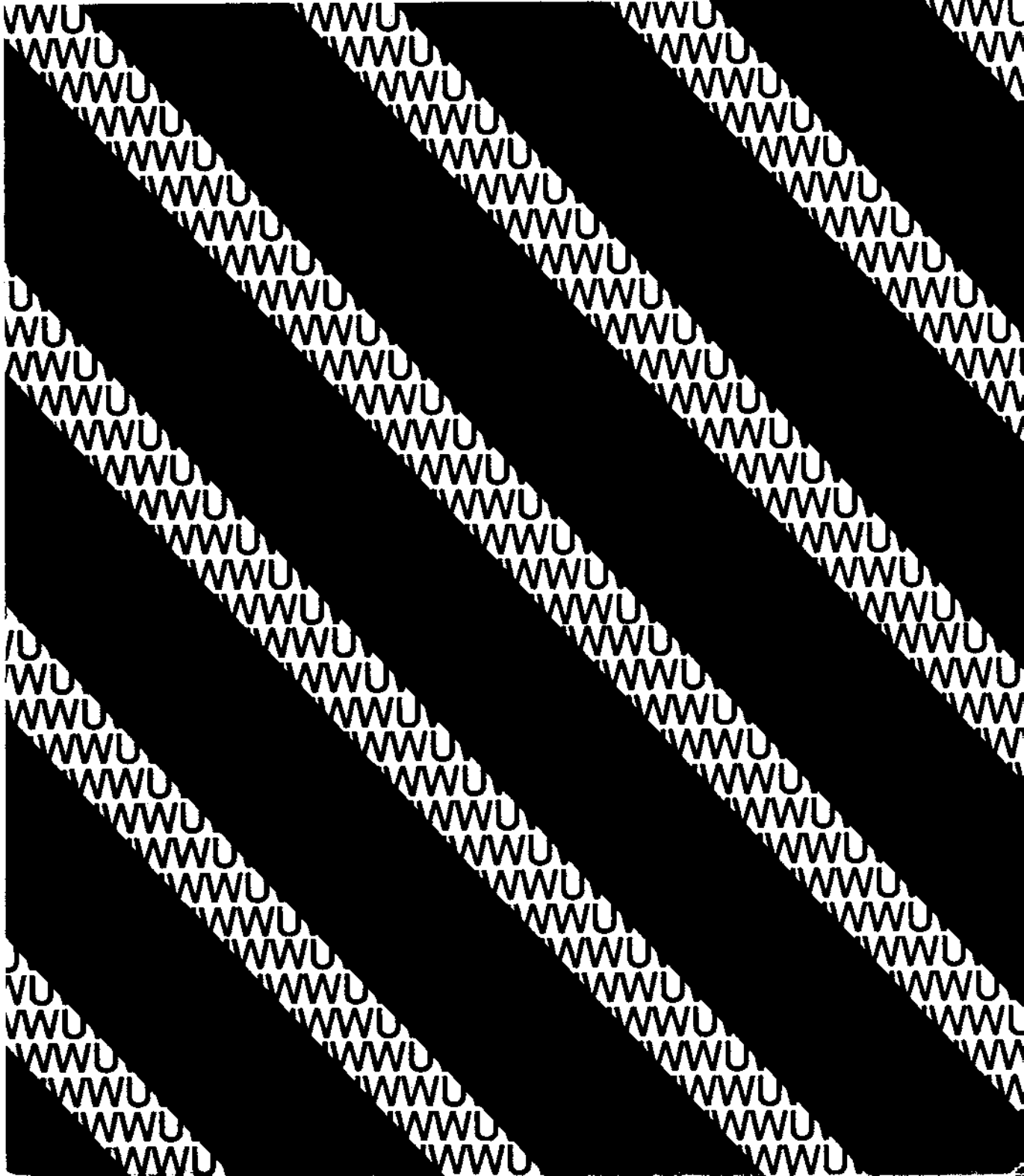


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WESTERN
WASHINGTON
UNIVERSITY
BULLETIN



NOTICE TO READERS

Every effort has been made to provide accurate information in this catalog. All policies and information contained herein, however, may have changed subsequent to the time of publication. Readers are therefore advised to consult with the appropriate University department or office for any possible revisions.



WESTERN WASHINGTON UNIVERSITY BULLETIN
(USPS 679-900)

Vol. 75

July, 1979

No. 1

Published in July, October, January and March by Western Washington University, 516 High Street, Bellingham, Washington, and entered as second-class matter at the post office at Bellingham, Washington.

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A Alpha [Residence]
 B Beta [Residence]
 Δ Delta [Residence]
 Γ Gamma [Residence]
 K Kappa [Residence]
 Ω Omega [Residence]
 Σ Sigma [Residence]

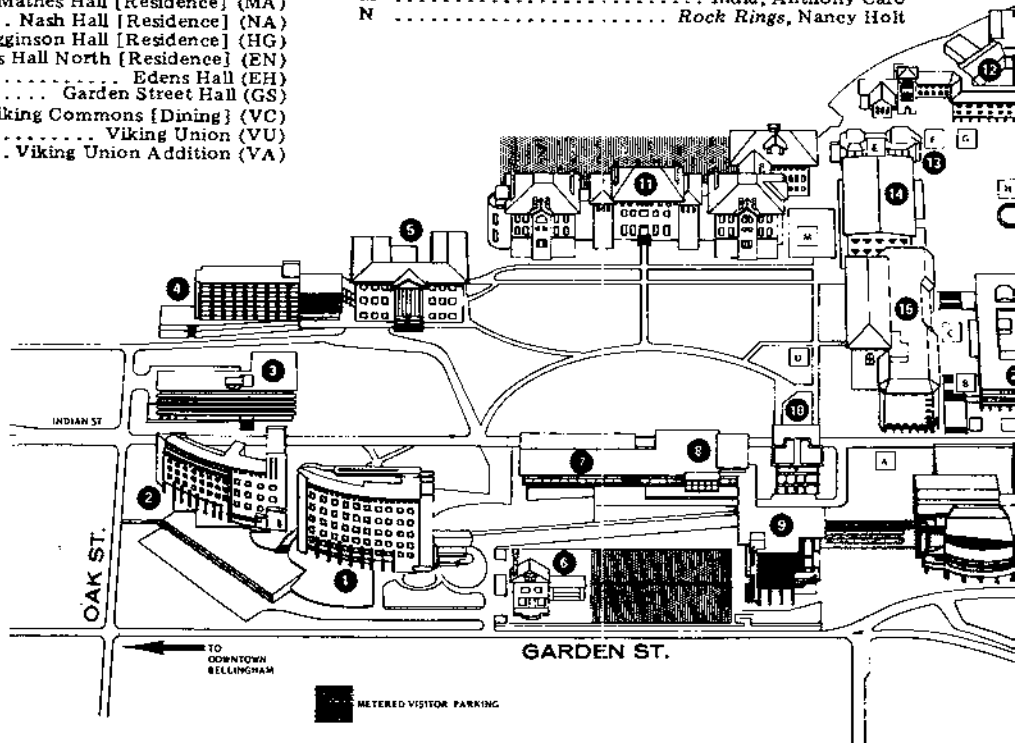
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 35 Maintenance-Motor Pool (MP)
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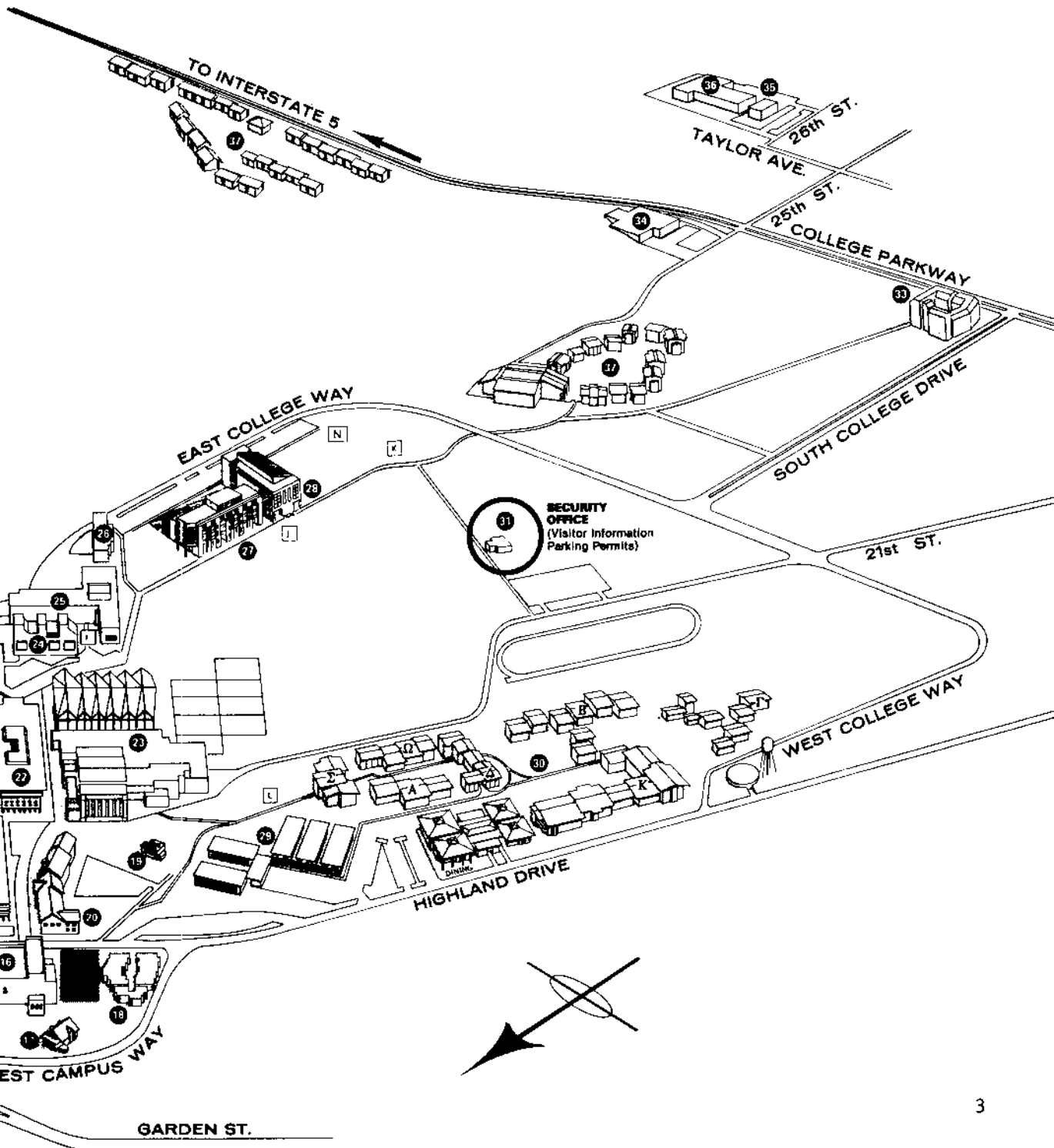
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A *For Handel*, Mark diSuvero
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 C *Alphabeta Cube*, Fred Bassetti
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 F *Scepter*, Steve Tibbetts
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 H *Fisher Fountain*, Ibsen Nelsen
 I *Wandering Rocks*, Tony Smith
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1 Mathes Hall [Residence] (MA)
 2 Nash Hall [Residence] (NA)
 3 Higginson Hall [Residence] (HG)
 4 Edens Hall North [Residence] (EN)
 5 Edens Hall (EH)
 6 Garden Street Hall (GS)
 7 Viking Commons [Dining] (VC)
 8 Viking Union (VU)
 9 Viking Union Addition (VA)





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UNIVERSITY CALENDAR 1979-1980 ACADEMIC YEAR

Fall Quarter 1979

September 24-25
Registration

September 26, 8:00 a.m.
Classes begin

November 12
Veterans Day Holiday

November 21, Noon - November 26
8:00 a.m., Thanksgiving Recess

December 10-14
Final examination week

Winter Quarter 1980

January 7
Registration

January 8, 8:00 a.m.
Classes begin

February 18
Washington's Birthday Holiday

March 17-21
Final examination week

Spring Quarter 1980

March 31
Registration

April 1, 8:00 a.m.
Classes begin

May 26
Memorial Day Holiday

June 6-12
Final examination week

June 13
Commencement

Summer Quarter 1980

June 23 - August 1
Six-Week Session

June 20-August 22
Nine-Week Session

June 23
Registration

June 24
Classes begin

July 4
Independence Day Holiday

CALENDAR

UNIVERSITY CALENDAR 1980-81 ACADEMIC YEAR

The calendar for 1980-81 includes only dates for academic quarters. The complete calendar including holidays will be published in August, 1980.

Fall Quarter 1980

- September 22-23
Registration
- September 24, 8:00 a.m.
Classes begin
- November 26, Noon - December 1, 8:00 a.m.
Thanksgiving Recess
- December 8-12
Final examination week

Winter Quarter 1981

- January 5
Registration
- January 6, 8:00 a.m.
Classes begin
- February 16
Washington's Birthday Holiday
- March 16-20
Final examination week

Spring Quarter 1981

- March 30
Registration
- March 31, 8:00 a.m.
Classes begin
- May 25
Memorial Day Holiday
- June 5-11
Final examination week

Summer Quarter 1981

- June 22 - July 31
Six-Week Session
- June 22 - August 21
Nine-Week Session
- June 23
Registration
- June 24
Classes begin
- July 3
Independence Day Holiday

SEPTEMBER

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THE UNIVERSITY

Western Washington University is one of three regional universities which, together with two state universities, one state college and a score of community colleges, comprise the state-supported system of higher education in Washington. These institutions have individual governing boards but work together through voluntary associations and the State Council for Postsecondary Education to coordinate their planning and efforts to provide higher education for the college and university population of the state.

Western Washington University is located in Bellingham, a city of 43,000 in the northwestern corner of the state near the Canadian border. Its historical antecedent was the New Whatcom State Normal School, established by the legislature in 1893, and which offered its first courses in the fall of 1899. From a normal school the institution evolved into a degree-granting institution in 1933, College of Education in 1937, State College in 1961, and a University in 1977.

Western Washington University is organized into a Graduate School, a School of Education and five semi-autonomous undergraduate colleges: The College of Arts and Sciences, The College of Business and Economics, The College of Fine and Performing Arts, Fairhaven College, and Huxley College of Environmental Studies.

Accreditation

The University is fully accredited by both the Northwest Association of Schools and Colleges and by the National Council for the Accreditation of Teacher Education to offer work at the bachelor's and master's degree levels. The University holds membership in the Council of Graduate Schools in the United States.

OBJECTIVES

Western Washington University strives to provide its students with opportunities which develop their intellect, enlarge their understanding and appreciation of human heritage, and stimulate their abilities to create, share and act on ideas. Appropriate to citizens in a free society, these facets of the liberal arts tradition continue long beyond the time students terminate their full-time studies and provide a sound foundation for any vocation.

The University has developed a variety of strong professional programs on that foundation and strives to maintain a direct relationship between its offerings and career requirements and opportunities.

Western accepts its responsibilities for extending and transmitting knowledge, for contributing to the arts, and for making its intellectual and creative resources available to the local, state and national communities. Committed to both quality and equality, the University encourages excellence in teaching, learning, research, creativity and service; and provides equal opportunity in both education and employment.



ACADEMIC PROGRAMS AND DEGREES

To fulfill its academic objectives, Western's curriculum includes a program of broad general education; intensive studies designed to develop scholarly competence in the arts and sciences; professional programs for both public school personnel and a variety of other professionals; and graduate programs in professional education, the arts and the sciences.

Students enrolled in Western's undergraduate and graduate programs can earn one or more of ten degrees:

- Bachelor of Arts
- Bachelor of Arts in Education
- Bachelor of Fine Arts
- Bachelor of Music
- Bachelor of Science
- Master of Arts
- Master of Business Administration
- Master of Education
- Master of Music
- Master of Science

Details concerning Western's undergraduate and graduate programs and degrees are provided elsewhere in this catalog.

RESEARCH

At Western, faculty research and the training of students in scientific and scholarly methods and techniques have received considerable impetus through foundation and government grants. Awards have been made by a wide range of agencies and foundations,



including the National Science Foundation, U.S. Office of Education, ARCO Foundation, Shell Foundation, National Oceanic and Atmospheric Administration, Canadian Embassy, Office of Naval Research, Department of Ecology, Reader's Digest, Gannett Foundation, Northwest Air Pollution Authority, National Park Service, and various agencies of the State of Washington.

The Bureau for Faculty Research has been established to encourage and coordinate faculty research and creative scholarly endeavor throughout the University. The Bureau assists the faculty in obtaining funds for curricular development and research, and provides a manuscript typing service and a staff artist.

ACADEMIC FACILITIES

The main campus and its 60 buildings occupy 224 acres along Sehome Hill overlooking Bellingham Bay and downtown Bellingham. Other University properties, such as the marine laboratory at Shannon Point near Anacortes, support regional educational and conservancy programs.

The University has on-campus residence halls and student apartments for 3,600 students.

The beautiful natural setting of the main campus and its award-winning architecture make Western Washington University a stimulating place for work and study.

The Library

The Mabel Zoe Wilson Library houses more than 800,000 items, including 350,000 volumes of cataloged books and bound periodicals, 400,000 units of microtext, and large collections of curriculum materials, pamphlets and publications of the United States, Washington State, and Canadian governments. The Library maintains subscriptions to over 4,500 current periodicals and newspapers.

The Library provides open stacks for its collections, together with reading and study areas, carrels and seminar rooms. It also maintains a branch Music Library in the Performing Arts Center which includes an extensive collection of scores, recordings, and books about music.

The Computer Center

The Computer Center operates an IBM 360/50 system for batched punched-card computing, and six Interdata 7/32 computers supporting a network of approximately 100 interactive terminals for problem solving and

computer-assisted instruction. The equipment — partly funded with National Science Foundation grants in 1962, 1968, 1974, 1975 and 1976, and a Health, Education, and Welfare grant in 1977, serves most of the on-campus instructional, research and administrative needs and does instructional processing for local high schools. In addition there are Interdata 70 computers in Huxley College and in a Computer Science laboratory, three small computers in Psychology laboratories, two in the Physics Department, and one in the Geology Department.

*Leona M. Sundquist Laboratory
at Shannon Point*

Located near the Washington State Ferry

terminal west of Anacortes, Washington, the Sundquist Marine Laboratory provides opportunities for undergraduate and graduate students to study the sea. The facility includes laboratories, a lecture room, research spaces and more than 50 seawater tanks useful in teaching and research. The laboratory site includes 71 wooded acres and a small lake, allowing studies beyond the marine, e.g., ecology and limnology.

The Sundquist Marine Laboratory is administered by Western Washington University on behalf of a consortium of schools including Western, Eastern and Central Washington Universities, Skagit Valley College, and Everett and Edmonds community colleges.



Leona M. Sundquist Laboratory is located at Shannon Point near Anacortes.

ADMISSIONS

GENERAL POLICY

Western Washington University makes every effort to provide an opportunity for higher education to all qualified applicants.

Acceptance of a student for enrollment at Western Washington University constitutes an agreement of mutual responsibility. The student's part of this agreement is to accept established University rules and policies, to respect the laws of the city and the state, and to act in a responsible, mature manner appropriate to these laws, rules and policies. The University's part is to provide an appropriate academic atmosphere and representation for students in matters with which they are directly concerned.

Admission standards are stated below in terms of the traditional A-F grading continuum. Students who present a number of non-traditional grades, or whose records include a large proportion of non-academic courses, will be considered for admission on individual bases and may be asked to submit additional evidence in support of their applications (i.e., entrance examinations, interviews and letters of recommendation).

Dates of Application for Admission

Applications and credentials for the fall quarter should be filed by September 1; application by March 1 is desirable, particularly for those seeking campus housing or financial aid. Completed applications should be on file by December 1 for winter quarter, March 1 for spring quarter, and June 1 for summer session.

Students may apply for admission while still enrolled in high school or other colleges. An offer of admission made on the basis of in-

complete records is granted with the understanding that the student will later furnish completed records which indicate that admission requirements set forth here have been satisfied.

ADMISSION TO WESTERN'S COLLEGES AND SCHOOLS

Western Washington University is organized into a School of Education, a Graduate School, and five colleges:

The College of Arts and Sciences

The College of Business and Economics

Fairhaven College

The College of Fine and Performing Arts

Huxley College of Environmental Studies

Undergraduate admission requirements, policies and procedures described above and below apply to all of Western's colleges and schools.

Unless they designate otherwise on their application forms, qualified undergraduate students are admitted to Western's College of Arts and Sciences. Undergraduate students interested in Western's other four colleges or the School of Education should note that each has additional requirements and that each selects its students on an individual basis. (Details are provided in the section entitled "Western's Schools and Colleges.")

All undergraduate students should apply for admission to Western Washington University through the Admissions Office. Candidates for the Master's Program should apply to the Graduate School. Degree holders seeking teacher certification should apply to the Office of Fifth Year Advisement.

Each new student admitted to Western Washington University receives additional information from the appropriate college or school.

FRESHMEN

The *Uniform Undergraduate Application for Admission to Four-Year Colleges and Universities in the State of Washington* is required of all freshman candidates. It may be obtained from any Washington high school or college, or from the Admissions Office at Western.

Graduates of accredited Washington State high schools are ordinarily admitted if their high school records indicate (a) a cumulative grade average of at least 2.50 or (b) a ranking in the upper half of the graduating class. Students whose records do not satisfy either of these criteria may seek consideration from the Admissions Committee by submitting additional evidence as requested by the Director of Admissions. The pattern of high school subjects may be considered in cases where the potential success in college is in doubt as the result of marginal high school grades or test scores. The University is able to grant admission to a limited number of students who can give other evidence of their ability and motivation to succeed in an academic program. Graduates of high schools in other states are ordinarily admitted if they meet either of the minimum achievement standards for resident students described above, provided they also submit satisfactory scores on either the Scholastic Aptitude Test of the College Entrance Examination Board or the American College Test. Results of these tests should be sent to the Admissions Office by the CEEB or ACT.

High School Subject Recommendations

Although Western does not require the completion of specific high school subjects for admission, the University recommends that the following subjects be included in the applicant's high school program to assure minimum preparation for a challenging collegiate academic program.

Subject Recommendations:

- English: Three years, including one course in the 12th grade
- Math: Two years, including algebra or geometry
- Science: Two years, including one course in 11th or 12th grades
- Social Studies: Two years, including one course in 11th or 12th grades
- Foreign Language: Two years, 10th grade level and above, recommended for students who plan to include further study in a foreign language at WWU.
- Academic Electives: Three years, one course each in 10th, 11th, 12th grades

Admission of Students Without a High School Diploma

The University welcomes applications from individuals 18 years of age and older, who are not enrolled in high school and have not earned a high school diploma. Admission will be considered on an individual basis, and arrangements for tests and an interview may be made through the Admissions Office. Experience in other than formal educational institutions is also considered as a basis for admission.

TRANSFER STUDENTS

A transfer student who has completed the last term prior to transfer with a grade point average of 2.00 or above and whose overall academic record indicates satisfactory academic progress is ordinarily admitted if he or she: (a) satisfies requirements for freshman admission (above) and has attained a cumulative grade average of 2.00 (C) in college-level study, or (b) does not satisfy freshman admission requirements but has achieved a cumulative grade average of either 2.00 based upon at least 40 transferable credits or 2.50 on at least 25 transferable credits. The grade average used for determining admission is calculated by counting all grades earned in courses transferable to Western. Exceptions to these standards may be made when evidence (test scores, maturity, etc.) indicates that previous grades are inaccurate predictors of the student's chances for success at Western.

The *Uniform Undergraduate Application* is available from any Washington college or from Western's Admissions Office. Candidates for admission as transfer students should submit this form in advance of the dates of application published above and must request that an official transcript be forwarded to the Admissions Office by each higher institution they have attended. A high school transcript is also required of candidates who have earned fewer than 40 transferable credits.

TRANSFER OF CREDIT POLICIES

In general, Western Washington University routinely grants credit for baccalaureate oriented courses completed at accredited institutions of higher education. Transfer of credit policies are developed by the Committee on Admissions and Inter-College Relations. Authority to administer these policies is delegated to the Registrar, the Director of Admissions, and where applicability of transfer credit to a major or minor is concerned, to department chairpersons. Western's policies

Admissions

and procedures are detailed under the various headings below.

Accreditation and Credit Transfer

The decision to grant transfer credit is based upon several factors. Chief among these is accreditation. For transfer purposes Western recognizes as fully accredited only those institutions which have received accreditation by one of the following associations: 1) New England Association of Schools, 2) Middle States Association of Colleges and Schools, 3) North Central Association of Colleges and Schools, 4) Northwest Association of Schools and Colleges, 5) Southern Association of Colleges and Schools, and 6) Western Association of Schools and Colleges.

Level of Accreditation

The total amount of transfer credit that may be granted from another institution may not exceed the level of accreditation granted to that institution. For example, the maximum credit transferable from accredited two-year institutions is 90 credits; that is, one half the amount normally required for a baccalaureate degree. Regardless of the amount of transfer credit granted, a student must earn at least 45 resident credit hours through Western and satisfy all other WWU requirements to graduate from Western. (Note: A transfer student may complete more than ninety credits at two-year colleges and each course will be considered for its appropriateness in satisfying particular requirements at Western. The total transfer credit granted from two-year institutions will be limited, however, to ninety quarter credits.)

Credit with Limited Transferability

A) *Sectarian Religion Credit.* Regardless of institutional accreditation, Western does not grant credit for religion or theology courses that are sectarian in nature. Certain survey courses in religion, such as literature of the Bible and history of Christianity, are transferable, but others, such as courses designed to prepare missionaries or to teach the doctrine of one particular religious denomination, are not.

B) *Experiential Credit.* Western grants no academic credit for experience *per se*. Credit granted on this basis by other institutions is not directly transferable and must be validated by departmental examination and placement procedures at Western. A student who believes that previous experience warrants academic credit may "challenge" the appropriate course(s) at Western. If a student's background enables him or her to begin be-

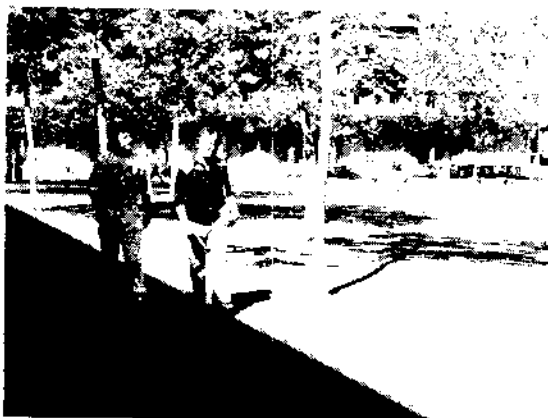
yond the introductory level in a sequence of courses, successful completion of a higher level course may lead, with prior departmental approval, to credit for lower courses or to waiver of course requirements.

C) *Military Credit.* Western grants no credit for military service *per se*. However, up to thirty credits may be granted for appropriate schooling received while in the military. Western normally grants credit in accordance with recommendations contained in "A Guide to the Evaluation of Educational Experiences in the Armed Services," published by the American Council on Education. DANTES Subject Standardized Test course examinations passed at the 50th percentile or higher will yield credit according to ACE recommendations for each course.

D) Credit by Examination

1) Credit granted by other accredited institutions on the basis of internally designed examinations or placement procedures is generally transferable.

2) Credit granted by other institutions on the basis of external examinations such as CEEB Advanced Placement Examinations or CLEP is not considered as transfer credit. Students are expected to present actual examination results for review by the appropriate departments at Western. Normally, a score of three or higher on the CEEB AP examinations results in credit for the related freshman-level course(s) at Western. CLEP "General" examinations do not result in credit at Western, but CLEP "Subject" examinations are reviewed by departments for credit. Students with questions about establishing such credit are advised to contact the Office of Admissions.



E) Other Limited Credit

- 1) A maximum of 10 transfer credits may be awarded for photography courses completed at two-year colleges.
- 2) A maximum of 15 credits may be awarded for Early Childhood Education courses completed at two-year colleges.
- 3) Up to 15 credits for courses that are not otherwise transferable will be accepted by Western if they are included as a part of an approved Associate degree program at a Washington community college.

Transfer students who complete the appropriate two-year degree at a Washington community college will ordinarily satisfy all of Western's general university requirements upon their enrollment. To be accepted in lieu of Western's General University Requirements, the AA degree must include at least 90 credits, 75 of which are transferable courses listed in the WWU Transfer Advisers Handbook. Since the community colleges offer several degree programs, students should consult their adviser for more complete information.

Exceptions to the transfer of credit policies described above may be made only upon petition to the Admissions Committee. Such petitions are to be filed with the Director of Admissions after enrollment.

FORMER WWU STUDENTS

Western students who have interrupted their studies for one or more quarters (except summer) may advance register with their class by filing an *Application for Registration* form at least two weeks prior to advance registration. Forms are available from the Admissions Office.

Those who file their application forms after advance registration but before the quarter begins will register one day prior to the beginning of classes.

Acceptance of transfer credit earned after the student's initial admission to Western Washington University is governed by policies applicable to transfer students.

A student who was eligible to continue at WWU at the time of departure (either in good standing or on academic probation) is eligible for readmission. If he or she has

undertaken studies at other colleges or universities since leaving WWU, the cumulative grade average for all such study must be at least 2.00 (C) and the student must have earned at least a 2.00 in the last term at the last institution attended. Exceptions to these standards may be made only by the Admissions Committee, and petitions for this purpose are available in the Admissions Office. A student who was in "dropped" status at the time of departure from WWU must be reinstated by the Academic Standing Committee. Petitions for this purpose are also available in the Admissions Office.

GRADUATE STUDENTS

For admission to graduate study at WWU and for full information about programs, assistantships and other matters, see the current *Graduate Catalog* of the University. A copy can be obtained by writing or phoning the Graduate Office — WWU, Bellingham, WA 98225 (206-676-3170).

Candidates for fifth-year study for a standard teaching certificate or for teacher certification through special programs for graduate students apply for admission through the Office of Fifth Year Advisement, Miller Hall, WWU.

INTERNATIONAL STUDENTS

Canadian students are considered for admission under the same general procedures as are citizens of the United States.

Western welcomes qualified students from other countries. To be eligible for admission, such students must have completed the university preparatory program in their own countries, give evidence of ability to succeed in university study, and demonstrate competence in use of the English language. They must also be able to pay the cost of each year they plan to study at the University. Letters from sponsors, family members, or banking officials are required in order to demonstrate sufficient finances, since the University has no financial aid available for foreign students. The Test of English as a Foreign Language (TOEFL) is required of candidates from countries in which English is not the language in general use.

International student applications are evaluated on an individual basis. Admission or denial will be based on the total evidence indicating the student's potential for success in an academic program at Western.

SPECIAL STUDENTS AND AUDITORS

The University welcomes mature students whose occupations preclude full-time attendance. Such students may be authorized to enroll with non-matriculated (non-degree) status. Transcripts and tests are not required of such students, although they are ordinarily expected to be able to satisfy the regular admission requirements.

Permission to enroll as a special student or auditor is granted for one term at a time and implies no commitment on the part of the University regarding later admission to a degree program.

ACCEPTING AN OFFER OF ADMISSION

Each admitted student will be asked to confirm his or her intention to enroll by submitting a non-refundable, non-transferable payment on tuition and fees. This payment should not be made until requested by the University when notification of admission is received.

REQUIRED TESTS

Although test scores are not generally used in determining eligibility for admission, test data are required as an important part of the University's advisement, curricular development and research programs.



Freshmen

The Washington Pre-College Test, required of all entering freshmen who are graduates of Washington high schools, should be completed during the junior or senior year of high school. Students unable to take the test in high school will do so during orientation. (The fee is \$8.)

The Scholastic Aptitude Test of the College Entrance Examination Board or the American College Test is required of graduates of high schools from other states. Results of these tests, normally taken in December of the senior year of high school, must be received by the Admissions Office before the candidate's eligibility for admission can be determined. Since the SAT or ACT is required of non-resident freshmen, the Washington Pre-College Test need not be taken during orientation.

Transfer Students

Undergraduate transfer students who have completed fewer than 40 transferable credits at their previous colleges must either present Washington Pre-College Test scores or complete the School College Abilities Test (SCAT) during orientation. (The SCAT fee is \$1.) Transfer students who have graduated from out-of-state high schools may submit SAT or ACT scores prior to registration.

REQUIRED HEALTH HISTORY

All new and transfer students are required to submit a personal medical history and verification of a negative tuberculin skin test or chest X-ray within the past 12 months, documented by a health department or physician.

Forms for these health requirements are sent to each new and transfer student who accepts an offer of admission, and the forms must be completed and returned to Western's Health Services Office before the student registers for classes.

DEGREE PLANNING AND PROGRESS RECORD — "THE BLUE BOOK"

Each entering student is provided a personal cumulative record and planning book during orientation. This booklet, typically referred to as "The Blue Book," records transfer credit, provides a convenient check list for completion of General University Requirements, and includes space for records regarding admissions test scores, completion of major requirements, procedures for declaration of major, the student advisement pro-



cess, etc. Transfer student blue books indicate the manner in which transfer credits are used to meet General University Requirements. The blue book also is used to record the student's senior evaluation — a document which provides a record of all courses completed and those needed for completion of a baccalaureate degree.

ORIENTATION

Immediately before each fall quarter, new students may participate in orientation programs designed to introduce them to Western Washington University.

Orientation programs provide students with opportunities:

- to learn more about Western's services, facilities and academic programs,
- to complete required tests,
- to meet faculty members, staff members and other new students,
- to begin the registration process.

HONORS PROGRAM

Freshmen are invited into the Honors Program on the basis of entrance exams, high school grade averages, and/or recommendations. Students already enrolled at Western enter the program on the above bases or may be recommended by a university instructor. See the "All-University Programs" section for additional information.

VETERANS INFORMATION

Each veteran enrolling at Western for the first time on the G.I. Bill must either apply for education benefits with the Veterans Administration or transfer his/her authorization from the last college attended. To insure that allowances are received on time, this should be done well in advance of the academic quarter the student wishes to attend. Assistance in making application is available in Western's Veterans Office.

Veterans should also make certain that the objective they plan to pursue is the one authorized by the Veterans Administration. For instance, if the authorization is for the master's degree, the veteran must enroll in courses acceptable toward that degree. Any necessary changes in objective should be made in advance of registration.

Veterans should be prepared to pay their expenses for at least two months, since the Veterans Administration sends benefit checks only at the end of months during which students have pursued their studies.

Military Credit

No academic credit is given on the basis of military service alone. However, up to 30 credits may be awarded for service schools completed. Courses for which credit is awarded are listed in "A Guide To The Evaluation of Educational Experiences in the Military," published by the American Council on Education.

REGISTRATION

The Registrar's Office works closely with the faculty to develop schedules of courses which serve the needs and interests of Western's students. For the convenience of students and for facilitating academic advising and scheduling, the process of registering for courses at Western has been divided into four parts:

CONTINUING STUDENT REGISTRATION

At mid-term during the fall, winter and spring quarters, students at Western are given an opportunity to advance register for their next quarter's courses. This opportunity enables current students to select their courses early and provides Western's faculty and Regis-

trar's Office with information about the courses for which they should attempt to schedule additional sections.

Each student who advance registers is mailed a statement for fees, together with an addressed envelope in which to submit payment. Because advance registration reserves a student's place in a course, if payment is not received by the specified date prior to the beginning of the next quarter's courses, the student's registration is canceled.

NEW STUDENT REGISTRATION

The first day of each quarter at Western is for registration. (See the Calendar at the front of this General Catalog.) On that day new students and continuing students who did not advance register sign up for their courses and pay their fees. Before that day, each new student should have received additional information and instructions, including a date for his or her academic advisement and program planning conference.

LATE REGISTRATION

Because entering a course late may reduce the student's level of achievement, late registration is permitted only in exceptional cases. After the first five days of instruction in any quarter, a student may register for and enter a course only (a) by obtaining written permission from the course instructor, the department chairperson and the Registrar, and (b) by paying the late registration fee.

CHANGES IN REGISTRATION

Policies concerning changes in registration, such as withdrawal from a course or from the University, are described in the section entitled "University Academic Policies."



FINANCES

At Western the various expenses of a student who is single and a resident of the State of Washington are about \$1,000 each quarter:

Approximate Quarterly Expenses

Tuition and Fees	\$206
Room and Board	515
Books and Supplies	60
Personal Expenses	255

Below are actual costs of various expenses for several student categories and brief descriptions of the financial assistance available at Western through the Financial Aid Office. (Room and board costs at Western are listed under the section entitled "Housing and Dining.")

TUITION AND FEES — 1979-80

(Fees are subject to change as the result of action by the State Legislature or the Board of Trustees.)

Quarterly Charges — Full-Time Students

(Students registering for ten or more credits pay full fees.)

Student Classification	Quarterly Total
Southeast Asian Veteran*	\$162
Resident ¹ , General	206
Non-Resident, General	661
Resident ¹ , Graduate Degree	228
Non-Resident, Graduate Degree	752

Quarterly Charges — Part-Time Students

Two quarter credit minimum.

(Students enrolling for a maximum of nine credits.)

For each credit:

General	\$21.00
Graduate Degree	23.00
Southeast Asian Veteran*	16.00

Auditors

Without credit, each course \$10.00

Full-time students may audit a course without an additional fee; part-time students may audit courses by paying the auditor's fee additionally.

Continuing Education

For each off-campus credit:

General	\$21.00
Graduate Degree	23.00
Southeast Asian Veteran*	16.00

Fees for courses which are offered on a self-sustaining basis are in addition to other fees

¹Residency — Washington State law on residence classification requires that a student be domiciled in the State of Washington for one year immediately prior to the beginning of the quarter for which he or she claims the right to pay resident tuition and fees. Washington State law defines domicile as ... "a person's true, fixed and permanent home and place of habitation" ... In addition, he or she must have established domicile in the state for other than educational purposes. Regardless of age or domicile, the following are entitled to pay resident tuition and fees: any person employed not less than 20 hours per week at a Washington public institution of higher education and the children and spouse; military personnel and federal employees residing or stationed in the State of Washington and their children and spouses; and any veteran whose final permanent duty station was in the State of Washington, so long as such veteran is receiving federal vocational or educational benefits conferred by virtue of his or her military service.

Students enrolled in undergraduate programs who are residents of the Province of British Columbia pay the same tuition and fees as Washington residents.

Questions concerning residency for tuition and fee purposes should be referred to the Admissions Office, Old Main 200.

*For Washington residents only.

Finances

paid to the University. Such courses are clearly identified in the Continuing Education Bulletin.

DESCRIPTION OF TUITION AND FEES

1979-80

	Tuition	Service & Activities Fee	Operations Fee
Resident, General	\$25	\$54	\$127
Non-Resident, General	96	54	511
Resident, Graduate	25	54	149
Non-Resident, Graduate	96	54	602
Southeast Asian Veteran	\$25	54	83

Tuition is used for the construction of academic facilities. It is not used for either Housing and Dining System buildings or support of the University's operating budget.

The Service and Activities Fee is used to amortize, in part, residence halls, dining halls, and student activities facilities; to provide the Associated Students administration; and to support student activities (theatre, forensics, musical activities, intramural and intercollegiate athletics, etc.).

The Operations Fee, with the state's general fund appropriation, is used to support the instruction, library, student services, administration and maintenance functions of the University.

MISCELLANEOUS SERVICE CHARGES

Parking

(For parking and traffic regulations, see Appendix F.)

Quarterly Total**

On-campus parking	\$18
Peripheral parking	\$4-\$8
Motorcycle parking	\$1.50

Late Registration/Late Course Adds

A fee of \$10 is charged if a student registers after the fifth day of instruction in a quarter. A fee of \$5 is charged if a student adds a class after the fifth day of instruction. Either action requires written permission of the course instructor, department chairperson and Registrar.

Fees for Required Tests

Freshmen who have not submitted appropriate examination results will complete the Washington Pre-College Test at a fee of \$8. Transfer students without appropriate test results will complete the School and College Abilities Test (SCAT) at a fee of \$1.

Special Examination Charge

Those who seek credit through examination pay \$2 per credit.

Graduation Fees

Baccalaureate Degree	\$ 8.00
Master's Degree	5.00
Placement Service fee for student with prior degree who earns teaching certificate only	2.00
Provisional Teaching Certificate	15.00
Standard Teaching Certificate	15.00

(Fees for teaching certificates are set by the State of Washington and are in addition to the graduation fees.)

Music Rentals

Pipe organ, other instrument, or practice space rental costs \$2 per quarter.

Transcripts

A reasonable number of transcripts will be issued free of charge. Requests should be submitted to the Registrar's Office one week in advance of need.

REFUNDS OF FEES

In ordinary circumstances, a student who withdraws before the sixth day of instruction in a quarter receives full refund of tuition and fees, except for the initial registration deposit required of new students.

A refund of one-half of tuition and fees is made to a student who withdraws on or after the sixth day of instruction, provided such withdrawal occurs within the first 30 calendar days following the first day of instruction. After the 30th day, no refunds are granted.

Note: The first \$50 of tuition and fees paid by newly admitted students, whether paid as a separate deposit to accept an offer of admission or as a part of total fees at the beginning of a quarter, is non-refundable.

*For Washington residents only.

**Estimated at time of printing.

Change in Student Status

A student who has paid part-time fees and who adds classes bringing the total credits to ten or more will pay the balance between fees already paid and the full-time fee. A full-time student who drops classes so that the remaining total of credits is nine or less will receive a refund of (a) the difference between the full and part-time fees if the change is made before the sixty day of instruction, or (b) one-half the difference if the change is made from the sixth day of instruction through the thirtieth calendar day following the first day of instruction.

Financial Obligations

Admission to or registration with the University, conferring of degrees and issuance of academic transcripts may be withheld for failure to meet financial obligations to the University. (WAC 516-60-006, filed 11/17/72).

When a National Direct Student Loan has been disbursed to a student while attending the University, failure to appear for an exit interview before graduation or withdrawal constitutes failure to meet a financial obligation and transcripts may be withheld.



FINANCIAL AID

Western Washington University makes every effort to provide financial assistance to eligible applicants through loans, work, scholarships, grants, or some combination of these and other student aid programs. It is expected, however, that students will meet part of their needs through savings from summer employment and that parents will contribute in proportion to their financial ability.

The limited funds available at Western for student aid programs are used to assist students whose attendance seems educationally sound and whose attendance would be impossible without such assistance.

TYPES OF FINANCIAL AID

A student who applies for financial aid at WWU is considered for a variety of federal, state and/or institutional programs. Applications are evaluated to determine each student's need, and awards are made with careful adherence to federal, state and institutional guidelines. Consideration can be given only to citizens of the United States or students residing in the U.S. on permanent visas.

Grants are available only to *undergraduate students* who demonstrate exceptional financial need. Grants are awarded as gift aid; repayment is not required.

Basic Educational Opportunity Grant (BEOG). All undergraduate students are eligible to apply for the federal BEOG. It is intended to be the foundation of a financial aid package and may be combined with other forms of aid in order to meet educational costs.

Supplemental Educational Opportunity Grant (SEOG). The federal SEOG may not exceed more than one-half of the total assistance given to a student; therefore, such grants must be matched with institutionally administered loans, scholarships or employment.

State Need Grant. The State of Washington offers State Need Grants to needy and disadvantaged students who are residents of this state. All eligible students will be nominated for selection by the State Council for Postsecondary Education. To be considered for nomination, students must provide parents' income information unless they can demonstrate that they have been self-supporting or financially independent for at least five years.

Tuition and Fee Waivers. Available to needy students who are residents of the State of Washington.

Work-Study Programs (State and Federal). Students, particularly those with great financial need, may be offered part-time employment under work-study programs. On-campus jobs are available in nearly every academic area, as well as in the student union, library, computer center, administrative offices, maintenance department, and other campus agencies. Off-campus jobs in the Bellingham area are limited to positions related to students' academic or career interests, and provide opportunities with youth groups, day care centers, and social service agencies.

National Direct Student Loans are long-term, low-interest loans available to undergraduate and graduate students at WWU. The size of the loan granted depends upon the applicant's eligibility and the funds available at WWU.

Interest does not accrue and repayment does not begin until nine consecutive months following a student's enrollment on at least a half-time basis. Loans bear interest at the rate of three per cent per year, and repayment of the principal may be extended over a 10-year period, with a minimum payment of \$30 per month.

Repayment may be deferred for three years while the borrower is in graduate school, the Armed Forces, Peace Corps, or Vista. Borrowers may receive partial cancellation of indebtedness through service in certain types of teaching or in the U.S. Military.

WWU Scholarships. Two categories of scholarships are available:

- Academic scholarships may be awarded to entering freshmen, transfer students, and returning students in recognition of outstanding scholarship.
- Departmental/Designated scholarships are awarded to students in specific majors or departments.

Entering freshmen are urged to explore scholarship opportunities from their hometown organizations with the aid of their high school counselors. A list of Western's departmental/designated scholarships is available from the Student Financial Aid Office.

HOW TO APPLY FOR FINANCIAL AID

To be considered for the financial aid programs described above, the following application materials must be submitted: College Scholarship Service Financial Aid Form (FAF), Basic Educational Opportunity Grant Student Eligibility Report (SER) and WWU Financial Aid Application.

Applications should cover either a three-quarter academic year (October 1 to June 15) or a single quarter. To insure first consideration for available funds, application materials must be received by the Student Financial Aid Office by April 1. Application materials received after April 1 receive full consideration, but only to the extent that financial aid funds are available.

SUMMER SESSION AID

Financial aid applications for summer session attendance are accepted only from students receiving financial assistance at WWU during the previous academic year. Priority is given to students who must attend in order to graduate in August.



OTHER ASSISTANCE AVAILABLE AT WWU

Guaranteed Student Loan [GSL]. Graduate and undergraduate students are eligible to borrow through this federal program provided that they are enrolled at Western, or have been accepted for enrollment, at least half-time. Students apply for GSL loans through the university to participating banks or credit unions. The application process takes approximately three weeks, and application forms are available from Western's Student Financial Aid Office.

Repayment begins nine months after the student leaves school and may be deferred while the borrower is in graduate school, the Armed Forces, Peace Corps or Vista. Monthly payments are \$30 or more. Seven per cent simple interest per year is charged beginning at the time the loan is granted; however, the federal government pays the interest while the student is in school and during the deferred payment period.

Part-Time Employment. The Student Employment Center provides information and assistance to students seeking part-time employment, either on or off campus.

On-Campus Employment. Many students are successful in obtaining part-time jobs in Western's academic and administrative units after they arrive on campus. Since advance employment cannot be guaranteed, Western's Student Employment Center does not accept advance applications for on-campus jobs; the office does provide information and assistance to students after they arrive on campus.

Off-Campus Employment. The Student Employment Center provides Western's students with information about part-time jobs listed by local employers and by the local State Employment Security Office. Such jobs are few, however, and students should not anticipate meeting a significant portion of their university expenses with earnings from part-time, off-campus employment.

Graduate Assistantships in limited numbers are available to qualified graduate students. Inquiries should be addressed to the Dean of the Graduate School.

HOUSING & DINING

Western Washington University maintains a wide variety of housing accommodations for its students. There are residence halls for men, women and coed living accommodations. The University also has apartments for single and married students. Assignments to on-campus housing and listings of off-campus housing accommodations are made without reference to race, age, marital status, creed or national origin.

The University does not maintain regulations about where students must live. However, students are encouraged to investigate housing accommodations thoroughly to assure conditions which promote their academic welfare and personal development.

UNIVERSITY RESIDENCE HALLS AND DINING HALLS

With few exceptions, rooms are designed for occupancy by two persons. Each is furnished with single beds, mattresses and pads, desks, desk lamps, telephone, access to TV cable and a wardrobe or closet. The occupant furnishes pillow and case, sheets, blankets, towels, alarm clocks and other personal necessities. Because of fire danger, electric open element appliances are not permitted in student rooms.

Kitchenette and laundry facilities are provided in central areas. A recreation room, reception area, lounge, special study rooms, vending machines, extra storage space for trunks, and bike racks are provided in each hall. In addition, some halls have saunas, pool tables and other recreational facilities.

Three dining halls are located close to the residence halls. Students living in residence halls must take their meals in the dining halls, all of which are coeducational and

serve 21 meals per week plus special dinners and banquets. No meals are served during vacation periods.

Reservations for accommodations in the residence halls are made by sending a completed application to the Director of Housing and Dining, Western Washington University, Bellingham, Washington 98225. No deposit is required with the application. Applications will be accepted only if the student meets one of the following conditions:

1. He or she has been admitted to the University as a new student and has prepaid the advance registration fee.
2. He or she is presently enrolled or has previously been enrolled at Western Washington University.

Space in residence halls is assigned according to the date of receipt of the application for room in a hall. The room assignment is made when the student moves in, based upon the information supplied by the student on roommate preferences. Official assignments are made by mid-June for fall quarter and one month prior to the beginning of other quarters.

Cancellations and Refunds

Students making application and later deciding they do not want accommodations must cancel their reservation by notifying the Director of Housing & Dining in writing prior to acceptance of a residence hall assignment.

In accepting an assignment to a residence hall, each assignee agrees to the Room and Board Agreement and makes a security deposit of \$60. Deadlines for the payments

are July 1 for fall quarter, or two weeks after the assignment is made. The \$60 security deposit will be retained by the University as a damage and/or reservation deposit as long as the student lives in the Housing system.

Once the payment of the security deposit is made, cancellation of a reservation cannot be made without penalty. Cancellations received after the payment is made — but prior to August 1 for fall quarter, December 1 for winter quarter and February 15 for spring quarter — will result in a forfeiture of \$30. Cancellations made between August 1 and September 15 for fall quarter, between December 1 and December 20 for winter quarter, or between February 15 and March 5 for spring quarter will result in a forfeiture of \$45. Cancellations made after the above stated deadlines will result in forfeiture of the entire \$60 deposit unless, because of unusual circumstances, a refund is granted by the Director of Housing & Dining.

Charges for damage to or loss of residence hall property in the custody of the student or for damage to the hall premises will be billed to the student or withheld from refunds.

If a student is found ineligible for admission to the University, the entire deposit will be refunded.

APARTMENTS FOR SINGLE AND MARRIED STUDENTS

Birnam Wood consists of 132 apartments for 532 students on a wooded seven-acre site near the campus. Each apartment has a living room, dining room, kitchen, outside deck, two-compartment bath, storage room, and two bedrooms furnished for four students with the usual furnishings, drapes and wall-to-wall carpeting. Utilities are provided as well as telephone service, television-FM cable and parking.

Assignments to the single apartments are made by date of application, preference being given to students with advanced class standing, those presently living on campus, and groups of four persons. A \$100 deposit is required on each apartment when assignments are made.

Buchanan Towers, located at the south end of the campus, is an eight-floor residence hall which houses 404 students in one- and two-bedroom apartments. Each standard unit has a living-dining-kitchen area, two large bedrooms and a bathroom. The lower floor has a recreation area and central lobby. Furnishings, utilities, telephone service, television cable and extra storage space is provided at no additional cost.

Bakerview Mobile Homes owned by the University are located on a wooded site seven miles north of the campus. All units are unfurnished, and tenants must pay for some utilities.

QUIET HALL

One large coed hall has been established as a quiet hall where quiet hours are set and respected by all residents. (Students in other halls often elect to make a wing or floor quiet also.)



Housing & Dining

LIVING COSTS

The following rates for room and board are in effect for the 1978-79 academic year:

Double room and 21 meals per week, academic year	\$1,425
Double room and 15 meals per week, academic year	\$1,404
Double room and 10 meals per week, academic year	\$1,362

Quarterly rates are slightly higher.

Breakfast, lunch and dinner are served seven days per week in the dining halls. Students may take 10, 15 or all 21 of their meals in the dining halls each week. Meal tickets are good seven days per week.

Future rates may be slightly higher because of inflationary factors. All rates are available from the Housing Office upon request.

Apartment rates for 1978-79 are as follows:

Birnam Wood

Furnished two-bedroom unit with all utilities:

Quarterly Cost \$735-\$785

Buchanan Towers

Furnished two-bedroom unit with all utilities:

Quarterly Cost \$470-\$660

Bakerview Mobile Homes

Unfurnished two-bedroom unit without facilities:

Per month \$125-\$190

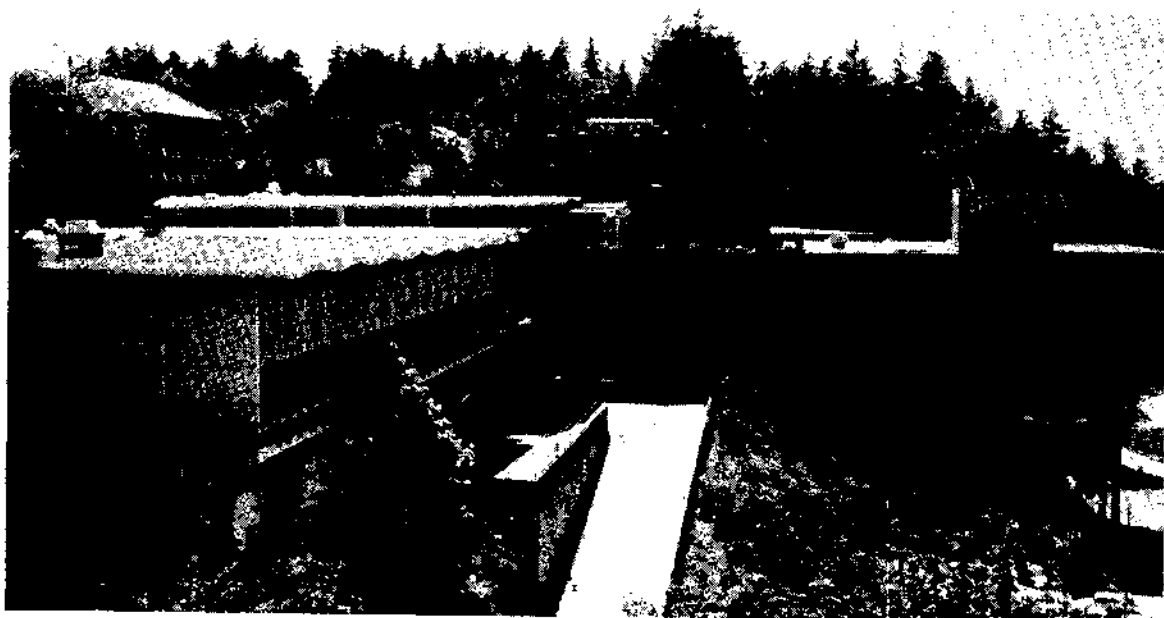
Other rates and facilities are developed each year to meet student requests for other varieties of housing. Updated information may be requested from the Housing Office at any time.

For more information about housing and dining on campus, write the Director of Housing & Dining, Western Washington University, Bellingham, Washington 98225.

OFF-CAMPUS HOUSING

The Off-Campus Housing Listing Service maintains lists of available off-campus rentals. Because of constant changes in availability, these lists are not printed for mailing. Off-campus rentals are in great demand, and it is to the student's advantage to arrive in Bellingham prior to the start of the quarter to make living arrangements. Although the Listing Service does not make individual rental agreements or assume responsibility for the condition or suitability of listings, it offers helpful information on renters' insurance and contracts with landlords, as well as a guide book for renters and a mediation service for disputes between tenants and landlords.

Information about off-campus listings is available by writing the Off-Campus Housing Listing Service, High Street Hall, Western Washington University, Bellingham, Washington 98225.



STUDENT AFFAIRS

Western Washington University is committed to helping each student benefit from the potential inherent in a university education.

The basic responsibility of the Division of Student Affairs is to provide each student every opportunity possible to evolve into the fully functioning, responsible and productive individual central to the goals of the University.

Western's Student Affairs professional staff offers services and assists students in developing an extensive variety of activities and programs so that full advantage can be taken of the University's diverse learning opportunities. Services include financial assistance, a health center, academic advisement, personal counseling, career planning and placement, support services for minority, international, handicapped, veteran and returning women students. The broad range of co-curricular learning experiences — many of them initiated and administered by students — includes recreational, educational and social activities in the Viking Union, as well as in the residence halls and at off-campus sites.

OFFICE OF STUDENT LIFE

Any student who has questions or concerns about academic or personal issues is welcome to come to the Office of Student Life. Assistance is available either directly or through referral to respond to virtually any student concern. Professional staff assist in various support services for different student populations and a wide variety of student programs.

Ethnic minority and educationally-disadvantaged students are counseled and assisted in such areas of need as academic tutoring,

academic programming, financial aid, housing, personal and social problems — or any other problem area where there is need for support.

Achievement classes are offered to assist students in study habits, interpersonal relations, writing research papers, career development, graduate school and the opportunity to communicate and share with other minority students and administrators.

Physically-handicapped students may obtain readers, note-takers, tutors, and sign language interpreters; career choice and placement counseling; volunteer job experience, off-campus internships, part-time employment; academic and personal advisement; information regarding parking privileges and transportation; and liaison with such state agencies as Vocational Rehabilitation and State Services for the Blind through the Office of Student Life. The study rooms of Western's library contain tape recorders, record players, braille dictionaries, and special devices for magnifying print. The Office of Student Life coordinates the taping of classroom materials, a service provided by the State Library Service for the Blind.

International students may obtain academic and personal advisement as well as immigration information from the Office of Student Life. To enable international students to become acquainted with people in the community, the Office of Student Life arranges for host families. Information about the University's International Club may also be obtained in this office.

WING (Women Involved in New Goals) is a program provided for non-traditional women students at Western. The service is designed especially for women who are just beginning or continuing their education for the purpose

Student Affairs

of upgrading skills, exploring a career or personal enrichment.

ACADEMIC ADVISEMENT CENTER

The Academic Advisement Center provides a variety of academic advisement services with emphasis on the pre-major student. Areas of service include new and returning student academic orientation, general advisement for the pre-major and pre-professional student as well as special advisement support for students experiencing academic difficulties. The Academic Advisement Center assists students in planning to fulfill the General University Requirements and in exploring the curricular choices of the University, especially those students undecided about a major or contemplating a change. Services include the following:

For all students:

- Administration of the scholastic standing process
- Arrangements for non-medical leaves of absence
- Mid-term separations and exit interviews

For new students:

- Assistance in developing awareness of Western's curricular offerings
- Appropriate contact with departmental or pre-professional faculty advisers
- Peer adviser assistance during the registration process
- Updating advisement for students returning to Western after an extended absence

For continuing students:

- Drop-in center for individual concerns as they arise
- Referral to appropriate departmental major advisers
- Specialized advisement for pre-professional majors
- Assistance in clarifying academic and/or career goals
- Assessment of advisement needs or learning problems and referral to such campus resources as the Writers Workshop and the Reading and Study Skills Center

Since Western's various colleges, schools, and programs offer academic advisement, students should also review the pertinent sections of this General Catalog and contact appropriate individuals in the college, school or program of their choice.

The Academic Advisement Center located in Old Main 275, is open daily from 9 a.m. to 4 p.m.

COUNSELING CENTER

The Counseling Center (Miller Hall 262, 676-3164) offers educational, vocational and personal counseling.

Personal counseling may be helpful in gaining self-understanding, increasing social and personal effectiveness, and learning to manage stress associated with being a university student. Counseling is offered to couples for improving communication, resolving conflicts, and enhancing relationships.

Educational and vocational counseling can be helpful in assessing interests, abilities and aptitudes, selecting an appropriate major, overcoming learning problems, managing exam anxieties, developing study skills and exploring long range vocational goals. Carefully selected standardized tests of interests, aptitude, and personality characteristics are usually included as part of the counseling process. The Center's Occupational Library houses a collection of occupational and educational materials offering information useful to students in making educational, vocational and career decisions (the library is open to all students, not just those using counseling services).

Depending upon student needs and requests, the Counseling Center also offers groups and special programs on interpersonal communication and skills, assertiveness training, study skills, stress management and weight control. Consultation services are provided for individual and campus groups on how and when to refer to the Counseling Center, training in basic counseling skills, and student adjustment and development.

Counseling Center services are for currently enrolled students. However, transitional planning is available to students who have been dropped for low scholarship or are recently withdrawn or graduated. Courtesy consultation and referral service is offered to faculty and staff who may be seeking information about psychological services.

Counselors at the Center are professionally trained and experienced in counseling/clinical psychology and social work. All information gathered during the course of counseling is confidential and released only with student consent.

The Counseling Center is open from 8 a.m. to 5 p.m., Monday through Friday.

CAREER PLANNING AND PLACEMENT CENTER

Western's Career Planning and Placement Center focuses on the full continuum from career planning to placement. Major services include student self-assessment, analysis of job market information, how to make career choices, how to translate these choices into educational goals, how to obtain appointments with employers, and how to become employed.

All Western students — regardless of degree, school, or college — are urged to seek and use the services of the Center early in their university programs.

CAREER PLANNING PROGRAMS AVAILABLE TO ALL STUDENTS

Students are assisted to think and learn more about their interests, values, skills, personal assets, and life goals as a basis for choosing and preparing for careers. Counseling is also offered to assist students to understand the realities of the work world and to realistically relate their own career interest, goals and needs to the opportunities available.

PLACEMENT SERVICES FOR GRADUATING SENIORS

Graduating seniors are encouraged to register formally with the Placement Center and to establish a file of "placement credentials" during the first quarter of their senior year. The Center provides special workshops and seminars on job search skills and techniques necessary to be competitive in a competitive job market. These include programs in resume preparation, letter writing skills and interviewing techniques.

When current placement credentials are on file in the Center, students are eligible to participate in on-campus interviews, to review job notifications, and to use special aids in contacting potential employers. (Placement credentials may also be used to facilitate entry into graduate schools.)

CAREERS INFORMATION LIBRARY

The Center maintains a comprehensive library of career and job trend information, including general career planning information, relationships of academic majors to occupational areas, and labor market trends and needs. The library is an integral part of both the career planning and the placement process. Students are encouraged to begin using the Center's library as a resource center no later than the sophomore year.

SERVICE TO ALUMNI OF WESTERN AND GRADUATES OF OTHER INSTITUTIONS

Alumni may obtain placement services if they update and activate their placement credentials. Graduates of other institutions working toward advanced degrees and certificates at Western or who have earned 30 or more credits at Western may also use the Center's placement services.

Western's Career Planning and Placement Center subscribes to an open-door recruitment policy and operates under federal and state non-discrimination statutes.

RESIDENCE HALL PROGRAMS

The staff of the Office of Residence Hall Programs provides a broad variety of educational programs for students who live in campus housing facilities. Professional staff and student staff members assist students through personal counseling, activity planning and improvement of the on-campus living experience; they also work directly with student leaders and other university personnel to provide out-of-class learning experiences in leadership, program planning and evaluation, career and life planning, and general university community involvement.

Resident students may become directly involved with the implementation of hall programs through three primary avenues. *Residence hall staff positions* are available each year to students who demonstrate an ability to work effectively with others in activity planning and para-professional advising. Student leadership experience through *membership on the Inter-Hall Council* is another avenue for contributing to a healthy on-campus living environment. Students may also obtain *membership on residence hall governing boards, campus committees, or special activity task forces*. All of the these opportunities provide practical leadership experiences, as well as student involvement in the shaping of a total program of residence education.

DAY CARE FACILITIES

The Associated Students Co-op Day Care Center, a student/parent cooperative operated in Western's Fairhaven College buildings, serves children of student parents from 7:30 a.m. to 5:30 p.m. on the days Western is in session. Children from two through five years of age may be enrolled. To join, members pay a \$20 membership fee; quarterly fees after joining depend on

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income and range from \$150 to \$250 for the first child and one-half this quarterly fee for all additional children. In addition to these payments, each member works five hours per week at the Co-op Day Care Center.

More information about day-care facilities on campus and in Bellingham may be obtained from the Office of Student Life.

HEALTH SERVICES

Good health is recognized as essential for students to derive the maximum benefit from their time at Western. Health care provided by the Health Service includes treatment of acute problems, preventive health measures, and health education.

Health Service is available without charge (there is a fee for some tests and supplies) to all students currently enrolled for six or more credits per quarter. It is not necessary to be a member of any health care or health insurance plan to use this service.

The Health Service is located at 25 High Street Hall. Its staff consists of physicians, registered nurses, and receptionists. The Health Service is open weekdays from 8:30 to 11 a.m. and from 1 to 4 p.m. At other times between 8 a.m. and 5 p.m., urgent problems will be seen. Any student needing medical care should go directly to the Health Service. Appointments with the doctor are made by the nurse when the student arrives at the Health Service office. No appointments are made by phone.

Care provided at the Health Service includes those problems generally treated in a medical office. Students with more complicated conditions are evaluated and referred to appropriate care in Bellingham or in the student's home community. Services offered on campus include medical evaluation by nurses and physicians; treatment, medication and prescription as indicated; referral for laboratory, x-ray and consultation as necessary; preventive medicine or wellness conferences; antigen injections; diet/weight/nutrition appointments; free venereal disease screening and treatment; pregnancy testing with prenatal, adoption and abortion referral.

At times when the Health Service is closed, the Whatcom Emergency Service at St. Luke's Hospital is available for urgent care needs. Note: the university assumes no financial responsibility for care dispensed at the hospital emergency room. Students who engage this service must plan to use private or health insurance funds to cover expenses.

An Emergency/Illness and Injury policy is available to students enrolled for six or more credits per quarter through Whatcom County Physicians Service. The cost is low and sign up time is during the first week of each quarter. Brochures are available at the Registration Center, Cashier's Office and Student Health Service.

All new or transfer students, including graduate students, must submit a medical inventory health form which includes:

- (a) A health history completed and signed by the student;
- (b) A negative tuberculin skin test or chest x-ray documented by a physician or health department.

Both of the above must be on file at the Health Service before the student receives registration privileges. While it is *not* mandatory, the Health Service strongly encourages a complete physical examination by your physician if this has not been done recently.

Medical Leaves of Absence

Students are encouraged to discuss absence from courses for medical reasons with their instructors.

All medical leaves of absence are issued through the Health Service, where the student must be seen by a nurse or physician to obtain a leave. If an accident or emergency illness requires the student's absence, he or she may be placed on leave by telephoning the Health Service regarding the medical problem and furnishing course schedule, course sections, and instructor's names.

Verifications of medical leave of absence are mailed to each instructor, the Office of Student Life, the Registrar, the student and any other office designated by the student.

STUDENT ACTIVITIES

The program of Student Activities at Western is designed to provide maximum opportunity for student participation in a wide range of co-curricular experiences. Student Activities are in no sense incidental in the plans of the university; rather they are integral and highly important parts of the total range of educational experiences offered by the university. Students are encouraged to become involved in some aspect of the activity program since these activities provide educational and social experiences

supplemental to, and often unavailable in classroom situations.

Many student activities are initiated and administered by students themselves through the Associated Students. Students may participate in the governing bodies of student-administered services, activities, and facilities not only to help determine the quality of co-curricular life, but also to gain administrative experience. Students may also participate in the university governance system as elected or appointed members of its various councils and committees.

Opportunities to serve fellow students and to develop skills in a para-professional capacity are available in a wide variety of student-provided services. These include drug, legal, sex, and environmental information services; a volunteer center; A.S. Community Recycling Center; a student newsletter, and a Cooperative Day Care Center.

Program Commission

From rock to Rembrandt, the Associated Students Program Commission coordinates and presents a large part of Western's entertainment, educational, and social activities. Weekly films, art exhibits, coffee houses, dances, symposiums, festivals, and a dance program are regularly provided by the Program Commission. In addition, it presents concerts and speakers such as Al Stewart, Warren Farrell, Cecil Andrus, Arlo Guthrie, George Benson, John Klemmer, James Cotton, Daniel Ellsberg, Bonnie Raitt, Chuck Mangione, and Esther Satterfield — all of whom have appeared at Western recently.

FM Radio

KUGS, at 89.3 on the FM dial, is Western's student-managed radio station. With a complete range of music, news, and educational programming, KUGS offers students opportunities for participation as engineers, disc jockeys, newswriters and managers.

Outdoor Program

Taking full advantage of the beautiful and varied country of northwest Washington, the Outdoor Program functions as a catalyst and resource center for hiking, ski touring, mountaineering, snow-shoeing, rock-climbing, bicycling, back-packing, river rafting, camping, sailing, canoeing, kayaking and many other activities. Included in the Outdoor Program Center are environmental, map and outdoor libraries, sign-up sheets for trips, informal courses, and many special events for both beginners and experts. A full range of outdoor equipment, such as rafts,

backpacks, cross-country skis and cycling gear, is available for rent from the Equipment Rental Shop.

Club Sports

Competition and/or involvement is offered through the Club Sports program of the Associated Students in rugby, soccer, sailing, chess, bridge, archery, lacrosse, fencing, scuba, karate, water skiing, swimming, water polo, and indoor recreational games. All of these clubs offer instruction.

Special Interest Groups

Special interest organizations offer involvement in a wide range of activities. More than fifty different organizations exist within the Associated Students including groups such as the Ethnic Unions, International Club, Cheerleaders, Radio Club, Women's Center, Society of Automotive Engineers, Wilderness Preservation Union, Society of Plastic Engineers, and various departmental clubs. Many religious groups also function at Western.

Departmentally Related Activities

Intramurals, athletics, forensics, theater/dance, music, performances, and publications are important University programs. Faculty from appropriate departments work closely with these student activities, but students need not be affiliated with the departments to participate. Students may receive credit for participation in most of these activities. The comprehensive Intramural Program includes many individual and group sports, through which students enjoy physical exercise and develop skills for leisure-time activities.



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Intercollegiate Athletics

Intercollegiate athletics involve many students as participants and spectators. Men's sports include baseball, basketball, crew, cross-country, football, golf, soccer, tennis, track and field, and wrestling. Women's sports include basketball, cross-country, field hockey, soccer, tennis, track and field, and volleyball. The University Men's Program is a member of, and governed by, the Evergreen Conference and the National Association of Intercollegiate Athletics. The University Women's Program is a member of the Association for Intercollegiate Athletics for Women and the Northwest College Women's Sports Association.

Forensics and Theater

The Forensics Program offers opportunities for developing new interests and skills through tournaments ranging from local, low-key competitions to the National Debate Tournament. The Theater/Dance Program continues throughout the regular academic year and summer. Experience in all phases of theater/dance activities is available.

Music Activities

The presence of the Department of Music has resulted in numerous student activities of high artistic and professional quality. The wide range of vocal and instrumental groups on campus provides musical activity for students at acceptable levels of ability, and the variety of musical entertainment available is sufficient to satisfy listeners of all tastes. Some of the opportunities for participation available to students are the Symphonic Band, Wind Ensemble, University Choir, Concert Choir, Symphony Orchestra, Stage Bands, Jazz Ensembles, Opera, Collegium Musicum, and numerous smaller ensembles. Membership in all of these ensembles is attained through either a performance audition or consent of the instructor. See the Department of Music section of this catalog or contact the Department of Music for further information regarding organized music ensembles and auditions for membership.

Publications

Publications include the *Western Front*, a twice-weekly newspaper; *Klipsun*, a twice-

quarterly magazine; and *Jeopardy*, the annual literary magazine. Student contributions of time and talent are essential, and new students at all academic levels are encouraged to join the staffs each quarter. Students may receive credit for working on these publications through the English and Journalism Departments.

Television

A student-produced weekly color TV news show carried on the cable system serving Bellingham provides experience in news-gathering, editing, scriptwriting, videotaping, studio production and on-camera performance. Credit is available through the Journalism, Speech and Technology Departments.

Viking Union

As the community center of the campus, the Viking Union is designed to play an integral role in the co-curricular program. The Union houses offices for the Associated Students' government, services, and activities; and the Viking Union/Student Activities administrative offices. Also located in the Union are meeting rooms, lounges, a music listening room, printshop, outdoor equipment rental shop, several food service areas, an information center/smokeshop, a delicatessen, commercial bank, art gallery, games room, and vending area.

Recreational Opportunities

Recreational facilities available to the university community include Lakewood, a ten-acre site on Lake Whatcom, operated by the Associated Students, which offers sailing, canoeing, swimming, boating, and picnicking. The Associated Students also operate Kulshan Cabin, located at timberline on Mt. Baker, under a permit from the U.S. Forest Service. The cabin serves as a base camp for climbing in the area, as well as a destination for day hikes in the Cascades. In addition, Viqueen Lodge, located on a 13-acre tract on Sinclair Island and operated by the university, offers overnight accommodations at the entrance to the San Juan and Gulf Islands.

STUDENT RIGHTS AND RESPONSIBILITIES

The complete text of the Guide to Student Rights and Responsibilities is included as Appendix B at the back of this catalog.

UNIVERSITY ACADEMIC POLICIES

Western's academic policies have been developed to guide students, faculty, and administrators and to assure consistent procedures in their mutual academic concerns. The policies described below pertain to all of Western's academic units.

ADVANCED PLACEMENT AND COURSE CHALLENGE

A regularly enrolled full-fee paying student may apply to challenge any course (except conferences, special projects, and physical education activities courses), and if achievement commensurate with the expectations of a given course is demonstrated, the student receives credit for the course. Such achievement may be demonstrated by:

College Entrance Examination Board Advanced Placement Examinations in certain subjects. The department concerned determines the minimum acceptable score.

One quarter of successful performance in an advanced course in a sequence which is developmental in nature can, upon departmental recommendation, qualify a student for credit for the preceding course; admission to the advanced course is subject to permission of the department.

Challenge examination or procedures prepared by the department concerned.

The following regulations govern course challenges:

1. Students desiring to challenge a course should apply to the University Examiner by the fourth week of the quarter. The time and procedure to be followed in completing the evaluative process will be

announced by the Examiner. A fee of \$2 per credit is charged.

2. The result of the challenge is recorded as "Satisfactory" or "Unsatisfactory" on the student's permanent record and is not used in computing grade point averages.
3. The challenge application will normally be denied:
 - (a) if the student is currently enrolled in the course;
 - (b) if the student has previously established credit for a similar course at this or another university;
 - (c) if the student has previously failed the course;
 - (d) if the student has previously challenged the course and failed;
 - (e) if the student has previously audited the course;
 - (f) if, in the judgment of the University Examiner, in consultation with the department concerned, the challenge procedure is inappropriate.

COURSE NUMBERING

Courses numbered from 100 to 299 are classified as lower division; those numbered from 300-499 as upper division. Generally, the first digit of a course number indicates its intended class level:

- 100-199 first year (freshman) courses
- 200-299 second year (sophomore) courses
- 300-399 third-year (junior) courses
- 400-499 fourth-year (senior) courses
- 500-599 graduate student courses
- 600-699 master's and/or post master's

Students are not permitted to take courses more than one year above their class standings except in unusual circumstances.

Academic Policies

The numbers 300, 400, and 500 are used to designate Directed Independent Study in a given field. Such courses are available only through prior arrangement with the instructor and with the approval of the department chairman.

Any undergraduate student wishing to enroll in a course numbered 500 or higher must obtain the written approval of the Dean of the Graduate School. (See *Graduate Catalog*.)

The numbers 197, 297, 397, 497 and 597 are reserved for courses generally offered only once. The number 445 is reserved for topics showing "Current Trends." The number 417 is for seminars in specialized areas of interest.

Courses listed in this general catalog constitute a record of the total academic program of the University. Except for unforeseen scheduling and personnel circumstances, it is expected that each course will be offered during the period of this catalog. For an exact scheduling of courses at Western, students should consult the annual class schedule, the summer catalog and bulletins of the Center for Continuing Education.

PREREQUISITE

The student is responsible for assuring that he or she has satisfied all prerequisites before registering for a given course. Should the student lack specific prerequisite courses, but believe he or she has nevertheless mastered the prerequisite knowledge, he or she must consult with the course instructor before registering.

A student who has registered for a course without satisfying prerequisites or obtaining permission may be required by the instructor to withdraw from the course.

CREDITS AND CREDIT LOADS

A student's academic work is recorded quantitatively in credits and qualitatively in grades. Western's concern for its students' academic achievement is a major reason for its policies concerning credit loads.

At Western, an academic credit is a measure of the total time commitment required of a typical student in a particular course of study. Total time consists of three components: 1) time spent in class; 2) time spent in laboratory, studio, field work, or other scheduled activity; 3) time devoted to reading, studying, problem solving, writing,

or preparation. One credit hour credit is assigned in the following ratio of component hours per week devoted to the course of study: 1) lecture course — 1 contact hour for each 1 hour credit (2 hours outside preparation implied); 2) laboratory or studio course — at least 2 contact hours for each 1 hour credit (1 hour outside preparation implied); 3) independent study — at least three hours work per week for each 1 hour credit.

Since each hour in a course requires two additional hours of study, and since students usually register for several courses, Western has established the following credit load policies for undergraduate students:

- The standard load per quarter for undergraduates is 15 credits; during the first quarter of residence, a load must not exceed 17 credits. Before registering for more than 15 credits, students should consult with their advisers.
- After the first quarter of residence, the maximum allowable load is 20 credits per quarter.
- An employed student is expected to reduce his or her academic program and credit load accordingly.

See the Summer Catalog for load limits during the summer session.

AUDITORS

Auditors are persons who desire to attend courses without credit. Admission as an auditor requires prior approval of the instructor and Registrar, as well as payment of a \$10 fee per course. Regularly enrolled full-time students do not pay an additional fee for auditing. Since auditors are not active participants, certain courses may not be audited (physical education activities, laboratory courses, studio courses, etc.).

FULL-TIME STATUS

The payment of full fees and tuition defines full-time undergraduate enrollment status for students to be eligible for on-campus jobs, student offices and memberships on University committees, councils, commissions and task forces.

Certain programs have different definitions of full-time undergraduate status (i.e., athletic eligibility, financial aid programs, Social Security benefits, Veterans Administration, etc.). *Students are advised to check carefully to determine that they meet the definition of "full-time enrollment" for the program in which they are participating.*

Graduate students should consult the Dean of the Graduate School for a definition of "normal progress."

CHANGES IN REGISTRATION

Students may enter new courses after the first week of instruction only after obtaining written permission of the instructor, the department chairperson, and the Registrar, and after paying the late add fee.

Formal withdrawal from any course must be made in the Registrar's Office. Students leaving a course without formal withdrawal receive a failing grade. Course withdrawal during the "Drop and Add" period at the beginning of each quarter is considered to be a change in initial registration and no grade results. From the sixth day through the eighth week of a quarter, course withdrawal results in a grade of "W" on the student's permanent record. After the eighth week of a quarter, course withdrawal is not permitted.

Formal withdrawal from the University may be made at any time before the final two weeks of a quarter. Students who leave the University without formal withdrawal receive failing grades. Students should begin the withdrawal process in the Registrar's Office.

COURSE ATTENDANCE

Course attendance is required at the discretion of the instructor. Excuses may be granted by the Health Service or authorized University personnel.

FINAL EXAMINATIONS

Final examinations, if given, must be administered by course instructors during the last week of each quarter. As a matter of University policy, individual students are not permitted to take early final examinations. Failure to take the final examination in any course normally results in a grade of "F." When extenuating circumstances make it impossible for a student to appear at a scheduled final examination, he or she may negotiate a contract in advance with the instructor to receive a grade of "K" (incomplete), a privilege available only to students whose achievement in the course is satisfactory. Removal of the "K" grade should be accomplished early in the following quarter. (See "Grades and Grade Reporting.")

GRADES AND GRADE REPORTING

The system of grading at Western is as follows:

- A Superior
- B High
- C Average
- D Low Passing
- F Failure
- S Satisfactory
- P Passing
- NP Not Passing
- K Incomplete
- U Unsatisfactory
- W Withdrawn
- Z Unofficial withdrawal

As with Western's admission standards, many evaluations of the academic achievement of Western's students are described in terms of the traditional A-F grading continuum:

Grades of A are awarded sparingly and recognize an unusual degree of excellence or distinction; grades of B identify performance that is clearly better than average; C identifies average course performance; D indicates low but passing performance; and F indicates either that the student has failed to perform adequately in a course or that the student has failed to carry out prescribed procedures when withdrawing from a course or the University, or both.

Other notes and policies concerning Western's system of grading are provided below:

Students are advised that excessive use of the P/NP grading system or consistent patterns of K or W grades may negatively influence admission to some graduate schools and employment opportunities.

Credit is granted in courses graded A, B, C, D, S and P. The grade of D, however, represents poor work unacceptable in the major, minor, supporting courses for majors or minors, English composition, professional education, educational psychology courses required for a degree or certificate, and Fifth-Year courses.

Grades of S and U are used in certain courses which the department and the appropriate curricular body deem inappropriate for other grading systems. In such instances, all sections of such courses use the S/U grading system.

The grade Z (unofficial withdrawal) is assigned if a student discontinues attendance in a course without completing the official

course withdrawal process in the Registrar's Office. The Z grade is treated as an "F" in the computation of grade averages.

The grade of K (incomplete) may be assigned only upon request of the student and agreement of the course instructor. Normally it is given only to a student who has been in attendance and has been doing passing work until the final two weeks of the quarter when extenuating circumstances beyond his or her control make it impossible to complete course requirements on schedule. (Extenuating circumstances do not include mere lateness in completing work, the desire of a student to do extra work to raise a poor grade, etc.). If circumstances require that a student leave a course prior to the final two weeks, he or she must formally withdraw from the course.

To receive a K grade, a student must obtain a contract form from the appropriate department and negotiate a formal agreement with the course instructor specifying the work done and the remaining work to complete the course and earn a grade. One copy is kept by the student, one by the faculty member, and one is filed with the chairperson of the academic department involved. Normally, the student removes the K grade (completes the work agreed upon) during the next quarter. After one year, removal of a K is not possible, and the student may establish credit only by registering again for the course.

The grade of W (withdrawn) results *only* from student initiative and may not be assigned by an instructor. (See "Change in Registration" for details concerning withdrawal.)

Grade reports are mailed to students at the close of quarters to addresses supplied at registration.

Grade points serve as a means of stating level of scholarship, a point value being assigned to each grade: A, 4 points; B, 3; C, 2; D, 1; F, 0. A three-credit course with a grade of B is assigned nine points. A grade point average is the result of dividing the total number of grade points by the total number of registered hours. A grade average of 2.0 represents a letter standard of C. Grades of S, P, and NP, and the credit involved in such courses, do not enter into grade point averages.

For most purposes, e.g., application of scholastic standards, honors and graduation, the grade average takes into account only work completed at Western Washington University.

A student may repeat any course previously attempted or completed. In cases of course repeats, only the final grade earned shall be computed in the calculation of cumulative grade average (unless the repeat results in a grade of W, K, U or NP). Credit shall be given only once for the course.

If a transfer student, in order to progress in the major or minor, is required to enroll in a course that may be a repeat of work transferred, the student will be allowed credit for both courses.

Pass-Fail grading is available on an optional basis to students in elective courses only.

Regulations pertaining to pass-fail courses are as follows:

1. Course required for the major, minor or supporting courses, undergraduate professional requirements, and General University Requirements may not be taken pass-fail. Courses graded P/NP may not be applied to Master's degree programs.
2. The student at the time of registration must designate the courses for which he or she wishes to receive a pass-fail grade. He or she may change this designation by the regular change of registration procedure through the fifth day of instruction.
3. Prerequisites, work required, and credit allowed are not affected by election of the pass-fail option.
4. In computing grade averages, neither the P nor NP grade in pass-fail courses will be counted.
5. Courses applying to a major (including supporting courses) or minor must be taken on the standard grade system. Should a student change his or her major or minor, the academic departments involved will be the sole judges of the acceptability of any pass-fail courses already completed in the newly chosen concentrations.
6. Once a student has earned NP grades in courses totaling 10 credits, he or she may no longer register for courses under the pass-fail option.

SCHOLARSHIP STANDARDS

The following scholarship standards apply to each academic division of Western Washing-

ton University, except Fairhaven College. Students should note that transfer between academic divisions is restricted in cases of low scholarship.

High Scholarship

Graduation Honors

Graduation *cum laude* or *magna cum laude* is possible from those divisions of Western Washington University which employ the A-F grading system: The College of Arts and Sciences, the College of Business and Economics, the College of Fine and Performing Arts, the School of Education and Huxley College. Fairhaven College, which employs a different grading system, may develop alternate ways to honor outstanding graduates, subject to approval of the Academic Coordinating Commission.

Within each college which awards *cum laude* or *magna cum laude* status upon graduation, the determining factor in granting such distinction shall be rank-in-class based upon cumulative grade average. *Magna cum laude* shall be awarded to each student whose cumulative grade average places him or her at the 97th percentile or higher among graduating seniors during the *previous* academic year. *Cum laude* shall be awarded to each student whose cumulative grade average places him or her from the 92nd through 96th percentile among graduating seniors during the *previous* academic year.

In computing cumulative grade averages to determine graduation honors, the Registrar shall count only those grades earned at Western Washington University and shall include, for this purpose only, grades in courses subsequently repeated.

To be eligible for *cum laude* or *magna cum laude* status upon graduation, the student must have earned at least 90 credits from Western Washington University, at least 65 of which must be for courses completed under the A-F grading system.

Only students who earn a first bachelor's degree are eligible for graduation honors.

Quarterly President's List

Each undergraduate student whose quarterly grade average places him or her at the 90th percentile or higher among students of the same class (freshman, sophomore, etc.) shall be placed on the President's List. The term "honor roll" shall be affixed to the student's permanent academic record for that quarter. To be eligible for the quarterly President's List, a student must be enrolled officially in a

division of Western Washington University which employs the A-F grading system and must complete at least 14 credits on that grading system.

Low Scholarship

The University has set the standards described below to assure that students who are earning poor marks will examine their objectives carefully before continuing enrollment. In some cases, students will be dropped from the University. The standards are designed to assure that this action is taken before a student's record deteriorates to the point that reinstatement or admission to another college or university becomes impossible. In all cases involving poor scholarship, students are encouraged to consult with their advisers, instructors, or members of the student affairs staff.

The low scholarship categories below apply to all divisions of Western Washington University, except Fairhaven (See the Fairhaven College section for that division's scholarship standards.) Students dropped from one college division may not transfer to another college division without reinstatement by the appropriate academic committee.

Academic warning is the University's expression of concern to students whose quarterly grade averages are below 2.00. A warning is issued to (a) a new freshman or transfer student whose first-quarter grade average is below 2.00 and (b) any other student whose quarterly grade average is below 2.00 but whose cumulative grade average is 2.00 or higher.

Academic probation is the status assigned to (a) any student except a first-quarter freshman or transfer student whose *cumulative* grade average falls below 2.00 and (b) a transfer student admitted by special action of the Admissions Committee.

Continuing probation is the status assigned to a student who begins a quarter on probation and, during that quarter, earns a grade average of 2.00 or higher without raising his or her *cumulative* grade average to at least 2.00.

Academic dismissal will result if a student (a) begins a quarter on probation and earns a quarterly grade average below 2.00 or (b) begins a quarter on continuing probation and, regardless of quarterly GPA, fails to raise his or her *cumulative* grade average to at least 2.0 at the end of the quarter.

Academic Policies

Removal from probation occurs at the end of a quarter during which a student has improved his or her *cumulative* grade average to 2.00 or higher. This must be done within two quarters after being placed on probation or academic dismissal will result (see "Continuing Probation").

Students who have received notice of academic dismissal may petition for reinstatement. Responsibility for reinstatement to the University (except Fairhaven and Huxley Colleges) rests with the Scholastic Standing Committee. Petitions for reinstatement and appointments with the Scholastic Standing Committee are available in the Academic Advisement Center, Old Main 275.

Factors considered in determining reinstatement may include measure of academic aptitude; lapse of time since dismissal, change of major goals, nature of academic or

other experience since dismissal or extenuating circumstances.

Students are encouraged to petition well in advance of the quarter for which they wish to be reinstated.

A student who is dropped from one of the colleges and wishes admission to another college must follow the normal admission procedures.

Certain restrictions govern students on academic probation. They are not eligible for remunerative employment on campus; they may not hold an elective or appointive office in any student organization or appear in any performance before the student body or at any conference or as a member of any team or organization.

TRANSFER OF CREDIT POLICIES

See "Admission" section.

ACADEMIC GRIEVANCE POLICY

The text and procedures of Western's Academic Grievance Policy are contained in Appendix D in the back of this catalog.

MATHEMATICS PROFICIENCY

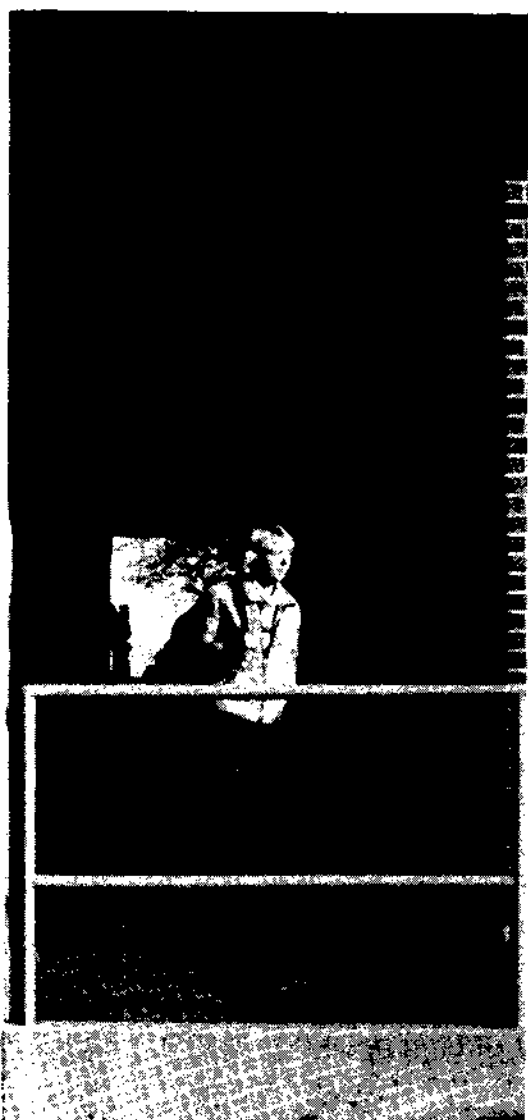
Proficiency in mathematics is expected of entering students. It is prerequisite to all university-level mathematics courses. Students must meet certain minimum requirements as measured by the Washington Pre-College Test. Those who enter with a deficiency are required to remove that deficiency prior to enrollment in a fourth university quarter.

Students failing to meet minimum mathematics standards on the Washington Pre-College Test may remove their deficiency by obtaining a satisfactory score on a re-test offered once each quarter. The Center for Continuing Education offers a non-credit review course in mathematics for those who need additional preparation for the re-test.

Transfer students with credit in any college-level mathematics course, transfer students with 40 or more credits and students with credit for four years of college preparatory mathematics in high school are considered to have satisfied this requirement.

STUDENT RECORDS POLICY

For the complete text of this policy, see Appendix C in the back of this catalog.



UNIVERSITY GRADUATION REQUIREMENTS

GENERAL REQUIREMENTS FOR BACHELOR'S DEGREES*

The following requirements are common to all undergraduate divisions of Western Washington University. For requirements unique to a given university division, see sections concerning the College of Arts and Sciences, College of Business and Economics, School of Education, College of Fine and Performing Arts, Fairhaven College and Huxley College.

- Minimum of 180 quarter hours of credit. (Please note that some baccalaureate degree programs require credits in excess of 180 for completion. Also, programs that are highly sequential

*A student should expect to matriculate and graduate according to the general requirements in the catalog current at the time he or she enrolls. Students should expect to meet the specific requirements of the departments for majors and minors in the catalog current at the time they declare major and minor to the appropriate department.

If the student interrupts his or her work for more than two consecutive quarters (summer quarter not included), he or she shall meet the demands of the catalog in force at the time he or she is readmitted.

While the University reserves the right to change the regulations concerning admission and requirements for graduation, it shall be the policy of the University to give adequate notice prior to effecting any significant changes and to make reasonable adjustments in individual cases where hardship may be occasioned.

necessitate careful planning, the lack of which may result in extended work beyond the minimum required.)

- At least one full year of residence study (45 credit minimum), including the final quarter before issuance of a degree. Study Abroad programs are acceptable as residence credit to a maximum of 45 credits. Correspondence, credit by examination and advanced placement credit are not included in this total
- At least 60 credits in upper-division study (courses 300 or above)
- Approved academic major
- General University Requirements (see following section)
- Scholarship meeting minimums prescribed by the university divisions and academic departments

Correspondence credit earned through a fully accredited college or university may be accepted toward the bachelor's degree up to a maximum of one-fourth of the credits required. Students in residence may not register for these courses except by special permission from the Registrar.

Transferring between undergraduate divisions of Western Washington University requires being admitted according to the procedure of the receiving division. Students may be a member of only one division at a time.

Students considering teacher education are advised to contact the School of Education Admissions and Advisement Office, Miller

Graduation Requirements

Hall 202, as early as possible for advisement on the professional studies portion of their programs.

GENERAL UNIVERSITY REQUIREMENTS

Required by the College of Arts and Sciences, the College of Business and Economics, the College of Fine and Performing Arts, Huxley College, and the School of Education. Fairhaven students see appropriate college section.

General University Requirements must be completed by all candidates for baccalaureate degrees except where the student has demonstrated proficiency through an acceptable college-level examination or through challenge procedure (see "Advanced Placement and Course Challenge" in Academic Regulations section of catalog). Some requirements may be satisfied with high school work as indicated below.

The student should study carefully the requirements of his or her major and the course descriptions before planning his or her General University Requirements, as some required courses in the major may also apply to General University Requirements. If questions arise, the student should confer with a credit evaluator in the Registrar's Office.

Aims of the General University Requirements

- (a) To broaden and intensify the student's understanding of significant aspects of man's cultural heritage.
- (b) To introduce the student to the methods and tools of thought and expression.
- (c) To assist the student in integrating his or her knowledge.
- (d) To assist the student in developing his or her powers of aesthetic enjoyment and creativity.
- (e) To stimulate the student in formulating a philosophy of life based upon knowledge and reflection.

Twelve-Credit Limit Per Department

Twelve (12) credits from one department is the maximum that may be applied toward General University Requirements except from the department of Liberal Studies.

Although more than 12 credits may be taken from the Liberal Studies Department to apply toward the *total* General University Requirements, the maximum for individual areas must be observed.

Grades in GUR Courses

Courses which are to apply to General University Requirements must be taken on an A through F grading scale. They may not be taken with Pass/No Pass grading.

Associate Degrees to Satisfy GUR

Approved Associate of Arts degrees from certain community colleges in Washington will fulfill all General University Requirements. Students at community colleges who wish to satisfy the General University Requirements by earning an Associate degree should check carefully with advisers, as only certain approved degrees will apply. To meet the GUR, an Associate degree must normally be earned prior to initial enrollment at Western as a transfer student.

COMMUNICATIONS

Complete Both A and B

All incoming students are urged to complete Block A of the Communications section of the General University Requirements during their freshman or sophomore years.

A. ENGLISH 101, Language and Exposition (4) (Waived for students demonstrating high English competency on Washington Pre-College Test)

B. One course from the following:

ENGLISH 201, Introduction to Fiction with Composition (4); 202, Introduction to Drama with Composition (4); 203, Introduction to Poetry with Composition (4); 301, Reading and Exposition (4); 302, Reading and Argumentation (4).

PHILOSOPHY 107, Logical Thinking (3).

SPEECH 100, Fundamentals of Speech (3); 205, Exposition, Argumentation and Persuasion (4).

HUMANITIES

Course work must be distributed among at least three departments with no more than 10 credits from any one department.

Select a minimum of 20 credits from the following:

ART HISTORY 190, Art Appreciation (2); 220, Survey of Art History I (3); 230, Survey of Art History II (3); 240, Survey of Art History III (3).

CLASSICAL STUDIES 350, Greek and Roman Mythology (3) (not both Classical Studies 350 and Liberal Studies 232 may be taken for GUR credit).

ENGLISH 214, Introduction to Shakespeare (5); 215, Survey of British Literature (5); 216, Survey of American Literature (5); 238, Society Through its Fiction/Drama/Poetry (5); 281, Western World Literature: Classical and Medieval (5); 282, Western World Literature: Renaissance and Neoclassical (5); 283, Western World Literature: Romantic and Modern (5); 362, The Bible as Literature (5) (not both English 362 and Liberal Studies 235 may be taken for GUR credit).

FOREIGN LANGUAGES, any foreign language course numbered 200 and above and involving actual instruction in the foreign language.

HISTORY 103, Introduction to American Civilization (5); 104, Introduction to American Civilization (5); 111, Introduction to Western Civilization (Prehistory to 476) (5); 112, Introduction to Western Civilization (476-1300) (5); 113, Introduction to Western Civilization (1300-1789) (5); 114, Introduction to Western Civilization (1789-present) (5); 267, Christianity in History (5); 347, European Intellectual History (5).

INTERDISCIPLINARY ARTS 110 (3)

LIBERAL STUDIES 121, The Western Tradition I: Ancient (5); 122, The Western Tradition II: Medieval (5); 123, The Western Tradition III: Modern (5); 231, Introduction to the Study of Religion (4); 232, Myth and Folklore (4) (not both Liberal Studies 232 and Classical Studies 350 may be taken for GUR credit); 235, The Biblical Tradition (4) (not both Liberal Studies 235 and English 362 may be taken for GUR credit); 242, Music and the Ideas of Western Man (4); 332, Universal Religions: Founders and Disciples (4).

MUSIC 140, The Art of Listening to Music (3).

PHILOSOPHY 111, Introduction to Philosophy: Philosophic Problems (3); 112, Introduction to Philosophy: Moral Philosophy (3); 113, Introduction to Philosophy: Philosophy of Religion (3); 330, Society, Law and Morality (3).

POLITICAL SCIENCE 360, Introduction to Political Theory (5).

THEATRE/DANCE 101, Introduction to the Art of the Theatre (3); 201, Introduction to the Cinema (3); 231, Introduction to the Dance (3).

SOCIAL SCIENCES

Course work must be distributed among at least three departments with no more than 10 credits from any one department.

Select a minimum of 17 credits from the following:

ANTHROPOLOGY 201, Introduction to Cultural Anthropology (5); 210, Introduction to Archaeology (5).

BUSINESS ADMINISTRATION 271, Law and Business Environment (4).

ECONOMICS 201, Principles of Economics I: Introduction to Macro-Economics (5); 202, Principles of Economics II: Introduction to Micro-Economics (4).

GEOGRAPHY 201, Human Geography (5); 207, Economic Geography (5); 210, Geography and World Affairs (2).

HISTORY 346, Technology and Society in Early European History (5).

HUXLEY 202, Environmental Studies: A Social Science Approach (3).

JOURNALISM 340, The Press and Society (3).

LINGUISTICS 201, Introduction to Linguistic Science (5).

POLITICAL SCIENCE 101, Government and Politics in the Modern World (5); 250, American Political System (5); 270, Introduction to International Politics (5).

PSYCHOLOGY 201, Introduction to Psychology (5); 318, Psychology and Culture (3).

SOCIOLOGY 202, Introduction to Sociology (5); 251, Sociology of Social Problems (5); 302, History of Social Thought (5).

NON-WESTERN AND MINORITY CULTURAL STUDIES

This area focuses upon a study of East Asia, South East Asia and India, the Middle East, Sub-Saharan Africa, Latin America, the Minority Experience in America, and Cross-Cultural Studies.

Graduation Requirements

Select a minimum of 8 credits from the following:

ANTHROPOLOGY 353, Sex Roles in Culture (4); 361, Indians of North America (5); 362, Peoples of Asia (5); 363, Peoples of Africa (5); 364, Peoples of the Pacific (5); 365, Peoples of the Middle East (5).

EAST ASIA 301, 302, 303, The Cultures of East Asia: The Early, Middle and Recent Periods (4 each).

ENGLISH 234, Introduction to Afro-American Literature (5); 338, Women and Literature (4).

ETHNIC STUDIES 201, The Afro-American Experience (3); 205, Introduction to Asian American Studies (3).

GEOGRAPHY 315, East and South Asia (5); 319, Africa (5); 321, India, Pakistan and Bangladesh (3); 322, The Middle East (3).

HISTORY 261, Black History in the Americas (5); 271, Introduction to Latin American Civilization (5); 273, Latin America (5); 280, Introduction to East Asian Civilization (5); 285, Introduction to African Civilization (5); 287, Introduction to Islamic Civilization (5); 361, Black History in the Americas: The Slavery Era (5); 375, The Indian in American History (5); 385, Africa to 1885 (5); 386, Africa since 1885 (5); 387, History of the Jews (5).

LIBERAL STUDIES 271, Humanities of India (4); 272, Mythology/Religion and Society in China and Japan (4); 273, Artistic Expression and Society in China and Japan (4); 275, Humanities of Japan (4); 276, Humanities in Africa (4); 370, Major Non-Western Traditions: The Traditional Order (4); 371, Major Non-Western Traditions: Their Modern Fate (4); 372, Modernization and the Place of the Individual in the Non-European World (4); 373, Strategies and Visions of Modernization in the Non-European World: Conservatives, Reformers, Revolutionaries (4).

POLITICAL SCIENCE 346, Poverty, Minorities, and Government (5).

PSYCHOLOGY 219, The Psychology of Sex Roles (4).

MATHEMATICS

(Students should check the mathematics requirement for their majors before selecting a mathematics or computer science course. Some majors require mathematics or computer science courses that will apply also to the General University Requirements.)

Students with four years of high school mathematics may have the requirement waived.

To satisfy this requirement, successfully complete any one mathematics course numbered 105 or higher or any one computer science course.

or

Students with three years of high school mathematics may substitute Philosophy 102, Introduction to Logic (3).

or

Students with two years of high school mathematics may take Mathematics 103, Algebra (5), and then substitute Philosophy 102.

SCIENCE

Complete Both A and B of Option I or complete Option II.

I. A. One course from three of the four following areas (students with one year high school preparation at the level of grades 11 or 12 in Chemistry, Geology, Physics or advanced Biology may substitute this work for the 101 course in the corresponding area in up to a maximum of two areas):

BIOLOGY 101, Principles of General Biology (4); 121, Introduction to Plant and Animal Biology (5).

CHEMISTRY 101, Chemical Concepts (4); 115, General Chemistry (5); 121, General Chemistry I (5).

GEOLOGY 101, General Geology (4); 211, Physical Geology (5).

PHYSICS AND ASTRONOMY

Physics 101, Physics for the Liberal Arts (4); 131, Principles of Physics I (5); 132, Principles of Physics II (5); 133, Principles of Physics III (5); 231, General Physics with Calculus (5). Astronomy 103, Astronomy for Liberal Arts (4).

B. One additional course from Section A above or one course from the following list:

BIOLOGY 122, Introduction to Cellular Biology (3); 123, Introduction to Genetics (3); 202, Field Biology of the

Northwest: Flowering Plants, Conifers and Ferns (3); 205, Field Biology of the Northwest: Marine Biology (3).

CHEMISTRY 122, General Chemistry II (5); 123, General Chemistry III (5); 251, Elementary Organic Chemistry (5).

GEOGRAPHY 203, Physical Geography (5).

GEOLOGY 102, General Earth History (4); 212, Historical Geology (4); 214, Environmental Geology (3).

HOME ECONOMICS 250, Human Nutrition (3).

HUXLEY 201, Environmental Studies: A Scientific Approach (3).

PHYSICS AND ASTRONOMY
Physics 331, Waves and Thermodynamics (5). Astronomy 315, Solar System Astronomy (4); 316, Stellar Astronomy (4).

II. Complete one of the following sequences.

BIOLOGY 121, 122, 123.

CHEMISTRY 121, 122, 123.

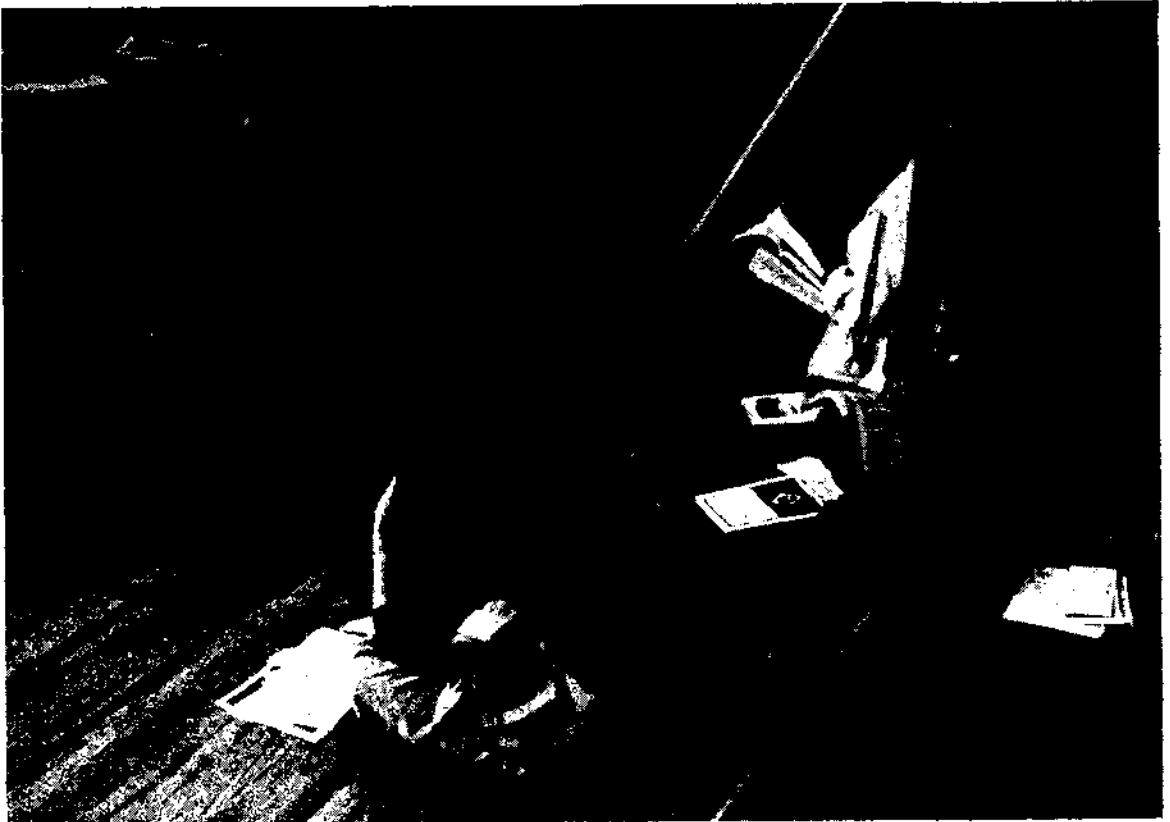
GEOLOGY 211, 212 and one of 310, 316, or 360.

PHYSICS 131, 132, 133 or 231, 331, 332.

PROCEDURES FOR APPLYING FOR BACHELOR'S DEGREE AND/OR PROVISIONAL TEACHING CERTIFICATE

Degrees and/or teaching certificates are not automatically awarded when requirements are completed. It is the responsibility of the student to make application in the Registrar's Office no later than the third week of the final quarter and it is strongly recommended that the student appear for the evaluation and application at least two quarters in advance of completion. Complete instructions are available in the Registrar's Office.

Commencement activities are held in the spring only. All students who have graduated the fall and winter quarters immediately preceding and those who have applied for graduation for spring quarter and the subsequent summer quarter are invited to participate. An informal mailing is forwarded to all eligible students early in the spring.



ALL-UNIVERSITY PROGRAMS

Western Washington University is organized into five colleges, a School of Education and a Graduate School. This organization not only accommodates Western's size and complexity, but also enables flexibility and innovation in Western's curriculum.

Some programs at Western are available through one department or college; some are interdisciplinary, involving several academic units; and some, the All-University Programs listed below, involve all or most of Western's departments, colleges and schools:

- Aquatic Studies
- Center for Continuing Education
- Field Experience
- Foreign Study
- Honors Program
- Pre-Professional/Transfer Programs

Academic opportunities available through Western's All-University Programs are described briefly below.

AQUATIC STUDIES

The Aquatic Studies Program maintains both fresh and salt water related research and instructional facilities to augment regular curricular programs. Operations include research, technical assistance, analytical and monitoring capacities. Offices are located in the Environmental Studies Center and at the Leona M. Sundquist Marine Laboratory at Shannon Point. The Sundquist Laboratory is managed by the program for a consortium of state colleges and community colleges. Located on Fidalgo Island, 44 miles from the WWU campus, it operates year-round and is used primarily for undergraduate instruction and research.

CENTER FOR CONTINUING EDUCATION

The Center for Continuing Education makes Western's courses and degree programs available off campus; develops special workshops, conferences and institutes; and thus extends Western's resources and increases Western's service to the State of Washington.

Learning opportunities available through the Center for Continuing Education enable adults throughout the state to upgrade their occupational skills, to acquire new skills, and to pursue a variety of special interests on a part-time basis. These opportunities are available not only on campus and through field centers in Bellingham, Clover Park and Seattle, but also in more than 50 other localities.

University credit may be earned in a wide variety of evening courses on and off campus; many courses may be audited. Western also cooperates with the state's community colleges, supplementing their curricula so that undergraduate degree programs are available to students and adults in community college areas. In a variety of locations, the Center also makes available Western's graduate courses and programs for public school teachers and administrators. *Independent Study* opportunities offered through the Center make many of Western's courses available by mail. *Non-Credit Programs* include courses, workshops, conferences, and seminars available on request by individuals, by committees, or by public, private and governmental agencies. Each non-credit program is tailored to the needs of its participants, and each usually involves adult learners, faculty members, visiting

scholars, and specialists from business, industry and government.

For further information, contact the Center for Continuing Education.

FIELD EXPERIENCE PROGRAMS

Western Washington University recognizes the value of work experience outside the classroom as a supplement to both the student's general education and major area studies. Thus the University offers opportunities for field experiences including practica, internships and cooperative education in a variety of community businesses, organizations and governmental agencies. Students who wish to apply their theoretical classroom learning to on-the-job situations can spend several quarters (maximum of 15 credits) in one of these positions. Credit will be awarded upon a satisfactory employer/faculty evaluation and fulfillment of contractual agreements. These work experience situations are arranged beforehand to accomplish specific goals agreed upon by the student, sponsoring faculty member and employer. Students should contact the Career Planning and Placement Center for additional information.

FOREIGN STUDY

WWU co-sponsors year-around liberal arts Study Abroad programs in England, Germany, France and Mexico, as well as other countries during specific quarters. Designed to give students a complete foreign study experience in the host country, each program includes numerous excursions to historical and cultural sites and a wide range of activities which complement formal classroom work. Students register at WWU before departure and carry normal course loads for the quarter (12-15 credits). Students may also receive credit for foreign study through (a) accredited programs sponsored by individual departments or other colleges, and (b) independent study arranged through departments and colleges by the Foreign Study Office. Foreign Study courses within a department are normally assigned 237, 337 or 437 numbers.

THE HONORS PROGRAM

Western's undergraduate Honors Program provides a challenging opportunity for students of high academic ability to realize their potential more fully. Freshmen and transfer students are invited into the Honors

Program on the basis of entrance exams, high school grade averages, recommendations and interviews. Students already enrolled at Western enter the program on the above bases or on the recommendation of a University instructor.

Students selected for honors work participate in much of the General University Requirements program required of all degree candidates, but are responsible to the director of the Honors Program for the precise determination of their programs. Substitutions or waivers of some required courses may be approved on the basis of individual needs. The director of the Honors Program and the student's major department have joint responsibility for upper-division course requirements.

The four-year Honors Program involves both general honors courses and more specialized work within the major department. The program also enables students to prepare alternates to the General University Requirements, to undertake more independent study and to develop contracts for graduation.

Students interested in this program are invited to consult with the director of the Honors Program, Dr. Brian Copenhagen, for more details.

Admission to the Program

Students admitted to Western are considered for admission to the Honors Program by any one of the following ways:

1. Scholastic aptitude test scores in the top five per cent.
2. A grade point of 3.7 or above.
3. Faculty recommendation.

Quarterly Courses of Study

Colloquia: Usually two or three credits; small groups of students and faculty who meet to study an area in depth. Several colloquia are offered each quarter, titles of past colloquia including "Socrates and Jesus," "The Common Law Tradition," "Philosophy of Science," "Geologic Hazards" and "The Russian Novel."

Tutorials: Usually two credits; one faculty member and one student work together on a problem of special interest to both.

Independent Study: Individual work with a concentrated area of study related to the student's major or minor, not necessarily completed on campus. Past examples include working with the ACT Theatre Company in

All-University Programs

Seattle, studying medieval architecture in Europe, and studying the Russian language.

Special Majors, Course Waivers, Early Graduation: General University Requirements may be waived in lieu of a relevant colloquium or tutorial. Advanced placement exams are available by arrangement with the Testing Center. Students may propose a major or major-minor concentration not listed in the catalog. Such majors are prepared in detail by the student with the help of faculty in concerned departments, and constitute a contract for graduation. In some cases, graduation with fewer than 180 credits is warranted.

Policies within the Honors Program, student-run colloquia, independent studies, recommendations for graduation with honors, and senior theses must be approved by the Honors Board. The Honors Board consists of the director, who chairs the board, and selected faculty and honors students.

Requirements for Graduation with Honors

In addition to (or in some cases, in lieu of) the requirements for graduation from WWU, the honors student must have completed the following:

- A *minimum* of 12 credits in honors (colloquia, tutorials, independent study) 20 credits of honors work is more typical.
- A minimum of two years in the Honors Program.
- An all-university grade point average of not less than 3.5 for the last 90 credits before graduation.
- Completion of department requirements for graduation with honors in the student's major (in those departments offering departmental honors).
- A senior thesis approved by the student's thesis adviser and department chairman. The thesis must be signed and delivered in proper form to the Honors Office three weeks prior to expected graduation. (The thesis proposal should be presented to the Honors Board three quarters prior to expected graduation.)
- The student who has developed his or her own major or who has completed alternate work for General University Requirements should check with the Honors Office prior to the Registrar's senior evaluation. Notice of work in honors will be forwarded to the Registrar.

Honors Courses (Non-departmental)

Specific descriptions of current offerings are available in the Honors Office.

151, 152, 153	TUTORIAL (2 ea)
161, 162, 163	COLLOQUIUM (2 or 3 ea)
251, 252, 253	TUTORIAL (2 ea)
261, 262, 263	COLLOQUIUM (2 or 3 ea)
290	SUMMER READINGS (2)
300	INDEPENDENT STUDY (variable credit)
361, 362, 363	COLLOQUIUM (2 or 3 ea)
390	SUMMER READINGS (2)
400	INDEPENDENT STUDY (variable credit)
461, 462, 463	COLLOQUIUM (2 or 3 ea)
490	SUMMER READINGS (2)

PRE-PROFESSIONAL TRANSFER PROGRAMS

The following programs are listed for students who anticipate transfer to another institution for completion of their professional training. Final acceptance and application of transfer credit are made by the institution to which the student transfers. Early contact with the on-campus faculty adviser and with the college, university or professional school is strongly encouraged.

Programs listed below are coordinated by the Academic Advisement Center where catalogs from other in-state colleges are available and assistance in clarifying transfer procedures is offered. Information concerning each transfer program is current at the time catalog copy is submitted. Programs undergo constant revision, however, and as changes occur program recommendations become outdated. The student, therefore, must bear responsibility for early contact with the on-campus adviser and the professional school.

Agriculture

In colleges of agriculture, most agriculture courses are usually taken during the junior and senior years. During the first two years the student normally takes courses designed to satisfy general requirements and to build a foundation for advanced study. Students planning transfer from Western to study agriculture are advised to review the catalog of the college or university from which they expect to graduate and also to correspond with the chairman of the appropriate department. Care must be taken to satisfy the general requirements of the other college or

university so that time for completing required agriculture courses after transfer is available. The schedule below is generally suitable.

- English 101 plus six quarter hours of other communications courses selected under advisement
- Nine quarter hours of arts and humanities courses selected under advisement¹
- Economics 201 (also 202 if interested in agricultural economics)
- Nine quarter hours in social sciences selected under advisement
- Chemistry 121, 122, 123 (suggested for freshman year)
- Biology 121, 122, 123, 310, 311, 312
- Mathematics through 121 at Western (if interested in agricultural economics, include one course in calculus)
- Electives in accordance with interests

Faculty Adviser: B.E. Omev, Registrar's Office.

Architecture

Western offers two years of undergraduate study which may be transferred to the University of Washington as the liberal arts component of a baccalaureate degree program in architecture. Pre-majors are required to complete a balanced distribution of courses during the first two years based on recommendations found on pages 66-67 of the 1978-80 University of Washington General Catalog.

Washington State University offers baccalaureate level architectural studies. Pre-major requirements include completion of the general university requirements and specifically recommended courses listed in the Washington State University Bulletin.

Faculty Adviser: Dr. Fred A. Olsen, Department of Technology.

Clothing, Textiles, and Fashion Merchandising

One-year transfer programs are offered for undergraduates interested in Clothing, Textiles and Fashion Merchandising. Students are advised to confer early with the transfer institution. Early advisement is essential. Please see the WWU adviser for program details.

¹Take courses which satisfy the general requirements of the transfer institution.

Recommended courses are as follows:

- Economics 201
- English 101, 301 or 302
- Home Economics 101, 164
- Psychology 201
- Sociology 202

Additional courses may be added for the Textile options: Chemistry 115; Economics 202; Home Economics 224, 250; and a political science elective.

Faculty Adviser: Dr. Alice Mills Morrow, Department of Home Economics.

Dental Hygiene

Associate and baccalaureate programs in dental hygiene are available in Washington institutions of higher education. Graduates of two- or three-year certificate or associate degree programs are generally limited to dental office practice and some public health positions. Hygienists with bachelor's degrees may work in private practice and with office experience are eligible for beginning dental hygiene teaching or administrative public health positions.

Baccalaureate programs are available at Eastern Washington University and the University of Washington. Because positions at these schools are limited, early communication with the Department of Dental Hygiene at the school of your choice is strongly urged.

A list of prerequisite courses which will transfer to these programs is available from the WWU faculty adviser.

Faculty Adviser: Dr. John C. Whitmer, Department of Chemistry.

Dentistry

Admission to the professional schools of dentistry is highly competitive; therefore, a pre-dental program should be planned with care. Electives should be relevant to dentistry and every effort should be made to maintain high scholarship.

Since dental schools give valuable advice and information about admission standards and requirements, it is wise for pre-dental students to make personal contacts with a dental school early in the program. The following courses should be included in programs leading to dental school application:

- Chemistry 121, 122, 123, 351, 352, 353, 354, 355

All-University Programs

- Biology 121, 122, 123, 312, 345, 467
- Chemistry 371²
- Physics 131, 132, 133
- Electives: students should take a minimum of 30 quarter credit hours divided between three or more of the following study areas, including a minimum of 10 quarter credit hours in one area — anthropology, economics, English, history, philosophy, political science, psychology and sociology

Committees on admission recommend that pre-dental students choose electives with the aim of broadening their intellectual and social backgrounds in speech, fine arts, languages, literature, business administration and the behavioral sciences.

There is no minimal number of pre-dental credit hours and a degree, although recommended, is not required for admission. Students being accepted in the schools of dentistry, however, have completed an average of more than 180 quarter credit hours.

There is no apparent advantage in transferring to the University of Washington before applying to the Dental School, as Western students have been admitted directly into their program.

Faculty Adviser: Dr. John C. Whitmer, Department of Chemistry.

Dietetics, Foods and Nutrition and Institution Management

Admission to programs in Dietetics and Nutrition is very limited. Students interested in these programs should contact the school of their choice early in their freshman year in order to determine their course of study at Western. The following courses should be included in the first year:

- Chemistry 115, 251
- Economics 201
- English 101, 301, or 302
- Home Economics 250, 253
- Math 121
- Psychology 201
- Sociology 202

Faculty Adviser: Dr. Alice Mills Morrow, Department of Home Economics.

Engineering

Schools or colleges of engineering at most universities emphasize course requirements in mathematics, the physical sciences, and communications. These are the base upon which all engineering curricula are constructed. After the first year, curricula for the various specializations — electrical, mechanical, chemical, civil, aeronautical, etc. — include general requirements and introductory courses.

Usually admission to a college or school of engineering requires above average academic performance and greater depth in introductory courses than is required for admission to a liberal arts program.

High school students who wish to major in a field of engineering in college should include high school courses in elementary functions or algebra IV as well as trigonometry, physics and chemistry.

Courses listed below generally meet most requirements, but students who anticipate transfer to a specific institution should consult its catalog and the W.W.U. program adviser in developing a schedule of studies.

Suggested courses:

- Chemistry 121, 122, 123
- Comp Sci 210, 124
- English 101, 401
- Mathematics 124³, 125, 126, 224, 331
- Physics 231, 331, 332
- Technology 210

Since engineering colleges generally require additional courses distributed in Social Science and Humanities, students should select such courses from Western's offerings as their schedule allows.

Faculty Advisers: Dr. Louis Barrett, Department of Physics, Dr. Joseph Black, Department of Technology, Dr. Richard Levin, Department of Mathematics.

Fisheries

The College of Fisheries at the University of Washington provides two baccalaureate programs in fishery biology. Students may complete the first two of the four-year program at

²or Chem 471, 472

³Students not qualified to take Math 124 should consult the program adviser.

Western, concentrating on the following science-related courses and fulfillment of the UW's distribution and proficiency requirements. Close consultation with the WWU faculty adviser is essential.

- English 101, 301 or 302
- Chem 121, 122, 123, 251
- Math 121, 124, 125, Biol 340
- Biology 121, 122, 123, 312
- Electives

Faculty Adviser: Dr. G. F. Kraft, Department of Biology.

Forestry

Washington State University offers degrees in forest management and in range management. The Chemistry 121, 122, 123 series is required, plus Physics 131, 132.

The University of Washington has seven curricula: forest management, forest engineering, outdoor recreation, pulp and paper technology, wood and fiber science, forest science and wildlife sciences. Four curricula accept Chemistry 115, but three (pulp and paper, wood and fiber, and wildlife) require the 121, 122, 123 series.

A recommended curriculum in the first year follows:

- English 101, 301 or 302, Speech 100
- Economics 201
- Chem 115 or 121, 122, 123
- Biology 121, 122, 123
- Math 121
- Electives ⁴

Because of variations among the various forestry curricula, students are urged to consult the pre-forestry adviser as soon as possible. For some curricula, specific courses should be included among the electives.

For some of the University of Washington curricula, students may complete two years at Western before transferring. Programs must be carefully planned with the adviser.

Faculty Adviser: Dr. Hubertus E. Kohn, Department of Biology.

Law

Most law schools require a bachelor's degree before the student begins professional legal education. Law schools normally do not spe-

cify preferred undergraduate majors, but they do seek students who are broadly educated. Law schools are interested in students with proficiency in oral and written communications, an understanding of human, political, economic, and social institutions, and well developed objective and critical thought processes. Western's General University Requirements are intended to aid students in realization of these goals.

Careful selection of electives may enhance performance in law school and undergraduate curriculum should reflect the interests and professional objectives of individual students. Therefore, early consultation with pre-law advisers on course and program decisions is highly recommended. Courses suggested for special consideration by students planning pre-legal educational programs include the following: Accounting 251, 252; Business Administration 271*, 370, 371, 372; Economics 201*, 202*; Fairhaven 412, 414; History 419; Philosophy 330*; Political Science 250*, 311, 313, 410, 413, 415; Sociology 454.

The Law School Admission Test (LSAT), normally required of applicants to American and Canadian law schools, is offered on the Western campus several times each year. Applications and test schedule information may be obtained from the Testing Center. Students should plan to take the LSAT late in their junior or early in their senior year (not later than February).

Faculty Advisers: Dr. John Moore, Department of Business Administration, Dr. John Wuest, Department of Political Science.

Medical Technology

At the University of Washington, the four-year medical technology program leads to a Bachelor of Science degree in medical technology. Students at Western may complete 90 quarter credits of study, concentrating on the following required courses which parallel the University of Washington's medical technology program, prerequisites and distribution requirements. It is important to consult with the WWU faculty adviser early in the first year of the pre-medical technology program.

Washington State University also offers a baccalaureate program in medical technology. Students planning to transfer to WSU

⁴Take courses which satisfy general requirements of the transfer institution.

*These courses also satisfy Western's General University Requirements.

All-University Programs

may complete two years at Western, following the recommendations listed below and completing additional courses which parallel WSU's general university requirements.

Students should consult with the faculty adviser before registration.

- English 101, 301 or 302
- Chem 121, 122, 123
- Biology 121, 122, 123
- Math 121
- Second year courses available from WWU Adviser.

Faculty Adviser: Dr. G. F. Kraft, Department of Biology.

Medicine

The faculty of the School of Medicine at the University of Washington believes that the appropriate level of scholarly achievement and preparation for medicine can best be developed in a liberal arts program with the emphasis on a major area of interest selected by the student in any field sufficiently demanding in scholastic discipline. No particular major is given preferential attention in selection. The major should be considered as the basis for a future career or for graduate study in the event the student is not admitted to medical school.

Before admission each applicant must have completed the minimum requirements listed below and must have demonstrated academic proficiency in these subjects by obtaining an acceptable grade point average. In addition to the following subjects and credits, proficiency in English and basic mathematics is expected of each applicant.

- Biology - 15 quarter credits
- Chemistry - 28 quarter credits
- Physics - 14 or 15 quarter credits

In recognition of the diverse opportunities afforded the graduate in medicine, specified requirements are purposely kept to a minimum. This enables each student to pursue, as a major field of study, any area of special interest — the physical sciences, biological sciences, or humanities — and still acquire the intellectual skills necessary to the regular medical curriculum.

Admission to the School of Medicine is highly competitive. Early consultation with the faculty adviser is strongly recommended. Students must contact the pre-med faculty adviser for discussion of graduation requirements, selection of an academic major, course sequences, AMCAS applications,

scheduling of MCAT, and other pertinent information. Pre-med students are strongly advised to establish a file in the office of the pre-med adviser so that an on-going record of their academic records and recommendations may be developed.

- Biology 121, 122, 123
- Chemistry 121, 122, 123, 351, 352, 353, 354, 355
- English 101 (plus an additional 6 to 10 credits in English)
- Math 121, 124, or 220
- Physics 131, 132, 133 (or 231, 331, 332)

Information regarding Chiropractic and Naturopathic education is also available from the faculty adviser.

Faculty Adviser: Dr. Gerald Kraft, Department of Biology.

Nursing

Students interested in a career in nursing may choose one of three training programs: (1) the two-year Associate of Arts degree programs offered by many community colleges, (2) the three-year hospital based R.N. programs, or (3) the four-year Bachelor of Science in nursing program. In each, admission is competitive, application must be made early, and pre-major preparation is required.

Western offers a complete selection of courses which prepare students for admission to nursing schools. Specific course requirements are available for students interested in transfer to community college programs or Eastern Washington University, Washington State University or the University of Washington. Please contact the nursing adviser for up-to-date information.

Faculty Adviser: Mrs. Kay Rich, Academic Advisement Center.

Occupational Therapy

Students wishing to earn a Bachelor of Science degree in occupational therapy at the University of Washington or elsewhere may complete their prerequisite courses at Western. Since graduation requirements vary among institutions, students should obtain specific information concerning them during the freshman year. Initial registration should include humanities, social science, or natural science courses comparable to those included under the arts and sciences distribution list (page 73 in the 1978-80 University of Washington catalog). Students should be

aware that admission to a school of occupational therapy is highly selective.

Faculty Adviser: Mrs. Kay Rich, Academic Advisement Center.

Optometry

Schools of optometry generally offer baccalaureate, master's and doctoral programs. Western is able to provide one year of liberal arts studies as a background for more specialized training in optometry. Students are advised to transfer after their first year. Early consultation with the faculty adviser is recommended.

- English 101, 301 or 302
- Chemistry 121, 122, 123
- Biology 101
- Math 124, 125, 126
- Physics 131, 132, 133 or 231, 331, 332
- Elective

Faculty Adviser: Dr. J.J. Veit, Department of Physics.

Pharmacy

The five-year pharmacy program at Washington State University and the University of Washington leads to a Bachelor of Science degree in pharmacy. Western provides a two-year series of courses which prepares students for admission to the College of Pharmacy at either WSU or the UW. Detailed information is available from each of these colleges. Admission is highly competitive and students are encouraged to contact the school of their choice early in their first year and to consult with the pre-pharmacy adviser at Western prior to registration.

The following courses are recommended:

- Biology 121, 122, 123, 312
- Chemistry 121, 122, 123, 351, 352, 353, 354, 355
- English 101, 301 or 302
- Math 121, 124 or 220
- Physics 131, 132, 133
- Speech 100
- Electives

The following electives are recommended for pre-pharmacy students: Econ 201; Psych 201; Anth 201, 215; courses in geography, history and philosophy.

For those interested in transferring to WSU, Math 121 only. Students may transfer after one year at Western or with special permission continue at Western through the second year.

Faculty Adviser: Dr. Lowell Eddy, Department of Chemistry.

Physical Therapy

Admission to a school of physical therapy is highly selective. Depending upon the institution, students are admitted to the professional program at the sophomore, junior, senior or post-baccalaureate level.

The following courses are prerequisites for admission to most schools, including the curriculum offered by the University of Washington:

- Biology 101, 345
- Chemistry 115, 251
- English 101, 301
- Math 103, 104 or equivalent
- Physics 131, 132, 133
- Psychology 201, plus an additional course — some require 314, or 316
- Biology 348, 349

Students must recognize that the above courses are minimum requirements and that additional course work is strongly recommended. Supplemental courses should be selected from Education 360, 361, 465; Health Education 447; Physical Education 201, 302, 303, 326, 402.

Students should consult with the pre-physical therapy program adviser during their first quarter at Western.

Faculty Adviser: Mrs. Kay Rich, Academic Advisement Center.

Social Work

Students preparing for admission to a professional school of social work and students interested in securing social work positions that do not require professional education may satisfy their interests by completing the B.A. in sociology, including the following elective courses in the major:

- Sociology 311 (in lieu of 310)
- Sociology 251 and 261
- Sociology 340, 351, 360, 333, 440, 465 and 491

Other courses strongly recommended include Sociology 353, 354, 367 and 467. For further recommendations of specific courses in sociology or cognate areas which may strengthen the student's preparation, consult with the faculty adviser.

Faculty Adviser: Dr. Charles Gossman, Department of Sociology.

All-University Programs

Theology

Students who are considering enrollment in a theological seminary or in other special training for religious work should seek advisement early in their academic careers. They should determine as soon as possible which graduate institution they may wish to enter and what is required for admission. Broad study in the liberal arts (literature, history, philosophy, language) is generally regarded as appropriate undergraduate preparation for seminary work, but expectations of particular institutions vary. In some cases the minor in the Study of Religion, offered through the Department of Liberal Studies, may form an appropriate part of an undergraduate pre-theological program.

Students interested in graduate theological or other graduate religious training, or in graduate work in the academic study of religion may contact the faculty adviser for further information.

Faculty Advisers: Dr. William Stoeber, and Dr. Joseph Bettis, Department of Liberal Studies.

Veterinary Medicine

The College of Veterinary Medicine at Washington State University requires at least seven years of study leading to completion of the Doctor of Veterinary Medicine degree. Western can provide a student with either four years of pre-veterinary training through a degree in Biology or a three-year transfer program. It is not absolutely necessary to complete a bachelor's degree however it is advisable to aim toward a degree in the event that a student is not admitted to a veterinary school. Admission is extremely competitive and students are strongly encouraged to have early consultation with the faculty adviser and to review the admission requirements on pages 280-281 of the 1978-80 WSU catalog.

The following courses are required for admission:

- English 101, 301 or 302
- Chemistry 121, 122, 123, 251, 371
- Biology 121, 122, 123, 310, 312, 321, 345
- Huxley 352, 452
- Physics 131, 132, 133
- Math 121

Faculty Adviser: Dr. Herb Brown, Department of Biology.



SCHOOLS & COLLEGES OF WESTERN

COLLEGE OF ARTS AND SCIENCES

Dr. James W. Davis, Dean
Dr. Brian P. Copenhaver, Associate Dean

The College of Arts and Sciences, Western's largest academic division, contains 21 departments offering more than 60 major programs at both bachelor's and master's degree levels. In addition to traditional majors in the humanities, social sciences and natural sciences, students may select from a variety of interdisciplinary programs or design their own majors with the help of faculty advisers.

Academic Programs Leading to Undergraduate and Graduate Degrees

American Studies	BA
Anthropology	BA, MA
Biology	BA, BS, MS
Biology/Chemistry	BA, BA/Ed
Biology/Math	BS
Biology/Physical Science	BA/Ed
Broadcast Communication	BA
Chemistry	BA, BS, MS, BA/Ed
Chemistry/Mathematics	BA/Ed
Chemistry/Physics	BA/Ed
Community Health	BS
Computer Science	BS
Earth Science	BA/Ed
Earth Science/Physical Science	BA/Ed
English	BA, MA, BA/Ed, M/Ed
Environmental Geology	BS
Foreign Languages	
(French, German, Greek, Latin, Russian, Spanish)	BA
(French, German, Latin, Russian, Spanish)	BA/Ed
(French, German, Spanish)	M/Ed
General Science	BA/Ed
Geography	BA, MA, MS, BA/Ed, M/Ed
Geography/Social Studies	BA/Ed
Geology	BA, BS, MS
Geology/Math	BS
Geophysics	BS
History	BA, MA, BA/Ed, M/Ed
History/Social Studies	BA/Ed
Home Economics	BA, BA/Ed
Industrial Arts Education	BS, M/Ed
Industrial Design	BS
Journalism	BA
Leisure Studies	BA
Liberal Studies	BA
Mathematics	BS, MA, MS, BA/Ed, M/Ed
Mathematics/Computer Science	BS

Mathematics/Economics	BA
Natural Science	M/Ed
Philosophy	BA
Physical Education	BA, BA/Ed, M/Ed
Physical Geochemistry	BS, MS
Physical Science	BA/Ed
Physics	BA, BS, MS, BA/Ed, M/Ed
Physics/Astronomy	BA
Physics/Math	BA, BA/Ed
Political Science	BA, MA, BA/Ed
Public Policy & Administration	BA
Psychology	BA, MA, MS, BA/Ed, M/Ed
Science Education	M/Ed
Self-Designed Interdisciplinary Major	BA, BS
Social Studies	BA/Ed
Sociology	BA, BS, MA
Sociology/Anthropology	BA/Ed
Speech	BA, MA, BA/Ed, M/Ed
Speech/English	BA/Ed
Speech Pathology & Audiology	BA, BA/Ed, M/Ed
Technology/Industrial Technology	BS
Urban & Regional Planning	BA
Visual Communications (VICOED)	BS
Vocational Industrial-Technical Teacher Education	BS

Admission

See previous catalog section on University Admission.

Requirements for Bachelor's Degrees

- 180 quarter hours of credit; no fewer than 60 credits in upper-division study
- Residence study: one full year (45 credits minimum) including the final quarter before issuance of a degree; Study Abroad programs are acceptable as resident credit to a maximum of 45 credits
- Scholarship standard: a cumulative grade average of 2.0 (C), or better, with no grades of less than C acceptable in the major, minor, supporting courses for major or minor, professional education courses, or in English composition. Admission to, and continuation in, the teacher education curriculum requires a minimum average of 2.5. Some depart-

Schools & Colleges

ments have minimum grade point requirements in the major for graduation. Please check the departmental major requirements for specific information

- General University Requirements: approximately 50 to 70 credits, depending upon degree of overlap with major and exemptions based on test results and previous preparation
- Major area emphasis as specified in departmental sections under Bachelor of Arts, Bachelor of Science and Bachelor of Arts in Education
- Electives as needed for the 180 quarter hours total credit

Majors and Minors

In addition to the General University Requirements and other common degree requirements listed on the preceding pages, the candidate for a Bachelor of Arts or Bachelor of Science degree must complete a major area emphasis which is usually accompanied by supporting courses. A minor is optional. A few concentrations are offered which encompass both a major and a minor. Students will confer with appropriate departmental advisers to plan study programs. Transfer students are expected to complete at least a portion of their work in the major and minor fields in this institution.

Student-Faculty Designed Majors

Students desiring concentrated study in areas not listed as majors by departments of the College of Arts and Sciences may design a major in conference with faculty members. For details of this procedure, please refer to the Academic Advisement Center or the chairman of the Department of Liberal Studies.

Academic Advisement

As the student completes the freshman year, usually consisting largely of courses that meet the General University Requirements, he or she is referred to the academic departments for continued personalized advisement in planning and selecting courses of study. Faculty within each department share responsibility for counseling students electing concentrations in their area. In some cases, faculty from several departments may cooperate with a student in constructing his or her own interdisciplinary major; in others, faculty members may recommend to the department chairman the waiving of certain course prerequisites (when it has been demonstrated that the student already has these competencies). Students who are un-

decided about a major may seek advisement through the Academic Advisement Center in Old Main.

Department Chairmen

Dr. James Bosch	Anthropology
Dr. Gerald F. Kraft	Biology
Dr. Donald M. King	Chemistry
Dr. Douglas B. Park	English
Dr. Walter Robinson	Foreign Languages
Dr. James W. Scott	Geography & Regional Planning
Dr. Charles Ross	Geology
Dr. Roland L. DeLorme	History
Dr. Alice Morrow	Home Economics
Mr. R. E. Stannard Jr.	Journalism
Dr. William Stoeber	Liberal Studies
Dr. Richard Levin	Mathematics/Computer Science
Dr. Hugh Fleetwood	Philosophy
Dr. Margaret Aitken	Physical Education
Dr. W. Louis Barrett	Physics & Astronomy
Dr. Ralph E. Miner	Political Science
Dr. Peter J. Elich	Psychology
Dr. E. R. Mahoney	Sociology
Dr. Larry Richardson	Speech
Dr. Michael Seilo	Speech Pathology/Audiology
Dr. Clyde M. Hackler	Technology

COLLEGE OF BUSINESS AND ECONOMICS

Dr. Robert P. Collier, Dean

Dr. Eugene Owens, Associate Dean

Objective of the College

The major purpose of the College of Business and Economics is the production and distribution of knowledge in the management and administration of complex organizations. The College develops managerial skills, analytic economic skills, and interpersonal sensitivities, as well as quantitative and accounting skills. In addition, the College prepares teachers for high schools and community colleges in the business disciplines.

The program is primarily upper-division, based upon a broad liberal-arts education in the first two years. Individual skills are developed sufficiently to achieve entry-level employment in many fields, but the College tries to motivate and orient the student for a life long learning experience. The College develops sensitivity to environmental aspects of business enterprise, promotes a commitment to ethical behavior, and provides a strong emphasis upon forward-looking, goal-setting behavior in the business world while encouraging an active role of leadership in the community.

The College of Business and Economics, established as a separate unit in 1976, is organized into four departments: Accounting, Business Administration, Economics, and Office Administration / Business Education. These departments are interdependent and their programs draw upon the whole College.

Department Chairmen

Mr. Byron E. Haglund	Accounting
Dr. E. Leroy Plumlee	Business Administration
Dr. K. Peter Harder	Economics
Dr. Hubert N. Thoreson	Office Administration/ Business Education

Academic Programs Leading to Undergraduate and Graduate Degrees

Accounting	BA
Business Administration	BA, MBA*
Economics	BA, MA*
Business Education	BA/Ed, M/Ed*
Office Administration	BS

*Consult the Graduate School for further details. The MBA is a new program for Western Washington University.

Joint Majors

Interdepartmental majors are given in: Accounting-Computer Science; Accounting-Economics; Business Administration-Mathematics; and Economics-Mathematics. See Departments for details.

Admissions

The College of Business and Economics is currently experiencing such severe enrollment pressure that selective admission procedures are necessary. Consequently, priority for enrollment in upper division courses (300 and above) is given to students who have been officially admitted to the College.

For admission to and continuation in good standing, a student must have earned at least 75 quarter hours of college credit. Although work experience and individual circumstances will be considered, at the present time admission is limited to students with a 2.25 or higher GPA. This level may be adjusted in the future. Announcements of changes in entrance standards will be published in the class schedule.

Students may enroll in lower division courses without formal admission into the College of Business and Economics. Transfer students may enroll in courses appropriate to a CBE major during the first quarter of their enrollment at Western. Continued enrollment, however, requires meeting the above criteria.

Applications for admission may be made directly to the College of Business and Economics. Academic advisement is provided by College of Business and Economics faculty.

See the Admissions section of this catalog for policies and procedures relevant to admission to Western Washington University.

Requirements for Bachelor's Degree

- 180 quarter hours of credit
- No fewer than 60 credits in upper-division study; some majors, however, may exceed 60
- Resident Study: A minimum of the final year's studies (45 hours credit)
- Scholarship standard: A cumulative grade point average of 2.25, or better. Continuation in the teacher education curriculum requires a minimum average of 2.5
- General University Requirements must be completed by all students before a baccalaureate degree will be granted
- Majors: major area emphasis and requirements are specified in the departmental sections
- Electives: electives may be selected as needed to ensure the required 180 quarter hours total credit, except that majors in accounting and business administration must complete a minimum of 72 credits in areas other than accounting, business administration and economics
- Petitioning procedure: any student who seeks either a variation from the strict application of the rules, regulations, or requirements of the college, or a student-designed major from among the departments of the college, may petition the Dean
- Graduation and degree application: refer to the "General University Requirements" section for procedures to be followed

Minor in Business

In addition to the majors provided by the four departments, a Business Minor makes an excellent addition to a specialized program in other areas of the University. This gives relevant, realistic, and applicable qualities to those valuable skills developed in other more abstract and theoretic departments. The combination of a Business Minor with a major in Speech, English, Journalism, VICOED, Home Economics, Foreign Languages, or other liberal arts majors, provides an additional strength and resource to the individual's skills and educational development.

The recommended minor in Business consists of 25 hours work: Acctg 251, 252; Econ 201, 202; Bus Admin 301, 303.

SPECIAL PROGRAMS

Bureau of Business and Economic Research. In addition to its regular academic programs and functions, the College of Business and

Economics is involved in several other endeavors. The Bureau of Business and Economic Research is an agency designed to stimulate and support the research activity of the faculty and students. Opportunities exist for students to participate in current research.

Center for Economic Education. The Center for Economic Education, coordinated by the Economics Department, is involved in providing economic knowledge, data, and teaching aids to the grade schools and high schools throughout the state. This Center is affiliated with the Washington State Council on Economic Education and assists in raising the standard of economic literacy of the state.

Internships in the College of Business and Economics recognize that practical experience outside the classroom is an essential part of the learning process. The College of Business and Economics has developed a very active internship program and provides actual work experience in businesses and governmental agencies in this region for which university credit is awarded. A faculty supervisor is needed for university credit to be awarded. Contact the College or the Career Planning and Placement Center for assistance in arranging such experiences.

SCHOOL OF EDUCATION

Dr. Arnold M. Gallegos, Dean

Western Washington University has a distinguished national reputation for the excellence of its teacher preparation programs. These programs have received two successive major awards from the American Association of Colleges for Teacher Education and another comparable honor from the National Education Association's Association of Classroom Teachers. In 1974 the University was honored with a national Pacesetter Award by the U.S. Office of Education. These awards were for the University's pioneering undergraduate program which integrates students' professional course work with immediate application of that course work in an off-campus residence center.

Both undergraduate and graduate preparation and research programs in education have received substantial federal grants that have enabled students and faculty to pursue studies in a variety of community settings with children and adults representing diverse social, cultural and economic backgrounds.

The School of Education encompasses many departments within Western Washington University. These departments of the University cooperate in teacher preparation. The departmental sections of this catalog describe academic major and minor concentrations offered throughout the University. Faculty members from various departments concerned with the preparation of school personnel are members of the School of Education faculty, headed by the Dean of the School of Education. This organization provides a clearinghouse for exchange of information and an agency for coordination of departmental efforts in programs of teacher education.

The Department of Education, as the major component of the School of Education, is responsible for developing and offering professional studies and for coordinating the elementary programs. As a part of this responsibility it offers programs leading to both the BA/Ed and the M/Ed.

In addition to the Education Department, the Human Services Program and the Center for Indian Education Specialists are also within the School of Education. The Human Services Program offers a B.A. degree in Human Services and the Center offers a non-degree certificate of study for counselor aides and teacher aides (see index for listings).

The Teacher Curricula and Certification Council has University-wide jurisdiction over teacher education curricula, teacher certification programs and professional preparation programs proposed by certification consortia in which the University participates. The council also has jurisdiction over the Human Services curriculum. The Dean of the School of Education chairs this council.

Academic Programs Leading to Undergraduate and Graduate Degrees

See departmental listings for academic area programs	BA/Ed, M/Ed
Professional concentration (elementary)	BA/Ed
Special Education	BA/Ed, M/Ed
Human Services	BA
Education (various fields)	M/Ed
Graduate programs leading to certification in School Administration and to Educational Staff Associate Certification in School Counseling, Speech Pathology & Audiology, and School Psychology ..	M/Ed, MA

Teacher Certification Requirements

Washington State Provisional Certificate

The provisional certificate is valid for three years from the date of issuance, renewable for an additional three years after completion

of a portion of the fifth year. (See fifth-year requirements for the standard (continuing) certificate.) For the first year, the provisional certificate is restricted to teaching at the level and/or subject area for which the teacher is recommended by virtue of his or her preparation.

Candidates for the provisional certificate must be citizens of the United States or must have declared their intent to become citizens. Non-citizens may complete the requirements for and receive the Bachelor of Arts in Education degree but will not receive a Washington Teaching Certificate.

Certification Patterns and the B.A. in Education

The B.A. in Education program at this University is designed to meet state requirements for the provisional certificate for all levels of the public schools. Teachers who complete these requirements may qualify also for certification in many other states.

Program requirements for the B.A. in Education degree and teacher certification may be classified in three categories:

- (1) General University Requirements for the B.A. degree.
- (2) Major and minor concentrations. Concentrations vary according to the student's choice of teaching level and/or subject area. (See departmental sections of the catalog for specific requirements in majors and minors.) Although a minor is not required for the B.A. in Education degree, elementary teachers need both academic and professional concentrations to qualify for a teaching certificate.
- (3) Professional studies. Requirements in this category vary according to the program chosen and according to campus-based or field-centered options. Common to all are courses in educational foundations, educational psychology, instructional strategies and supervised teaching in a public school setting.

Students desirous of certification who are pursuing a B.A. or B.S. degree in a specific area (e.g., biology, chemistry) should contact the major department and the School of Education Admissions and Advisement Office, MH 202, concerning the additional course work required.

Professional studies programs and course listings in education are found in the Department of Education section of the catalog.

Department Chairman

Dr. Alden L. Nickelson Education

FAIRHAVEN COLLEGE

Phillip R. Ager, Dean

The College

Fairhaven is a liberal arts division of Western Washington University, designed to provide the advantages of a small undergraduate college, while at the same time providing access to the resources of a large institution. A Fairhaven student has the best of both worlds: the personality, intimacy, informality of a distinctive degree program, and the technical and educational facilities of a state university.

Classes are lively, independent studies are encouraged, evaluations are personal and detailed. Fairhaven does not use grades; rather, courses are taken on a "satisfactory" or "unsatisfactory" basis, and academic credits are entered into a student's record on submission of written student-faculty evaluations. A close relationship between students and their faculty tutors or advisers is essential to this kind of self-evaluation and study assessment.

At Fairhaven, emphasis is placed on developing skills of inquiry and problem-solving. Students are challenged to bring what they learn to bear on the basic concerns and crucial problems of human existence, to experiment, to do research and to act. This style of education supports liberal studies; it also facilitates the development of personal skills needed for a variety of vocations.

Perhaps the most important thing a student learns at Fairhaven is, ironically, the most difficult to describe and to gain with certainty. It is an attitude or habit of critical awareness, of continual question-asking, of taking responsibility, of active participation. It is a motivation to ask not just "what" but also to discover the "why" and then to assess the "why" and make value judgments and commitments. This attitude pushes for the recognition and study of the relations among ideas; the interaction between people and their world; and the connection between knowledge and action. Some courses address these matters more directly than others, but in fact these are the essence of nearly all Fairhaven classes. It is the responsibility of faculty to evidence this attitude in their own

learning and teaching. Students develop this habit through practice, through participation in learning with faculty, in relations with other students, by reading and through experience.

The Community

The idea of a living-learning democratic community is stressed at Fairhaven. Students are involved at every level of decision-making within the college, and have full voting membership on all committees. Meetings of the faculty and other constituent bodies are open, and members of the community are made authentically responsible for the nature of the college and the direction it should take.

For those who find the usual process of learning variously restrictive, Fairhaven provides opportunity for both wide exploration and intensive concentration. Fairhaven should be considered especially by those who wish to take an active role in their own education — by those who wish to individualize their studies, to develop and advance at their own pace, to create an independence of spirit and mind at once serious and joyful, practical, committed and humane.

EDUCATIONAL OPPORTUNITIES

The Curriculum

Fairhaven's curriculum recognizes that *how* one learns changes as one progresses through the learning process; it complements, directs, and supports the students at each stage of their progress, for its focus is on the learners and their development.

The curriculum is comprised of study at *three stages* which, together, improve and sharpen the basic skills of expression and thought; broaden and integrate knowledge of the liberal arts; examine in depth a problem, a theme, or a discipline; and provide a setting in which those about to graduate share and summarize their scholarship. In addition to completion of all three stages, a minimum of 180 credits (60 at the upper-division level) must be earned.

- **Stage One:** The first stage is one of exploration, what Alfred North Whitehead, upon whose theory of learning Fairhaven's curriculum is patterned, called a period of "romance." This is a time to explore what's out there to be learned, a time for introductions to areas and methods of study, ways of knowing,

purposes of an education, and a time for study of the self in relation to intellectual and social experiences.

- **Stage Two:** The satisfactions during the second stage are different from those of stage one and focus on coming to know one subject as deeply as possible, using the breadth of acquaintance gained in the first stage as a base upon which to build. This period of concentration can be pursued in two ways: (1) Through a major offered in another college of Western; or, (2) Through a Fairhaven Interdisciplinary Concentration constructed by the student in consultation with a faculty advisory committee.
- **Stage Three:** Study at Fairhaven culminates in at least one quarter of working with faculty and other advanced students to demonstrate an understanding of the implications of the specialized study and attained skills, and to search for ways in which one's focused studies relate to other areas of knowledge and to society. Students are asked to participate in at least one advanced seminar, and to be involved in some activity which shares with the community the fruits of their study, through teaching, a performance, a presentation, or social action.

Refer to back section of this catalog for a more complete description of the curriculum, graduation requirements, and courses and studies.

The Interdisciplinary Concentration [Specialization Leading to the B.A. Degree]

The Fairhaven Interdisciplinary Concentration provides a unique opportunity for developing the equivalent of a major. The *concentration* allows the student maximum flexibility in designing a program of advanced studies appropriate to his or her needs. Course work, independent study, travel study and field practice can be integrated into a program not otherwise available at the various colleges of WWU.

The student's **Concentration Adviser** and **Concentration Committee** is responsible for reviewing the program during proposal stages and for evaluating the completed major. The program should anticipate at least 50 non-Fairhaven credit hours, must combine work from different academic disciplines or areas, and should utilize Fairhaven College studies to integrate and focus the specialized work.

Majors, Other University Divisions
[Specialization Leading to the B.A. or B.S. Degree]

Some Fairhaven College students find their areas of interest covered in one of the majors offered in another college of Western. (Refer to program descriptions in this catalog.) For them, appropriate departmental consultation and approval is necessary. Completion of major requirements signals student presentation to the Fairhaven College adviser a statement describing the rationale, content and value of that major.

Professional Education
[Specialization Leading to the B.A. Ed. Degree]

Western's School of Education provides a choice of majors, including the Fairhaven Interdisciplinary Concentration, and administers a program for students who are interested in obtaining teaching credentials. Selected Fairhaven faculty help to advise students and provide a channel of communication between the school and the college.

The Upside-down Degree
(Liberal Arts, Breadth Studies Leading to the B.A. Degree)

This program is unique within the University. The usual route to a B.A. calls for "general education" experience to take place during the first two years and for the major area to be completed in the junior and senior years. Under this program, students who have a strong technical degree and a desire to continue their education may transfer their specialization and complete two years of general studies (Stage I and Stage III) at Fairhaven. (Note: Candidates for admission to this program follow the same procedures as those seeking regular admission. The words "Fairhaven College, Upside-down Degree" should be clearly written on the standard application form.)

SPECIAL PEOPLE, SPECIAL PLACES

The Bridge Project

The Bridge Project is one of the ways Fairhaven enriches and diversifies the learning environment. The major component of the project is the 55-plus age group residing on campus. "Bridgers" participate in classes, activities and workshops along with regularly enrolled students. Many study for interest only, but others work toward a bachelor's degree by following regular admission and

enrollment procedures. Questions about this program should be addressed to: *Bridge Project Director, Fairhaven College.*

Visitors

Visiting faculty and guests are brought to Fairhaven to expose students to different viewpoints and personalities, and they do this in a way which is personal and direct. Visitors and guests meet with classes, offer workshops and join students for informal discussions and meals.

Residential Program, Workshops and Studios

Western's campus residence hall community includes co-educational halls, all-women's halls, all-men's halls, apartments and the Fairhaven Complex. Special features of the program at Fairhaven include a broad variety of living accommodations, separate food service, theme residences and arts and crafts workshops.

Graduates: After Fairhaven, What?

"The record established by a number of Fairhaven graduates and the apparent relationship of this record to the Fairhaven experience is impressive." (WWU/Fairhaven College Evaluation Committee; Winter, 1978.)

A large percentage of Fairhaven graduates go on to pursue advanced degrees. Those not electing graduate study are employed in a wide variety of jobs; most find positions in teaching, the helping professions, small business and government. Data from Fairhaven's graduate surveys indicates that job placement has been very good over the years.

ADMISSION

Admission Standards

Western Washington University requires a minimum cumulative grade average of 2.50 from entering first-year students. Transfer students should meet similar expectations. Admission to the University qualifies students for admission to Fairhaven College. Our experience has been that candidates enter the college with outstanding credentials. In some instances, supplemental information about your academic goals and degree plans may also be requested by Fairhaven.

Application for Admission

Candidates for admission to Fairhaven College apply to Western Washington University via the *Uniform Undergraduate Application*

for Admission to Four-Year Colleges and Universities in the State of Washington. The words "Fairhaven College" should be clearly written at the top of this form. The standard application and all transcripts should be sent to: Office of Admissions, Western Washington University.

If you are considering admission to Fairhaven, we encourage you to visit the campus, preferably, when classes are in session so that you can fully experience our learning environment and meet faculty, staff and students. Given advance notice, we can ensure individual appointments with the Dean and a faculty adviser.

Other Important Items

Information elsewhere in this catalog related to test scores, health history, residency and tuition are all applicable to Fairhaven College students. Financial aid application forms may be obtained from state high school counselors or the University Financial Aid Office, Old Main. Housing and residence hall applications are available at the University Housing Office, High Street Hall. Students are urged to submit applications for financial aid and housing early in the admission process.

REQUESTS FOR SUPPLEMENTARY INFORMATION ABOUT FAIRHAVEN COLLEGE should be addressed to: Office of the Dean, Fairhaven College, WWU, Bellingham, Washington, 98225.



'For Handel' sculpture in Performing Arts Center plaza.

COLLEGE OF FINE AND PERFORMING ARTS

Dr. William A. Gregory, Dean

The College of Fine and Performing Arts came into being January 1, 1976. It brought together for the first time the departments of Art, Music and Theatre/Dance. The new configuration allows Western to supply integrated training in the arts by more efficient use of resources and facilities. It also allows Western to provide an enriched artistic atmosphere through the improvement of local performances and displays in art and the establishment of integrated programs which broaden students' skills on the base of historical knowledge and experience.

Academic Programs Leading to Undergraduate and Graduate Degrees

Art	BA, BA/Ed, BFA, M/Ed
Art History	BA
Dance	BA
Music	B/Mus, M/Mus, BA/Ed, M/Ed
Theatre	BA

Admission

A student is admitted to the College of Fine and Performing Arts when he/she has been admitted to Western Washington University and has officially declared and been accepted as a major in any one of the three departments of the college. Advisement is carried on through the department and through the office of the dean of the College of Fine and Performing Arts.

Requirements for Bachelor's Degree

- 180 quarter hours of credit; no fewer than 60 credits in upper-division study
- Residence study: one full year (45 credits minimum) including the final quarter before issuance of a degree; Study Abroad programs are acceptable as residence credit to a maximum of 45 credits
- Scholarship standard: a cumulative grade average of 2.0 (C), or better, with no grades of less than C acceptable in the major, minor, supporting courses for major or minor, professional education courses, or in English composition. Admission to, and continuation in, the teacher education curriculum requires a minimum average of 2.5. Some departments have minimum grade point requirements in the major for graduation. Please check the departmental major requirements for specific information
- General University Requirements must be completed by all students before a baccalaureate degree will be granted.

They may be satisfied in one or a combination of the following alternatives:

- (1) Demonstrating proficiency through appropriate examinations
 - (2) Through challenge in the manner described under the "Academic Policies" section of this catalog (see "Advanced Placement and Course Challenge")
 - (3) Completion of the General University Requirements as outlined in the section on All-University Graduation Requirements or an approved associate of arts degree from certain community colleges that satisfy those requirements
- Major area emphasis as specified in departmental sections under Bachelor of Arts, Bachelor of Arts in Education, Bachelor of Fine Arts and Bachelor of Music
 - Electives as needed for the 180 quarter hours total credit

Majors/Minors

In addition to the General University Requirements and other common degree requirements, a candidate for a Bachelor's degree must complete a major from one of the departments within the College of Fine and Performing Arts. A minor is optional.

Student/Faculty-Designed Major

The Student/Faculty-designed major is a major for a Bachelor's degree granted by the College of Fine and Performing Arts. Each major is approved by the Curriculum Committee of the College of Fine and Performing Arts. Approval must come after 45 — and before 90 — credits are completed.

Directions and contract forms will be issued to applicants by the Dean's office only after the Dean has granted preliminary approval to the applicant's concept for his or her student/faculty-designed major.

Interdisciplinary Arts Major

A nine-quarter program which leads to a Bachelor of Arts degree in Fine and Performing Arts, the program is a 108 credit major comprised of: 36 credits in Interdisciplinary Arts courses, a 36 credit concentration within a department of the college and a 36 credit university concentration, taken under advisement. Courses and other details can be found in this catalog under Arts, Interdisciplinary.

Students interested in this major should consult with the Director of the Interdisciplinary

Arts program or the Dean of the College of Fine and Performing Arts.

A minor in Interdisciplinary Arts is also offered.

Department Chairmen

Dr. Thomas Schlotterback	Art
Dr. Albert Shaw	Music
Mr. Dennis Catrall	Theatre/Dance

HUXLEY COLLEGE OF ENVIRONMENTAL STUDIES

Dr. J. Richard Mayer, Dean

Huxley College was created in 1968 to develop programs of environmental studies that would bridge the traditional walls of individual disciplines. The College was named after Thomas Henry Huxley, the eminent British biologist. The following quotation from one of his grandsons gives a philosophical cornerstone:

Sooner rather than later we will be forced to get away from a system based on artificially increasing the number of human wants, and set about constructing one aimed at the qualitative satisfaction of real human needs, spiritual and mental as well as material and physiological.
—Sir Julian Huxley, *The Humanist Frame*

Huxley College is principally an upper-division college offering two-year programs of undergraduate environmental study. The primary mission of the College is to shape programs of undergraduate education which reflect the broadest possible view of man in a physical, biological, social, and cultural world. These programs seek to prepare students to recognize and understand environmental problems, to engage in inquiry and research that can provide insight into these problems, and to explore alternative solutions open to society. Huxley's programs are global in their frame of reference, innovative in their design, and problem-oriented in their outlook.

Academic Programs

Undergraduate

Huxley College offers programs of upper-division study leading to a Bachelor of Science or Bachelor of Arts degree in Environmental Studies. Bachelor of Science

Schools & Colleges

candidates in environmental studies may choose from five concentrations in three broad program areas.:

Environmental Science

- Ecosystems Assessment and Management
- Environmental Health

Environmental Planning

- Environmental Planning

Environmental Affairs

- Social Assessment and Policy
- Environmental Education

A student/faculty designed concentration may also be developed.

Candidates for the Bachelor of Arts degree complete a general program in environmental studies.

Huxley degree candidates may complete a second major and/or a minor in any other unit of the University by fulfilling the specified major or minor requirements of that unit.

Huxley's concentrations are broadly conceived and allow students to elect coursework, seminars and independent learning experiences (called "Problem Series") in freshwater, marine, coastal and terrestrial ecology; air and water pollution; general environmental health; food and nutrition; urban, regional and site environmental planning; environmental systems and simulations; human ecology, environmental journalism, teacher education; outdoor education and interpretation; mass communications; and environmental policy and administration.

Graduate

While Huxley's primary mission is undergraduate education, the College is also committed to graduate studies and research. Two Master's programs are currently offered: Applied Biology, a cooperative program with Western's Department of Biology, and Environmental Planning, a cooperative program with Western's Department of Geography and Regional Planning.

Admissions

Huxley's upper-division degree programs are normally undertaken by students at Western who have junior standing (90 or more quarter hours), and by transfer students from other colleges and universities who have similar

academic standing. In addition, interested freshmen and sophomores may be provisionally admitted to Huxley College. Provisional students are assigned faculty advisers to help plan their pre-Huxley program and are encouraged to participate in all activities of the Huxley community. Western students are urged to apply for provisional admission to Huxley College as soon as they become interested in Huxley's degree programs in order to obtain advisement and to explore ways of participating in the activities of the college community.

Regular Admission — WWU Juniors

Admission of students into Huxley College is based upon satisfactory completion of 90 or more quarter credit hours (junior standing), a cumulative grade point average of at least 2.0, and completion of the following courses:

- Biology 121 — Introduction to Plant and Animal Biology (includes lab) (5)
and
- Biology 122 — Introduction to Cellular Biology (5) *Prereq: one quarter of college chemistry*
- Chemistry 115 — General Chemistry (5)
or
- Chemistry 121 — General Chemistry I (5) *Prereq: Math 103 or equivalent, or concurrent registration*
- Geology 211 — Physical Geology (5) *Prereq: high school or college chemistry*
- Math 121 — College Algebra (5) *Prereq: basic algebraic skills comparable to those described under Math 103; students should have either trigonometric skills comparable to those described under Math 104 or they should register for Math 103 concurrently*
- English 301 — Reading and Exposition (4) *Prereq: Eng 101*
or
- English 302 — Reading and Argumentation (4) *Prereq: English 101*
or
Demonstration of proficiency in English composition

All of the above courses are acceptable toward the General University Requirements.

Regular Admission — Transfer Students

Transfer applicants are encouraged, since Huxley's curriculum is mainly an upper-division program. The first step in application to Huxley College is application and admission to Western Washington University. All transfer applicants are evaluated by Western's Office of Admissions for transfer credit and for credit applicable to the General University

Requirements. The second step is application to Huxley College on the form provided to WWU applicants who intend to major in environmental studies. Huxley applicants who have completed the following requirements will be admitted directly into the College:

- General biology: two college courses offered for science students; topics covered should include plant and animal evolution, cellular biology and genetics.
- General chemistry: a college course offered for science students.
- Physical geology: a college course offered for science students.
- College algebra: a pre-calculus college algebra course.
- English composition: a college course above the level of introductory composition, or demonstration of proficiency in English composition.

These courses may be one quarter, one semester or one trimester of work.

Students planning pre-Huxley programs at other colleges and universities should try, in filling these requirements, to complete equivalents of the WWU courses listed under *Regular Admission*, above.

Regular Admission — Transfers from Washington State Community Colleges

Students who have earned certain Associate's degrees from community colleges in Washington State are admitted to Huxley College if they transfer with 90 credits and have completed the course requirements listed above. Such students are considered to have completed the General University Requirements; prospective transfers should consult their community college counselor or the WWU Office of Admissions for information on which degree or degrees offered by their community college are accepted under this agreement.

Regular Admission — Students Holding Degrees from Other Institutions

Students holding Associate's degrees from community colleges outside of Washington State, or Associate's degrees from colleges within Washington State for which no agreement exists, will be considered as transfer students (see above). Students holding the Bachelor of Arts degree from accredited colleges and universities and working toward a second Bachelor's degree will be considered as transfers who have completed the General University Requirements.

Provisional Admission — Transfers and Western Students

Transfer students and Western students applying to Huxley College who have not yet reached junior standing or who are deficient in more than two of the courses required for admission will be provisionally admitted. Admission to Huxley College will be granted when the student reaches junior standing and completes the courses required for admission, provided a cumulative grade average of at least 2.0 (C) is maintained. Provisionally admitted students are encouraged to participate in all activities of the Huxley community.

Requirements for Bachelor's Degrees

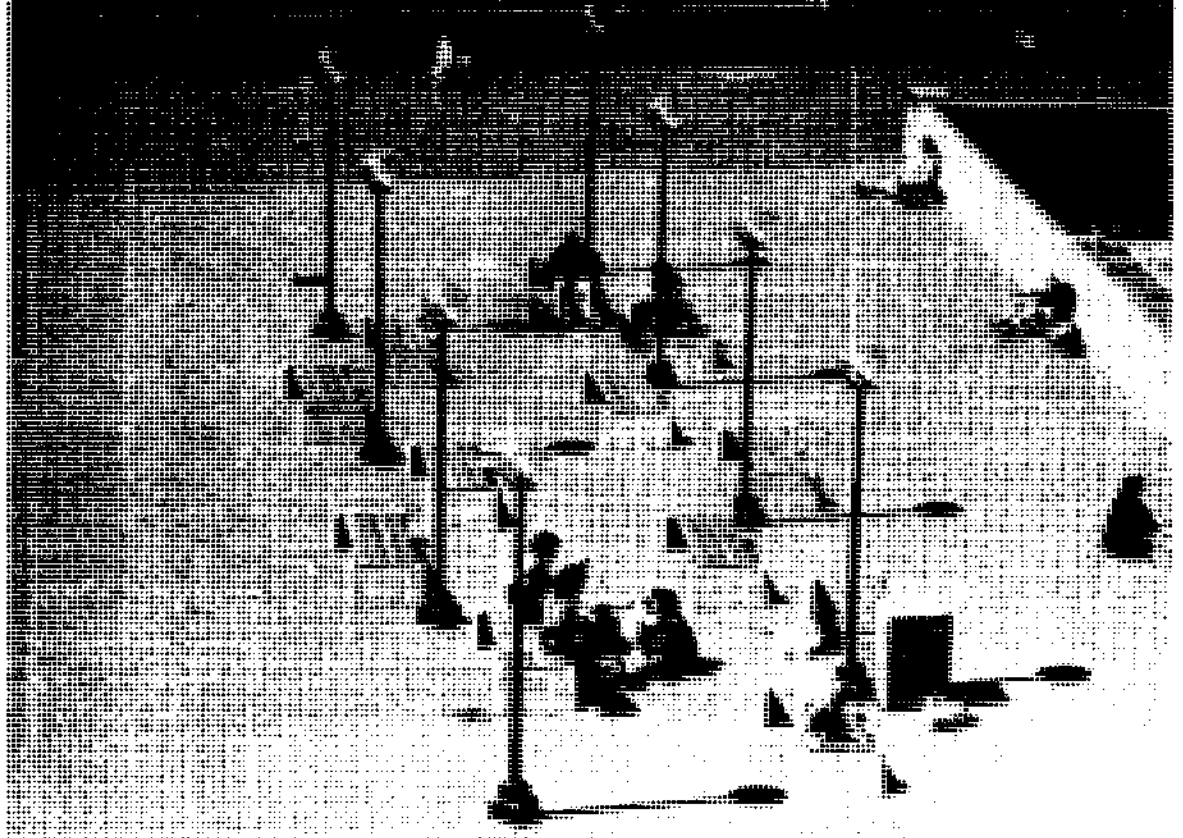
- 180 quarter hours of credit; no fewer than 60 credits in upper-division study, including:
 - the General University Requirements
 - a Huxley College concentration, student/faculty designed concentration, or the general environmental studies major as specified in the Huxley College section of departmental listings;
 - electives as needed for the 180 quarter hours total credit
- Residence study: At least one full year (45 quarter credits) as a member of Huxley College, including the final quarter before issuance of a degree.
- Scholarship standard: a cumulative grade average of 2.0 (C), or better, with no grades less than C acceptable in courses that define a student's major and concentration or minor, professional education courses, or in English composition. Admission to, and continuation in, the teacher education curriculum requires a minimum average of 2.5.

THE GRADUATE SCHOOL

WWU is authorized by the Washington State Legislature to award five graduate degrees:

- The Master of Arts (M.A.)
- The Master of Business Administration (M.B.A.)
- The Master of Education (M.Ed.)
- The Master of Music (M.Mus.)
- The Master of Science (M.S.)

More than two dozen programs — from Anthropology to Technology — offer graduate study leading to one or more of these degrees. The *Graduate Catalog*, which is avail-



Performing Arts Center plaza.

able from the Graduate School upon request, provides information about admission requirements, courses and program options, program advisement, and other matters relating to graduate study at the University.

In 1978, Western's graduate programs were given continuing accreditation by the Northwest Association of Schools and Colleges and by the National Council for the Accreditation of Teacher Education. The University is a member of the Council of Graduate Schools in the United States and adheres to the general policies and criteria established by this national association.

The University's purpose for graduate study is to provide students with quality graduate offerings, accompanied by opportunities for research and professional development. Graduate programs are intended to prepare able students for career advancement and further study. The programs provide service to the state and its major divisions, to the business and commercial sector, and to a number of professions.

Several of WWU's graduate programs offer courses or program elements at locations outside Bellingham, mainly in the Puget Sound region. Increasingly, it is possible to combine off-campus study with a residential term at Bellingham and thus earn a master's degree. The summer session on WWU's campus includes a number of special arrangements for graduate study: intensive study during a limited period of time, instructional

and research seminars, professional seminars, and courses offered by visiting faculty. The University's Summer Bulletin lists these special arrangements. At present, there is no out-of-state tuition for summer quarter enrollment.

Teaching Assistantships are available in limited number in nearly all graduate programs for the academic year — fall, winter and spring terms. These Assistantships are competitive. Duties vary according to the department and program, the needs of the program faculty, and the student's graduate plan of study. Information about Assistantships can be obtained from the Graduate School. Graduate students also are eligible for several types of financial aid; information can be obtained from the University's Office of Student Financial Aid.

Persons who plan to enter graduate study at WWU should read the current *Graduate Catalog* closely before enrolling in any course that is intended to count toward a master's degree or advanced certificate of study (except that students working toward a fifth-year certificate for teaching should contact the Fifth Year office in the School of Education). Additionally, students should consult the appropriate program adviser and the Graduate Office.

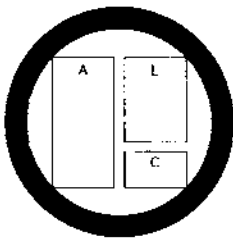
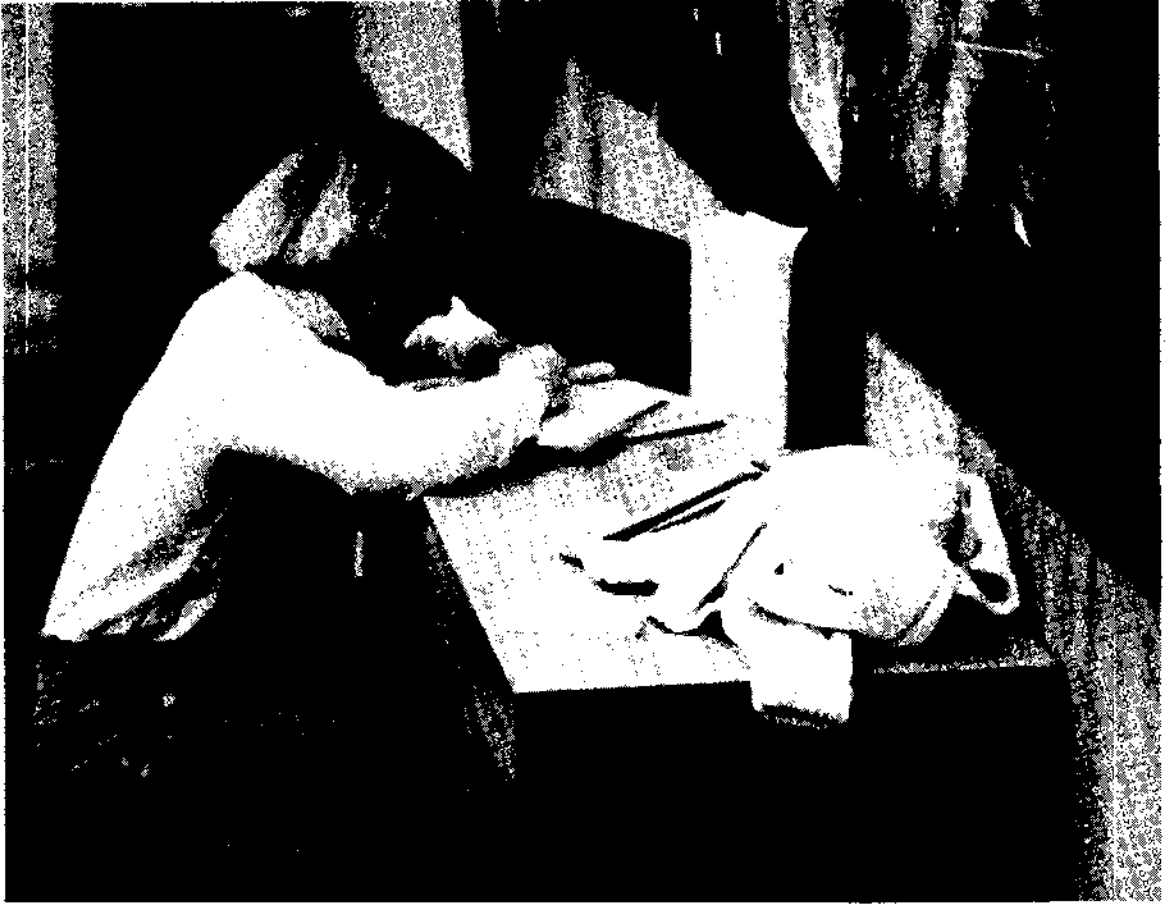
For further information about graduate study at WWU, write: Dean of the Graduate School, Western Washington University, Bellingham, WA 98225.

DEPARTMENTS, PROGRAMS & COURSES

Courses listed in this general catalog constitute a record of the total academic program of the University. Except for unforeseen scheduling and personnel circumstances, it is expected that each course will be offered

during the period of this catalog. For an exact scheduling of courses at Western, students should consult the annual class schedule, the summer bulletin and bulletins for the Center for Continuing Education.





ACCOUNTING

College of Business and Economics

Accounting is considered by many as the most important tool of management. A knowledge of accounting is necessary to understand the operation and financial condition of any complex institution — business or government, profit-seeking or non-profit. An understanding of accounting will aid the student in his study of economics and management.

A student majoring in accounting takes the year of introductory accounting required of a business administration major. In this series he studies the fundamental principles of accounting theory and practice as it applies to corporations, partnerships and proprietorships. Subsequently, he will take additional work in intermediate and advanced theory and practice, cost accounting, taxes, and auditing. The student who wishes to prepare

for the Certified Public Accountant (CPA) examination will take additional course work during his senior year and is permitted to take an examination during the last quarter of his senior year.

The accounting major can expect to find employment in a number of areas including private business, public accounting practice, or governmental work. A person entering the accounting department of a private business will typically enter as a staff accountant and may expect to work into such positions as cost accountant, tax accountant, treasurer, auditor, budget officer, business manager or controller. The certified public accountant offers his services as a professional person to the general public for the purpose of installing accounting systems, providing tax counsel and compliance, and auditing accounting records. For this work the CPA certificate is

necessary. The government also offers many opportunities for employment as general accountants, cost analysts and auditors.

The prospective accountant is one who likes to analyze business problems through the use of financial and other records. Writing skills are essential. The accountant should also have a knowledge of business law, economics, management, finance, mathematics and statistics.

Accountancy offers opportunity for employment for both men and women. Promotions may be either to better accounting positions or to executive positions.

Western Washington University offers a broad program of courses in accounting. No specific high school courses are required for entrance into the program other than those required generally for admission to Western. It is recommended that students take four years of English and at least three years of mathematics in high school. Students well grounded in these two subjects usually have little difficulty doing satisfactory University-level work.

ACCOUNTING FACULTY

- BYRON L. HAGLUND (1956) Chairman. Associate Professor. BBA, MA, University of Minnesota; CPA, Washington D.C., State of Washington.
- CODY E. BRYAN (1977) Assistant Professor. BGE, University of Nebraska (Omaha); MBA, University of Puget Sound; CPA, State of Washington.
- THOMAS JOHNSON (1979) Professor, AB, Harvard University, MBA, Rutgers University, MA, PhD, University of Wisconsin.
- RICHARD L. KELSEY (1977) Assistant Professor. BSB, MS, University of Minnesota.
- ELIZABETH PATTON (1979) Assistant Professor, BA, Denison University; MBA, University of Washington; CPA, State of Washington.
- WILLIAM M. SAILORS (1974) Associate Professor, MBA, MS Engr. University of Southern California; BSME, University of Illinois; CPA, States of Washington and California.
- RONALD N. SAVEY (1976) Assistant Professor. BA, Western State College (Colo.); MBA, University of Denver; CPA, States of Colorado and Washington.
- WILLIAM R. SINGLETON (1976) Assistant Professor. BBA, Memphis State University; MBA, University of Portland; CPA, States of Oregon and Washington.

BACHELOR OF ARTS

Major 105 credits

- Acctg 251, 252, 350, 351, 352, 353, 354, 356, 455, 461
- BA 301, 303, 311, 330, 356, 360, 495
- Two of BA 271, 370, 371, 372
- Econ 201, 202, 306
- Math 155, 156, 256

Accounting 350 may be waived for accounting majors in exceptional cases by written approval of the department.

Students who wish to make a professional career in public accounting should take additional courses under departmental advisement.

Combined Major — Accounting/Computer Science 108 credits

This concentration is for students who wish depth in the fields of accounting and computer science.

- Acctg 251, 252, 351, 352, 353, 356, 455, 461
- Comp Sci 210, 217, 310, 350, 351, 352, 353, 470, 471
- BA 271, 301, 303, 311, 330, 360, 495
- Econ 201
- Math 155, 156, 240*

An interdepartmental major in Accounting Economics is also offered. See "Economics" section of catalog for details.

Minor 25 credits

- Acctg 251, 252, 350, 352, 353
- Additional credits in accounting under departmental advisement

COURSES IN ACCOUNTING

251 PRINCIPLES OF ACCOUNTING (4)

Introduction to the theory and practice of accounting, including financial statements.

252 PRINCIPLES OF ACCOUNTING (4)

Prereq: Acctg 251. Emphasis on partnership and corporation accounting.

*Math 256 may be substituted for Math 240.

Accounting

350 ACCOUNTING ANALYSIS AND CONTROL (5)

Prereq: Acctg 252. Theory and use of accounting data in management control and decision-making process; flow of funds statement; analysis of accounting statements as a guide to management and investors; survey of cost accounting and budgeting.

351 COST ACCOUNTING (5)

Prereq: Acctg 350. Historical factory job and process cost systems, distribution cost systems, fixed and flexible budgeting and other controls over business operations available from accounting records.

352 INTERMEDIATE ACCOUNTING THEORY AND PRACTICE I (5)

Prereq: Acctg 350 or 351. The financial reporting process; income statement; statement of financial position; and statement of retained earnings. Particular attention is focused upon the accountant's measurement of business income, inventory costing techniques, and fixed asset accounting.

353 INTERMEDIATE ACCOUNTING THEORY AND PRACTICE II (5)

Prereq: Acctg 352. Continuation of Acctg 352. Accounting principles related to stockholders' equity matters, investments, revenue recognition, deferred taxes, pension plans, leases, and preparation and analysis of financial statements.

354 INCOME TAXATION I (5)

Prereq: Acctg 252. General income tax requirements; special problems relating to individual tax returns.

356 FUND AND GOVERNMENTAL ACCOUNTING (3)

Prereq: Acctg 252. Fund and budgetary accounting as applied to municipalities, governmental units, and non-profit organizations.

410 SPECIAL PROBLEMS IN ACCOUNTING (1-5)

Prereq: 20 credits in accounting and prior consultation with instructor.

454 INCOME TAXATION II (3)

Prereq: Acctg 252, 354. Special problems of partnerships, corporations, and trusts; introduction to tax research.

455 ADVANCED ACCOUNTING THEORY AND PRACTICE I (5)

Prereq: Acctg 353. A accounting for business firms organized as partnerships, and introduction to accounting for business combinations — mergers, acquisitions, and consolidations.

459 ADVANCED ACCOUNTING THEORY (3)

Prereq: Acctg 353. Theory of accounting related to income measurement, assets, and equities; uses and limitations of general purpose financial statements.

461 AUDITING THEORY AND PRINCIPLES (5)

Prereq: Acctg 353. Theory and procedures relative to auditing by both independent auditors (CPA's) and internal auditors.

462 AUDITING PRACTICE (3)

Prereq: Acctg 461. Application of auditing theory and principles using case simulations. Auditing of computer-based accounting systems and computer-augmented audit aids will be utilized.

463 OPERATIONAL AUDITING (3)

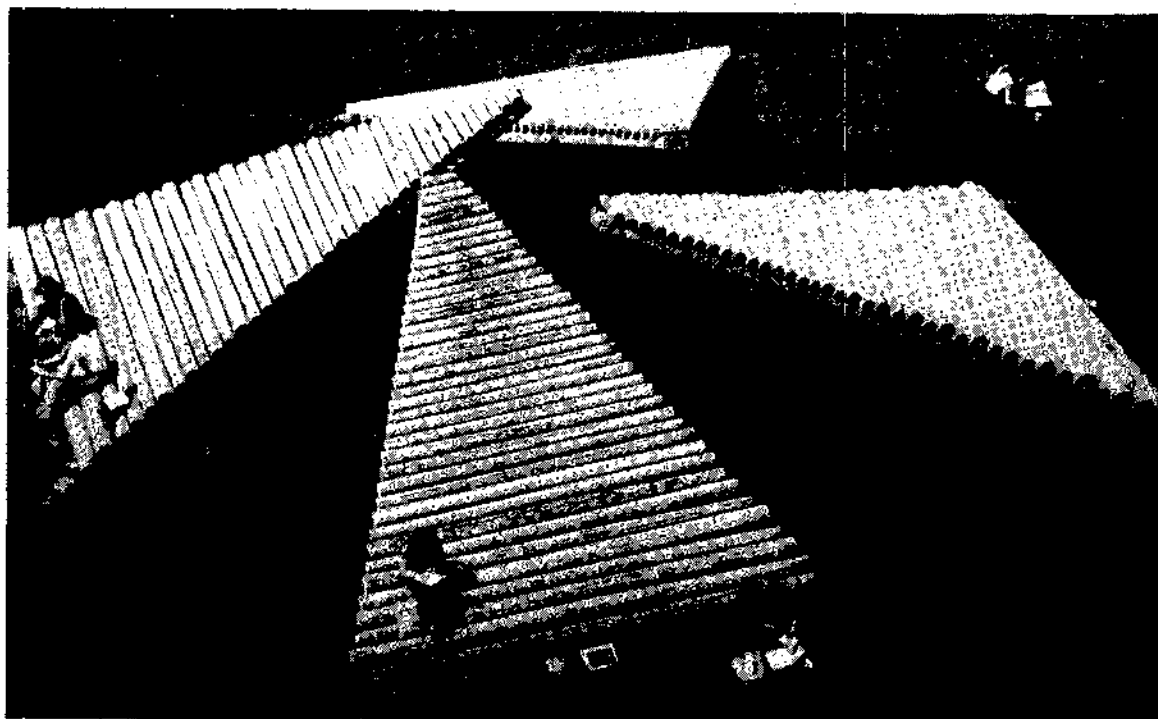
Prereq: Acctg 461. The internal auditor's evaluation of the effectiveness of the management information and control systems. This management tool appraises the effectiveness of financial and administrative systems, divisional budgets, marketing effectiveness, personnel policies and managerial performances.

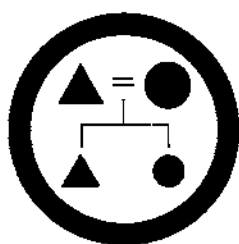
464 ADVANCED TOPICS IN TAXATION (3)

Prereq: Acctg 353, 354, 454. Advanced techniques used in tax planning. Emphasis on tax research directed toward the individual, and the closely held family business; either sole proprietorship, partnership, or corporation.

467 CPA EXAMINATION REVIEW (3)

Prereq: Acctg 353, 461, BA 370. A review of selected areas of law, auditing, accounting theory, and accounting practices for students preparing to take the CPA examination. Grading will be S/U only.





ANTHROPOLOGY

College of Arts and Sciences

Anthropology is that discipline which studies humankind in the widest perspective, its physical development, development through time, and the diversity of ways of life people have created. Anthropology attempts to make generalizations about human nature, group life, and culture. To achieve these goals, the anthropologist does fieldwork and comparative cross-cultural studies in time and space.

Anthropology shares techniques and methods with other behavioral sciences as well as draws upon physical and biological sciences. Unlike other behavioral sciences, which deal primarily with the western world, anthropology includes the broadest human context. Thus, anthropology provides theoretical and empirical bases for development of hypotheses about human behavior and for testing the limitations of such hypotheses.

Anthropology is divided into subdisciplines.

1. The archaeologist attempts to reconstruct the past through a study of material remains of extinct peoples.
2. The physical anthropologist both aids in the reconstruction of the past through a study of human fossil remains and in our understanding of the modern human as a biological entity.
3. The anthropological linguist investigates the interrelationships between human culture and language with special focus on unwritten languages, emphasizing the diversity of world languages and the non-verbal human communication.
4. The cultural anthropologist does field work and attempts to describe each culture in its own perspective. On the basis of this experience, the study of hundreds of other field reports, and other information, he or she does cross-

Anthropology

cultural comparisons to test generalizations about human behavior.

Utilizing ethnographic, ethnological and ethno-historical tools as well as information supplied by these subdisciplines, the anthropologist does comparative studies of living and dead cultures and of the processes of human development.

The Anthropology Department offers training in all of these areas. The research and publication strengths of the faculty are in the first, third and fourth areas. Therefore, a student should not normally plan to receive training beyond the intermediate level in physical anthropology.

The department offers the B.A. in Arts and Sciences and the B.A. in Education (as well as minors in both programs).

Opportunities for fieldwork and library research are available in all areas and for advanced research leading to the master's degree in all areas save physical anthropology.

Archaeological surveys and excavations are conducted in most summers. During this biennium the department will be engaged in a preparation of a *Handbook of Washington Indians*, providing a wide diversity of research opportunities. Library holdings include the complete Human Relations Area File for those pursuing cross-cultural and culture-area research. Linguistic specializations available include languages of South Asia, East Asia, and the Northwest Coast.

Career opportunities for graduates in anthropology exist in teaching (public school, community college, and college), federal and state agencies, industry, and museums.

ANTHROPOLOGY FACULTY

- JAMES W. BOSCH (1967) Chairman.
Associate Professor. BA, San Francisco State College; MA, PhD, Stanford University.
- ANGELO ANASTASIO (1955) Professor. Certificate, Juilliard School of Music; AA, Boston University; MA, PhD, University of Chicago.
- GARLAND F. GRABERT (1967) Professor. BA, MA, PhD, University of Washington.
- HOWARD L. HARRIS (1966) Associate Professor. BA, University of Iowa; MA, University of Missouri; BD, Hartford Theological Seminary.
- LINDA AMY KIMBALL (1976) Assistant Professor. BSEd, MA, PhD, Ohio State University.
- RICHARD EBERT SALZER (1978) Assistant Professor. BA, MA, PhD, University of California, Berkeley.
- HERBERT C. TAYLOR, JR. (1951) Professor. BA, MA, University of Texas; PhD, University of Chicago.

BACHELOR OF ARTS

Major—Anthropology 60 credits

- Anth 201
- Anth 202 or 210 (both may be taken, one as an elective)
- Anth 301
- Anth 247 or 348
- A course in statistics under departmental advisement
- Electives in anthropology under departmental advisement

Minor 25 credits

- Anth 201
- Anth 202 or 210 (both may be taken, one as an elective)
- Electives under departmental advisement

BACHELOR OF ARTS IN EDUCATION

Major Elementary 45 credits

- Anth 201 and either 202 or 210 (both may be taken, one as an elective)
- Anth 301
- Electives under departmental advisement (it is recommended that fifth-year education students take 5-10 hours under departmental advisement)

(Note: no major is offered in secondary education.)

Minor 25 credits

- Anth 201 and either 202 or 210 (both may be taken, one as an elective)
- Electives under departmental advisement

DEPARTMENTAL HONORS

In addition to the general requirements for all honors students, an anthropology major who wishes to graduate "with honors" must demonstrate a reading knowledge of a foreign language and submit a senior thesis.

COURSES IN ANTHROPOLOGY

201 INTRODUCTION TO CULTURAL ANTHROPOLOGY (3)

The study of societies that contrast with Western civilization, leading to an acquaintance with the concept of culture and its importance to an understanding of human behavior. Emphasis will be placed upon understanding each culture from its own point of view rather than our own.

202 INTRODUCTION TO HUMAN ORIGINS (3)

Human origins drawn from the fossil and archaeological records. Problems of human physical diversity and prehistoric cultural diffusion explored.

- 210 INTRODUCTION TO ARCHAEOLOGY (5)**
 The nature of archaeology as seen by classicists, art historians, historians and anthropologists. Methods, techniques and theories used by the different conceptions of the discipline.
- 247 LANGUAGE IN CULTURE AND SOCIETY (3)**
 Prereq: Anth 201. Analysis of situational varieties of language level and vocabulary; social processes of language change; semantics and world-view; speech communities.
- 300 DIRECTED INDEPENDENT STUDY (1-6)**
 Conference Course Permit required from instructor before registering.
- 301 DEVELOPMENT OF ANTHROPOLOGY (5)**
 Prereq: Anth 201. The development of anthropology with emphasis on the period beginning with L.H. Morgan and E.B. Tylor.
- 309 CURATORIAL METHODS IN ANTHROPOLOGY (5)**
 Prereq: Anth 201 and 210 and permission. The study of museum techniques in cataloguing, preparation, storage, and preservation of ethno-graphic, archaeological, and historical artifacts and other materials. Assistance of the curatorial staff in preparation, assembly, and research concerning displays and public information. Students will work with the staff of the Whatcom Museum of History and Art and will write a report of their activities to include particular aspects of research and preparation in which they were engaged.
- 310 THE RISE OF CIVILIZATIONS (5)**
 Prereq: Anth 201, and 202 or 210. Village agricultural societies as revealed by archaeology; crystallization of village farming societies into urban civilizations in the Near East, Egypt, India, China and New World parallel developments.
- 311 PREHISTORIC BASES OF EUROPEAN SOCIETY (5)**
 Prereq: Anth 201. An examination of the archaeological evidence for the introduction of agriculture, metallurgy, trade routes and complex social systems into Europe. The study begins with the several historic approaches to interpretation of European civilization out of Classic Greek and Roman and the current views of a partially indigenous development. The time span involved extends from the mesolithic period of early post-glacial times to Roman Britain.
- 312 FIELD COURSE IN ARCHAEOLOGY (12)**
 Prereq: Anth 201, 210 or equivalent and permission of instructor. On-site training in methods and techniques of archaeological survey and analysis.
- 330 RELIGION AND CULTURE (5)**
 Prereq: Anth 201. Comparative study of religious thought, belief, and behavior; relationship of religious experience and institutions to other aspects of culture and society.
- 332 EVOLUTION/REVOLUTION/MODERNIZATION (5)**
 Prereq: Anth 201. A survey of anthropological strategies for the study of socio-cultural change. Selected case studies will be analyzed.
- 341 INTERGROUP RELATIONS (5)**
 Prereq: Anth 201. Adjustment of groups to the natural environment and to each other in selected areas. Mechanisms of interaction including social, political and economic factors.
- 348 ANTHROPOLOGICAL LINGUISTICS (3)**
 Prereq: Anth 201. Language as a form of communication. Distinctions between spoken and written language. Introduction to phonology, morphology, and syntax. The ways in which different languages employ different spectra of the phonological, morphological, and syntactical universe.
- 351 FAMILY AND KINSHIP ORGANIZATION (5)**
 Prereq: Anth 201. Cross-cultural study of family types and the definition of social roles through kinship organization.
- 353 SEX ROLES IN CULTURE (4)**
 Prereq: Anth 201. The concepts of status and role as they relate to sexual differentiation in a variety of cultures. Socialization and education, marriage and family, social and economic patterns, attitudes and values, and religion and mythology are among the areas that will be studied in the attempt to understand the nature of sexual differentiation in culture.
- 361 INDIANS OF NORTH AMERICA (5)**
 Prereq: Anth 201. Ethnographic survey of the peoples and cultures.
- 362 PEOPLES OF ASIA (5)**
 Prereq: Anth 201. Ethnographic survey of the peoples and cultures.
- 363 PEOPLES OF AFRICA (5)**
 Prereq: Anth 201. Ethnographic survey of the peoples and cultures of Africa south of the Sahara.
- 364 PEOPLES OF THE PACIFIC (5)**
 Prereq: Anth 201. Ethnographic survey of the peoples and cultures of the Pacific area.
- 365 PEOPLES OF THE MIDDLE EAST (5)**
 Prereq: Anth 201. An ethnographic survey of the societies and cultures of the Middle East (Arabian Peninsula, Mesopotamia, Levant, Egypt and Northern Sudan) and North Africa (Sahara and Sahel).
- 371 FIELDWORK METHODS IN CULTURAL ANTHROPOLOGY (5)**
 Prereq: Anth 301, Math 240. Focuses on the anthropologist as field worker. Detailed analysis of selected monographs to give an understanding of the techniques and methods of ethnographic fieldwork.
- 396a,b,c. HONORS TUTORIAL (3-5 ea.)**
- 400 DIRECTED INDEPENDENT STUDY (1-6)**
 Conference Course Permit required from instructor before registering.
- 409 ARCHAEOLOGICAL FIELD METHODS (3)**
 Prereq: Anth 201, 202 or 210, and permission of instructor. Site surveys and evaluation; mapping methods and recording of data; field experience in excavation techniques, preservation of artifacts. Offered every other year.
- 410 ARCHAEOLOGICAL ANALYSIS AND INTERPRETATION (3)**
 Prereq: Anth 201, 202 or 210. Archaeological laboratory methods; artifact identification, classification, measurement; map reproduction, soil and feature profiles, use of photographs and other graphic methods. Offered every other year.
- 411 ARCHAEOLOGY OF NORTHWESTERN NORTH AMERICA (3)**
 Prereq: 10 credits in anthropology including 210 or equivalent. Prehistoric archaeology of the Northwest. Culture changes and adaptations as evidenced in the archaeological data. Northwest coast and interior regions are considered in the prehistoric context of paleo-environment, space and time. The several hypotheses of origins, interrelationships and cultural developments are discussed.

Anthropology

412 ARCHAEOLOGY OF THE NEW WORLD (3)

Prereq: 10 credits in anthropology including 210 or equivalent. Origins of the New World cultures from the earliest to the historic Native Americans are discussed. The framework for developmental interpretation and the nature of the evidence are examined. Both the nuclear areas of Mexico and Peru are treated, but the hunting cultures of the Archaic and Woodland periods are considered equally as contributive to the totality of New World prehistoric cultural developments.

415 PHYSICAL ANTHROPOLOGY (5)

Prereq: Anth 202. A detailed examination of basic topics in physical anthropology, including osteology, population development, medical anthropology, and applied techniques.

417 SEMINARS IN SELECTED TOPICS (3)

Prereq: permission of instructor. To be offered in alternate years.

- 417a Political Anthropology
- 417b Symbolic Anthropology
- 417c Comparative Religion
- 417d Medieval Explorers as Ethnologists
- 417e Pre-Columbian Contacts with the World
- 417f Siberian Ethnography
- 417g Culture, Music and Art
- 417h Anthropological Linguistic Theory
- 417j Archaeological Theory
- 417k Current Issues in Anthropology
- 417m Use of Models in Anthropology

472 ECOLOGICAL ANTHROPOLOGY (3)

Prereq: Anth 201 and 10 additional credits in anthropology. Analysis of the application of ecological concepts to anthropological problems, with an intensive study of one strategy of adaptation.

424 MEDICAL ANTHROPOLOGY (3)

Prereq: Anth 201. Comparative studies of healing practices in non-Western societies, with emphasis upon medical systems within cultural frameworks.

425 CULTURE AND PERSONALITY (3)

Prereq: Anth 201 and five additional credits in anthropology. The ways in which the study of the individual and his culture has been approached in anthropology. Offered every other year.

426 AGING: A CROSS-CULTURAL STUDY (3)

Prereq: Anth 201. A study of the aging process as a cross-cultural comparison from the great apes through hunting and gathering societies to agricultural villages to the modern world. Emphasis is upon role changes and forecast of future change.

430 SOCIAL ANTHROPOLOGY (3)

Prereq: Anth 201 and 351. Historical and methodological survey of the field of social anthropology, emphasizing both British social and American socio-cultural anthropology. Major works in both areas will be read and discussed.

431 SOCIAL CHANGE IN AMERICA (3)

Prereq: 10 credits in anthropology. Social change in the United States since 1900; contemporary theories of social change; problems in predicting change.

448 INTERMEDIATE ANTHROPOLOGICAL LINGUISTICS (3)

Prereq: Anth 348. Detailed examination of further topics in anthropological linguistics, including language universals, language acquisition, world language and script patterns, and ethnosemantics.

441 NORTH AMERICAN INDIAN ACCULTURATION (3)

Prereq: Anth 361. The study of changes resulting from culture contact in North America. Historical processes and contemporary conditions.

462 INDIANS OF THE NORTHWEST COAST (3)

Prereq: Anth 201. Tribal distributions, social organization, and ecological adjustment with emphasis on the Indians of Western Washington; problems of adjustment to the modern world.

463 PEOPLES AND INSTITUTIONS OF SOUTH ASIA (3)

Prereq: Anth 201. A survey of cultures on the Indian sub-continent, Mainland and Insular Southeast Asia. Emphasis is on special topics, including ecology, prehistory, and selected cultural groups. Readings focus on original monographs.

464 PEOPLES AND INSTITUTIONS OF EAST ASIA (3)

Prereq: Anth 201. Ethnographic in-depth study of the national and minority peoples of China (including Taiwan), Korea, and Japan with emphasis on their distinctive cultures and societal structure.

465 PEOPLES OF CENTRAL AND SOUTHWEST ASIA (3)

Prereq: Anth 201. Ethnographic analysis of the peoples of Mongolia, Chinese and Russian Turkestan, Afghanistan, Iran and Turkey. Emphasis on nomadic pastoral groups.

467 PEOPLES OF MEXICO (3)

Prereq: Anth 201. Survey of the Indians of Mexico, covering the prehistoric period with particular reference to the Aztec and Maya and continuing with an examination of the effects of the Spanish conquest and subsequent amalgamation of cultures.

470 RESEARCH (3-5)

Prereq: permission of instructor. Investigation of a problem through field or library research.

481 CHILDHOOD AND CULTURE (3)

Prereq: 10 credits in anthropology. The process of socialization or enculturation viewed from a cross-cultural perspective.

483 SOCIAL CHANGE AND THE MORAL ORDER IN RECENT LITERATURE (4)

Anthropological examination of contemporary literature (fiction and non-fiction) as a key to understanding social change and the obtaining moral order.

484-489 READING AND CONFERENCE (3-5)

Prereq: Conference Course Permit from instructor required before registering. The specific study topic will be determined by the instructor in consultation with each student.

- 484 Cultural Anthropology
- 485 Physical Anthropology
- 488 Linguistics
- 489 Archaeology

495 TEACHING-LEARNING PROCESSES IN INTRODUCTORY ANTHROPOLOGY (3)

Prereq: 25 credits in anthropology and permission of instructor. Practicum as discussion leaders in Anth 201 or 210. May be repeated once for departmental credit.

496a,b,c HONORS TUTORIAL (3-5 ea)

GRADUATE COURSES

The following courses are offered for graduate credit for persons enrolled in the department's graduate program. For course descriptions and other information about the graduate program, see the current Graduate Catalog.

500 SPECIAL PROJECTS (1-6)

individual conference.

503 HISTORY OF ANTHROPOLOGY (5)

504 METHODS AND THEORY IN ANTHROPOLOGY (5)

522 SEMINAR: OLD WORLD PREHISTORY (3)

523 SEMINAR: NEW WORLD PREHISTORY (3)

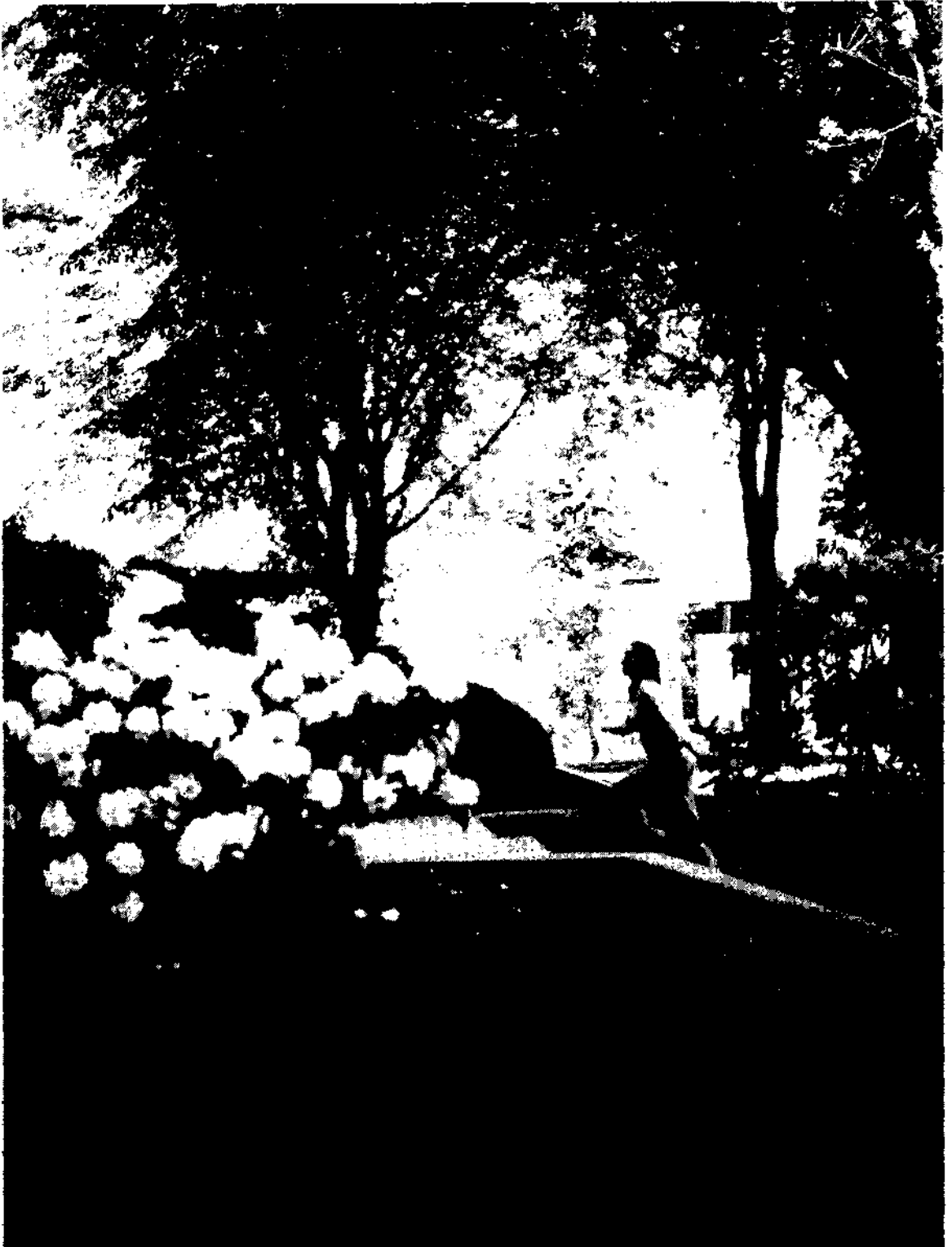
530 SEMINAR: VALUES (3)

532 COMPARATIVE SOCIAL ORGANIZATION (3)

540 LANGUAGE, LEXICON AND CULTURE MAPPING (3)

690 THESIS RESEARCH (3)

691 THESIS (3)





ART

College of Fine and Performing Arts

One of the earliest human activities was the production of works of art. Through the centuries one measure of human civility has been involvement in the arts. Presently, concern for the arts is very high. The Art Department at Western is meeting that concern with a highly qualified faculty teaching in the major areas of art. The faculty not only teaches but is intimately involved in art production and scholarship.

The Art Department offers a number of degree programs in studio art, art history and art education. Through a contract system students may, in conjunction with faculty of the Art Department, develop majors to meet their particular backgrounds, needs and interests. Most of the traditional areas of art are offered at Western. Through arrangement with instructors, innovative programs may be planned. Programs may also be developed

involving art and other disciplines. While there are certain required courses in each of the majors, the Art Department has attempted to give the greatest possible degree of flexibility in its programs congruent with student involvement and concerted faculty advisement. Students should, early in their program at Western, seek advisement from faculty members in the department.

Transfer students are required to complete in residence a minimum of 15 credits in art for the teacher education major, 11 credits in art for the Arts and Sciences major, or 5 credits in art for a minor.

It is possible to take an Interdisciplinary Arts major with a concentration in art. See *Arts, Interdisciplinary* in this catalog for full details of the major.

ART FACULTY

- THOMAS SCHLOTTERBACK (1965) Chairman. Professor. BFA, MFA, University of Kansas; PhD, The State University of Iowa.
- DORIS CHATHAM (1975) Assistant Professor. BA, Rice; MFA, University of Washington; MA, Asian Studies, University of California, Berkeley; PhD, Art History, University of California, Berkeley.
- IONE A. FOSS (1957) Associate Professor. BS, MAA, Montana State College; MFA, University of Oregon.
- LAWRENCE HANSON (1963) Professor. BA, MFA, University of Minnesota.
- ROBERT A. JENSEN (1966) Associate Professor. BBA, University of Washington; MFA, Washington State University.
- THOMAS A. JOHNSTON (1967) Associate Professor. AA, San Diego City College; AB, San Diego State College; MFA, University of California, Santa Barbara.
- DAVID F. MARSH (1957) Professor. BA, Central Washington State College; MS, University of Oregon.
- PATRICK F. McCORMICK (1969) Associate Professor. BFA, BA, University of Washington; MFA, Cranbrook Academy of Art.
- MARY A. McINTYRE (1968) Associate Professor. AB, MFA, Indiana University.
- DAVID E. TEMPLETON (1969) Professor. BFA, MA, University of Illinois; PhD, University of Minnesota.
- EDWARD B. THOMAS (1967) Associate Professor. BA, MFA, University of Washington.
- ROBERT A. URSO (1969) Associate Professor. AB, MA, University of Notre Dame, Ind.
- GENE E. VIKÉ (1962) Associate Professor. BA in Ed, BA, Western Washington State College; MS, Pratt Institute.
- *WALTER F. WEGNER (1961) Associate Professor. BS, University of Wisconsin; MFA, University of Iowa.
- HOMER A. WEINER (1964) Professor. BFA, Bradley University; MFA, University of Iowa.

STAFF OF THE WHATCOM MUSEUM OF HISTORY AND ART

- Emil Mierson, Administrative Coordinator, MBA, Northwestern.
- George Thomas, Museum Curator, MFA, University of California, Santa Barbara.
- Janice Olson, Registrar, BA, Art History, Western Washington State College.

BACHELOR OF ARTS

Studio Major 73-85 credits

- Art 101 or equivalent
- Art 301, 401
- Art History 220, 230, 240

The student will elect from courses at the 200 level a basis for all subsequent work. The student will be guided by noting the prerequisites for courses at the 300 level, and by faculty advisement.

*One Quarter Sabbatical Leave 1979-80

Satisfactory completion of the studio major will be determined by contractual agreement between the student and a faculty committee. Individual advisement concerning this contract may begin whenever the student requests it. The contract must be written before the student has completed 24 credits in art. Concentrations may be developed in printmaking, painting, sculpture, ceramics, jewelry, textiles, graphic design, or in a combination of these areas as determined by the student's contractual agreement. Courses outside the Art Department where appropriate may be applied. Revisions and amendments will be considered and may be made by the student and the faculty committee upon request.

Transfer students with more than 18 credits of previous work should seek advisement during their first quarter at WWU.

Studio Minor 25 credits

- Art 101 or equivalent
- Art History 240
- Electives under advisement

Art History Major

60 credits plus Supporting Courses

- Art History 220, 230, 240, 340, 440, 490
- Three areas from:
 - (a) Art History 310, 410
 - (b) Art History 320, 420
 - (c) Art History 430, 431
 - (d) Art History 360, 460
 - (e) Art History 370, 470
- 12 elective credits in art history
- 12 credits in studio courses
- Supporting courses; 10 credits in appropriate courses outside the area of art history selected under departmental advisement
- Reading knowledge of French or German

Art History Minor 24 credits

- Art History 220, 230, 240
- Two courses selected under advisement from each of two areas: Primitive, Ancient, Renaissance, Modern, or American; one course from any single area may be a directed studies in that area

BACHELOR OF ARTS IN EDUCATION

Major Elementary and Secondary 45 credits

- Required of all majors:
 - (a) Art 101 or equivalent
 - (b) Art History—two courses from 220, 230, 240
 - (c) Art 280, 381, 382
- One course from each of the following: drawing, painting, sculpture, print-making, ceramics, jewelry, textiles
- At least 6 credits in one upper division studio area
- Courses outside the department may be required as part of the major

Satisfactory completion of the major will be determined by contractual agreement between the student and a faculty committee. Upon completion of not less than 12 credits of art and not more than 18 credits, a student must write a contract with the faculty committee for completion of the major. Transfer students with more than 18 credits should do this prior to completion of their second quarter at the University. Revisions and amendments may be made by the student and the faculty committee upon request.

Minor 25 credits

- Art 101 or equivalent
- Art 280, 381
- Art History 240
- Electives under advisement

Major Concentration 70 credits

- Required of all majors:
 - (a) Art 101 or equivalent, 301, 401
 - (b) Art History 220, 230, 240 and one additional course
 - (c) Art 280, 381, 382
- One course from each of the following: drawing, painting, sculpture, print-making, ceramics, jewelry, textiles
- At least 15 credits in one upper division studio area
- Courses outside the department may be required as part of the major

Satisfactory completion of the major will be determined by contractual agreement between the student and a faculty committee. Upon completion of not less than 12 credits of art and not more than 18 credits, a student must write a contract with the faculty committee for completion of the major. Transfer students with more than 18 credits should do this prior to completion of their second quarter at the University. Revisions

and amendments may be made by each student and the faculty committee upon request.

BACHELOR OF FINE ARTS

Studio Major 154 credits

The Bachelor of Fine Arts degree is the professional undergraduate art degree. It is an expanded undergraduate degree that requires each student to undertake a program of more than 180 undergraduate quarter credit hours. Students are advised that a Bachelor of Arts studio major of normal length is available. The Bachelor of Fine Arts degree requires each student to complete the following basic program:

- An 85-hour concentration in one specific studio area. The areas are: drawing, painting, printmaking, sculpture, graphic design, ceramics, fabric design and jewelry
- A 30-hour secondary concentration in a studio area other than that covered in 85-hour concentration
- A 24-hour art history minor
- A minimum of 15 free elective hours outside of the Art Department in addition to general university requirements
- Passage to BFA candidacy after completion of 50 hours of art credit
- Passage to BFA status upon completion of contract before granting of the degree

Each student BFA program is arranged through the Art Department's contract system. That contract must be established between the student and the major area and minor area advisers at the completion of 24 credits in art. After the completion of 50 credit hours, each student must have made arrangements through the major professor to submit work to the area faculty in consideration for admission to BFA candidacy. Each student's works are considered by each committee separately and judged in relationship to established traditional esthetic criteria in a manner designated by the department as a *concours* system. At the completion of all hour requirements each student must submit work en *concours* for BFA degree consideration. This last *concour* will be a public presentation in an appropriate milieu. Transfer students with more than 18 credits of previous art work should seek advisement before entering the BFA program. All incoming students contemplating the BFA degree are urged to seek departmental advisement during the first quarter at Western.

DEPARTMENTAL HONORS

In addition to the general requirements for all honors students, an art major who wishes to graduate "with honors" must complete Art 401, Music 342.

MUSEUM TRAINING

The Art Department and the Whatcom Museum of History and Art provide a museum training program for qualified students from Western Washington University. Students wishing such training will enroll in Art History 301 — Museology I, or Art History 401 — Advanced Museology. The students will receive their training with the staff of the Whatcom Museum of History and Art.

GRADUATE STUDY

For a concentration leading to the Master of Education degree, see the *Graduate Bulletin*.

COURSES IN ART

[See also Art History section, which follows.]

NOTE: The Art Department may request samples of work produced in a studio course for exhibition purposes.

- 101 **DRAWING (3)**
Not open to students with two years of high school art. Fundamental principles and techniques.
- 201 **DRAWING CONCEPTS & SYSTEMS (3)**
Prereq: Art 101 or equivalent. A studio course committed to the study of various conventional drawing concepts and systems appropriate to various studio concentrations.
- 202 **LIFE DRAWING I (3)**
Prereq: Art 101 or equivalent.
- 210 **PRINTMAKING I (3)**
Prereq: Art 101 & 201. Introduction to Intaglio processes.
- 211 **PRINTMAKING II (3)**
Prereq: Art 101 & 201. Introduction to lithographic processes.
- 220 **PAINTING (3)**
Prereq: Art 101 or equivalent. Introduction to contemporary painting.
- 230 **SCULPTURE I (3)**
Prereq: Art 101 or equivalent, introduction to sculpture.
- 237 **FOREIGN STUDY (3-5)**
(See Art 437.)
- 240 **CERAMICS (3)**
Prereq: Art 101 & 201. Handbuilt clay construction. Introduction to glaze formulation, kiln loading and firing.
- 270 **DESIGN AND COLOR (3)**
Studies of form and structure in a variety of media; emphasis on two-dimensional design concepts, pattern and color.
- 271 **THREE-DIMENSIONAL DESIGN (3)**
Exploration of construction in space employing a variety of media.
- 280 **INTRODUCTION TO ART EDUCATION (2)**
Prereq: 9 credits in art. Examination of the profession of art education, teaching skills, teaching as influencing student behavior in art, curriculum content and materials.
- 300 **DIRECTED INDEPENDENT STUDY (1-4)**
Conference Course Permit required from instructor before registering.
- 301 **CONTEMPORARY PRACTICE (3)**
Prereq: Art History 240 and 9 credits in studio. A survey of recent ideas in the visual arts. The course will incorporate a history of art since 1945 but will not be limited to historical analysis. Study of major artists and critics of this period.
- 302 **LIFE DRAWING II (3)**
Prereq: Art 202 or equivalent; repeatable to 15 credits. Drawing as a major medium.
- 310a,b **INVENTIVE DRAWING (3,5)**
Prereq: Art 201 or 202. A studio course committed to the pursuit of drawing as a major creative mode of expression. Repeatable to 15 credits.
- 311 **PRINTMAKING — LITHOGRAPHY (3)**
Prereq: Art 211, 301, or concurrent enrollment. Planographic processes; emphasis on lithography.
- 312 **PRINTMAKING — INTAGLIO (3)**
Prereq: Art 210, 301, or concurrent enrollment. Intaglio processes; etching, engraving, drypoint, aquatint.
- 313a,b **PRINTMAKING WORKSHOP (3,5)**
Prereq: Art 311 or 312; repeatable to 15 credits.
- 320 **THE ENHANCEMENT OF COLOR (3)**
Prereq: Art 270. Exploration and identification of the issues which make for the enhancement of color in composition.
- 321a,b **PAINTING WORKSHOP I (3,5)**
Prereq: Art 220, repeatable to 15 credits. Individual search for form and expression within a workshop environment.
- 322a,b **CONCEPT DEVELOPMENT IN PAINTING (3,5)**
Prereq: Art 321 and 201 or A.H. 240, permission of instructor. A studio course and seminar committed to the development and articulation of delineation concepts and meaning in painting. Repeatable to 15 credits.
- 323a,b **WATER COLOR PAINTING (3,5)**
Prereq: Art 220, 301, or Art History 240 or concurrent enrollment; repeatable to 15 credits. Various water soluble media.
- 328a,b **LIFE PAINTING (3,5)**
Prereq: Art 202, 301, or Art History 240 or concurrent enrollment; repeatable to 15 credits. The continued development of a personal direction in painting, making use of the nude or draped model.
- 331a,b **SCULPTURE WORKSHOP (3,5)**
Prereq: Art 230; repeatable to 15 credits. Problems in three-dimensional form and expression employing a variety of media and materials.
- 337 **FOREIGN STUDY (3-5)**
(See Art 437.)

Art

- 341 CERAMICS (3 or 5)**
Prereq: Art 240. Students are advised to take Art 230; repeatable to 15 credits. Introduction to the potter's wheel as a tool. Handbuilding. Glaze formulation and kiln firing.
- 342a,b CERAMIC WORKSHOP I (3, 5)**
Prereq: Art 341; repeatable to 15 credits. Clay as a medium. Pottery and/or ceramicsculpture.
- 350 JEWELRY I (3)**
Prereq: Art 101 or equivalent, Art 271 or Tech 210 or 214. Design and construction of jewelry in various metals, with emphasis on silver; the setting of stones. Repeatable to 15 credits.
- 351a,b JEWELRY II (3,5)**
Prereq: Art 350, Art History 240; repeatable to 15 credits. Problems in simple and centrifugal casting.
- 360 FABRIC DESIGN I (3)**
Prereq: Art 101 or equivalent, Art 270, one art history course. Design problems using linoleum block print, tie-dye and stitching.
- 361a,b FABRIC DESIGN II (3,5)**
Prereq: Art 360; repeatable to 15 credits. Silkscreen processes, batik, natural dyeing.
- 367a,b WOVEN AND CONSTRUCTED FABRICS (3,5)**
Prereq: Art 360. Pattern weaving, construction and use of a primitive loom; non-loom construction. Repeatable to 15 credits.
- 373 LETTERING (3)**
Prereq: Art 101 or equivalent. Anatomy of letter forms, alphabets and calligraphy; problems in pen and brush lettering.
- 371 GRAPHIC DESIGN I (2)**
Prereq: Art 101 or equivalent, 370. Introduction to visual communication as related to graphic processes.
- 372a,b GRAPHIC DESIGN II (3,5)**
Prereq: Art 371; repeatable to 15 credits. Advanced problems in design as communication.
- 375 ILLUSTRATION (3)**
Prereq: Art 101, 202, 270, or equivalent. Basic methods of illustration in black and white, and color. Developing the concept, organizing the image, and execution of the image.
- 380 ART IN ELEMENTARY EDUCATION (4)**
Prereq: Humanities or Art 190; for non-majors. Child development in art for the elementary school; problems in design, drawing, painting and printmaking as they relate to the school.
- 381 THEORIES OF ART EDUCATION (3)**
Prereq: Art 280. The philosophy, psychology and procedures for art in the elementary and secondary schools.
- 382 ART EDUCATION STUDIO (3)**
Prereq: Art 381 or concurrent registration. Problems in art and their adaptation to the elementary and secondary school.
- 390 UNDERSTANDING ART (5)**
Prereq: sophomore standing. Understanding and appreciation of the visual arts with particular emphasis on the art of Mexico. This course is designed for study in Mexico based in Guadalajara.
- 400 DIRECTED INDEPENDENT STUDY (1-6)**
Conference Course Permit required from instructor before registering.
- 401 SEMINAR IN ART (2)**
Prereq: senior status or 9 credits in art history; 18 credits in studio courses; repeatable to total of 6 credits. Development of criteria for mature artistic judgment.
- 402a,b LIFEDRAWING III (3,5)**
Prereq: Art 101 or equivalent; 9 credits of Art 302; repeatable to 15 credits. Continuation of individuality established concerns in the area of drawing.
- 404 BFA DRAWING WORKSHOP (2-5)**
Prereq: admittance to BFA program. Repeatable to 20 credits. For students in the BFA program to pursue their individual directions in drawing.
- 410 DRAWING WORKSHOP (5)**
Prereq: Art 101 or equivalent, Art 202 and 302 or an aggregate of nine hours minimum, Art History 240 and consent of instructor. Class is for pursuit of individual creativity in the drawing medium under supervision.
- 411a,b ADVANCED PRINTMAKING WORKSHOP (3,5)**
Prereq: Art 313; repeatable to 15 credits. Continuation of problems related to a refined use of the traditional printmaking processes as well as more recent technological innovation as they might be applied to editioned art.
- 414 BFA PRINTMAKING WORKSHOP (2-5)**
Prereq: admittance to BFA program. Repeatable to 20 credits. For students in the BFA program to pursue their individual directions in printmaking.
- 421a,b PAINTING WORKSHOP II (3,5)**
Prereq: Art 101 or equivalent; 9 credits of Art 321, Art 301, and Art History 240; repeatable to 15 credits. Continuation of individually motivated search and research into form and expression with an emphasis on current issues within the field of painting as related to the making of art.
- 422 ADVANCED WORKSHOP AND SEMINAR (2-5)**
Prereq: 30 credits in painting or 30 credits in drawing or combination, totaling 40 credits; Art 301 and nine credits in art history including Art History 240. Repeatable to 15 credits.
- 425a,b ADVANCED WATER COLOR PAINTING (3,5)**
Prereq: Art 325; repeatable to total of 15 credits. Painting workshop using aqueous media.
- 431a,b SCULPTURE WORKSHOP (3,5)**
Prereq: Art 331; repeatable to 15 credits. Advanced problems in three-dimensional form and expression employing a variety of media and materials.
- 432a,b DIRECT METAL SCULPTURE (3,5)**
Prereq: Art 331; repeatable to total of 15 credits. Direct metal sculpture; emphasis on the welding processes.
- 433a,b BRONZE CASTING (3,5)**
Prereq: Art 230; repeatable to total of 15 credits. Bronze casting by the lost wax process; modeling in clay, wax and plaster; mold-making and other techniques for making cast metal sculpture.
- 434 BFA SCULPTURE WORKSHOP (2-5)**
Prereq: admittance to BFA program. Repeatable to 20 credits. For students in the BFA program to pursue their individual directions in sculpture.
- 437 FOREIGN STUDY (3-5)**
Prereq: for Art 237, 101 or equivalent and one art history class; for Art 337, 9 credits in lower-division art classes and one art history class; for Art 437, 20 credits in upper-division art. These courses are offered only through the WWU Study Abroad program. Contact Foreign Study Office, OM 400, for information.

441a,b CERAMIC WORKSHOP II (3,5)
Prereq: Art 341; repeatable to 15 credits. Advanced ceramics. Self-directed problems; weekly seminars.

444 BFA CERAMICS WORKSHOP (2-5)
Prereq: admittance to BFA program. Repeatable to 20 credits. For students in the BFA program to pursue their individual directions in ceramics.

450a,b JEWELRY III (3,5)
Prereq: Art 350; repeatable to 15 credits. Advanced problems in fabrication.

451a,b JEWELRY IV (3,5)
Prereq: Art 351; repeatable to 15 credits. Advanced problems in casting.

452a,b ADVANCED JEWELRY WORKSHOP (3,5)
Prereq: Art 451; repeatable to 15 credits. Advanced problems in jewelry as an art form.

454 BFA JEWELRY DESIGN WORKSHOP (2-5)
Prereq: admittance to BFA program. Repeatable to 20 credits. For students in the BFA program to pursue their individual directions in jewelry design.

461a,b FABRIC DESIGN III (3,5)
Prereq: Art 361; repeatable to 15 credits. Advanced study in printed and dyed textile techniques.

464 BFA FABRIC DESIGN WORKSHOP (2-5)
Prereq: admittance to BFA program. Repeatable to 20 credits. For students in the BFA program to pursue their individual directions in fabric design.

467a,b WOVEN AND CONSTRUCTED FABRICS III (3,5)
Prereq: Art 367; repeatable to 15 credits. Advanced workshop in tapestry, rugmaking and other media.

471a,b GRAPHIC DESIGN III (3,5)
Prereq: Art 372; repeatable to total of 15 credits. Advanced graphic design.

474 BFA GRAPHICS WORKSHOP (2-5)
Prereq: admittance to BFA program. Repeatable to 20 credits. For students in the BFA program to pursue their individual directions in graphics.

481 ADVANCED ART EDUCATION (3)
Prereq: previous work in art education; teaching experience. Lectures and studio work in art education as related to materials and evaluation of process, product and individual growth.

482 ART EDUCATION WORKSHOP (2-5)
Prereq: teaching experience. Explorations in art media and their adaptation to use in the school; may be repeated with different topics.

GRADUATE COURSES

The following courses are offered for graduate credit for persons enrolled in the department's graduate program. For course descriptions and other information about the graduate program, see the current Graduate Catalog.

- 500 SPECIAL PROJECTS (1-6)
Individual conference.
- 511 GRADUATE DRAWING AND PRINTMAKING (2-4)
- 521 GRADUATE PAINTING (2-4)
- 531 GRADUATE SCULPTURE (2-4)
- 541 GRADUATE CERAMICS (2-4)
- 551 GRADUATE JEWELRY (2-4)

- 561 GRADUATE FABRIC DESIGN (2-4)
- 580 SPECIAL PROBLEMS IN ART EDUCATION (2-4)
- 582 CURRICULUM PLANNING (4)

COURSES IN ART HISTORY

- 190 ART APPRECIATION (2)
Introduction to form and expression in the visual arts for the non-major.
- 220 SURVEY OF ART HISTORY I (3)
Ancient and medieval art.
- 230 SURVEY OF ART HISTORY II (3)
Renaissance art, 13th-18th centuries.
- 240 SURVEY OF ART HISTORY III (3)
Modern art in 19th, 20th centuries.
- 300 DIRECTED INDEPENDENT STUDY (1-6)
Conference Course Permit required from instructor before registering.
- 301 MUSEOLOGY I (2-5)
Prereq: background in art history, art, history, or anthropology; permission of instructor. May be repeated to 15 hours credit. Training in the methods and processes of museum work. Students work with and under the guidance of the staff of the Whatcom Museum of History and Art. Part of the training is an apprenticeship program of work directly in the museum.
- 310 PREHISTORIC AND PRIMITIVE ART I (3)
Prereq: Art History 220 or 230 or 240; Anth 215 or 361 prerequisite or concurrent. Art of the Paleolithic and Neolithic cultures and Western hemisphere primitive cultures.
- 320 ANCIENT ART I (3)
Prereq: Art History 220 and 230. Art of Ancient Egypt, Mesopotamia, Crete, Mycenae and peripheral areas.
- 330 MEDIEVAL ART (3)
Prereq: Art History 420 or 220 or 230 and permission of instructor. Western art from the fall of the Roman Empire to the beginning of the Renaissance.
- 337 FOREIGN STUDY (3-5)
(See Art History 437.)
- 340 MODERN ART HISTORY I (3)
Prereq: Art History 240. The art of the 19th century Western world.
- 360 AMERICAN ART TO 1913 (3)
Prereq: Art History 220, or 230, or 240, or 340. Art in the United States from the Colonial period to the Spanish American War.
- 370 ORIENTAL ART I (3)
The art of India and Southeast Asia from the Indus Valley civilization (c. 2500 B.C.) to the end of the 18th century.
- 400 DIRECTED INDEPENDENT STUDY (1-6)
Conference Course Permit required from instructor before registering.
- 401 ADVANCED MUSEOLOGY (2-5)
Prereq: Art History 301 and permission of instructor. May be repeated to 15 credit hours. The course concentrates on preparing the student for a career in museum curatorship.

Art

410 PREHISTORIC AND PRIMITIVE ART II (3)

Prereq: Art History 220 or 230 or 240; permission of instructor; Anth 215 or 363 or 364 or Art History 310 prerequisite or concurrent. Tribal arts of Africa and the South Pacific.

420 ANCIENT ART II (3)

Prereq: Art History 220 or 220 and permission of instructor. Art of the Ancient Greek and Roman civilizations.

430 RENAISSANCE ART I (3)

Prereq: Art History 220 and 230. Art of the Renaissance in Southern Europe.

431 RENAISSANCE ART II (3)

Prereq: Art History 430 or 220 or 230 and permission of instructor. Art of the Renaissance in Northern Europe.

432 BAROQUE ART (3)

Prereq: Art History 230 or 430 or 431 and permission of instructor. Art of the West during the 16th, 17th and 18th centuries.

437 FOREIGN STUDY (3-5)

Prereq: for Art History 337, Art 101 or equivalent and one art history class; for Art History 437, 12 credits in art history or senior-level status. These courses are offered only through the WWU Study Abroad program. Contact Foreign Study Office, Old Main 400, for information.

440 MODERN ART II (3)

Prereq: Art History 240 and 340. Art of the 20th century Western world.

460 AMERICAN ART, 1900 TO THE PRESENT (3)

Prereq: Art History 220, 230, 240.

470 ORIENTAL ART II (3)

The art of China and Korea from the Shang Dynasty (1523 B.C.) to the end of the 18th century.

471 ORIENTAL ART III (3)

The art of Japan from the prehistoric Archaeological Age to the end of the 18th century.

490 SEMINAR IN ART HISTORY (3)

Prereq: 12 credits in art history including Art History 300, or senior standing, or permission of instructor. Each seminar deals with a separate and special art historical problem or project. Each student prepares research, with oral and written presentation of materials pertinent to the course.

GRADUATE COURSES

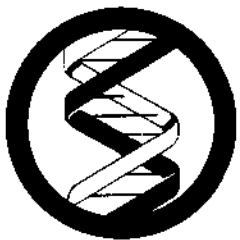
The following courses are offered for graduate credit for persons enrolled in the department's graduate program. For course descriptions and other information about the graduate program, see the current Graduate Catalog.

500 SPECIAL PROJECTS (1-6)

Individual conference.

590 DIRECTED STUDIES IN ART HISTORY (1-4)





BIOLOGY

College of Arts and Sciences

Biology—the study of life—includes a broad spectrum of the natural sciences. Microbiology, ecology, parasitology, systematic or taxonomic biology, genetics, marine biology, biometry, molecular biology, limnology, science education, animal and plant physiology and anatomy are some of the specialties to be found in Western's department. Students prepare for professional careers in biology, in the health sciences such as medicine, or for careers in teaching in the public schools and community colleges. Some biology graduates go on to other universities to complete a program leading to a doctorate degree in preparation for teaching at the college and university level. Many select a liberal arts program in biology because they find it a fascinating area of study even though they do not plan to follow a career in biology. A growing number find biology a valuable second major, thus enhancing employment opportunities. The de-

partment offers courses and major and minor programs encompassing all of these possibilities.

MAJOR CONCENTRATIONS IN BIOLOGY

Professional career opportunities in biology are diverse, and many of them require education beyond the baccalaureate degree. Graduates of biology programs may continue their education in such fields as biology, botany, zoology, microbiology or ecology. Others continue in related fields such as medicine, oceanography, environmental law, fisheries, veterinary medicine, sanitary engineering, and various specialties in medical or dental technology. Students interested in professional careers are advised to enter one of the major concentrations leading to the Bachelor of Science degree.

Biology

The B.S. (biology) includes supporting courses in the physical sciences and mathematics and a strong core of basic biology. It is intended for those who wish to continue post-baccalaureate studies in the biological sciences or to teach in the larger secondary schools and in community colleges. For students who wish to become certified to teach biology in addition to other subjects in secondary schools, a Bachelor of Arts in Education may meet their special needs. Students who wish to apply for admission to medical or dental schools may take this degree or may find the Bachelor of Arts (pre-medical emphasis — see below) or the Bachelor of Science combined major Biology/Chemistry better suited to their needs. The programs differ in depth and breadth; therefore students should consult the pre-medical or pre-dental adviser concerning the choice. The B.S. (ecology) is provided for those who have made an early decision to emphasize that aspect of biology. The B.S. (marine biology) allows concentration in that area. The B.S. (biology-mathematics) is offered for those students interested in quantitative biology: statistics, biometry, some kinds of ecology and computer modeling of biological systems. The B.S. (biology-chemistry) is designed for students who wish to pursue graduate study in molecular biology, biochemistry, or medicine.

Many students are deeply interested in biology or one of its component specialties, but not in teaching or other professional careers. These students may wish to combine biology with another area of interest such as history or law; they may wish to enter the medical or dental professions with a liberal education and a baccalaureate degree; they may want an early opportunity to study in depth only one aspect of the field; or the student may simply want to make the science of life the focus of a liberal education. These students are encouraged to consider the Bachelor of Arts degree in which the number of required courses has been kept low to permit the student to select areas of study and courses suited to his individual needs and interests. Programs one might design under this major include combinations of biology and another discipline such as anthropology, art, economics, philosophy, physical education, psychology, political science or speech.

The Biology Department maintains a program of advisement; students interested in any of the major programs in biology should consult the undergraduate advisement coordinator (Dr. Fred Rhoades) as early in their university careers as possible. All

biology majors must declare the major, and have it so signed in the bluebook by the appropriate area adviser, not later than 12 months before the bluebook is approved for senior evaluation.

TEACHING CAREERS IN BIOLOGY

Many of Western's students are interested in careers in teaching. To be effective in teaching biology, one must also have a solid foundation in the other sciences. Thus, those interested in teaching in the larger secondary schools are urged to complete a B.S. (biology emphasis) including Biol 493 and the professional education sequence (see Education). The professional education courses may be included as electives in the baccalaureate program or may be taken during a post-baccalaureate year, part of which may be applied to the fifth-year requirement for standard certification. Students entering this program are urged to seek departmental advisement as soon as possible.

Those who expect to teach in smaller secondary programs are advised to consider the B.A. in Education (biology) or one of the combined major B.A. in Education programs (biology-physical science or biology-chemistry).

Students planning to teach at the college level are advised to complete a B.S. (biology) and graduate work leading to a master's or doctoral degree.

Students who wish to teach at the elementary or intermediate levels are advised to take the general science major (see Interdepartmental Programs section). Note that Science Education 383 (formerly Biology 383) is Biological Science for the Elementary School (see Interdepartmental Programs section).

THE BIOLOGY LABORATORIES AND PROGRAM

The Biology Department is housed partly in Haggard Hall and partly in the Environmental Studies Center. The laboratories are modern and well-equipped. The department shares the facilities of the Sundquist Marine Laboratory at Shannon Point, the Science Education Center, an electron microscope laboratory, and can utilize the services of the Computer Center.

Biology at Western stresses learning by doing, open-ended study, and audiovisual teaching aids. Students explore the Gulf

Islands, California's Coast Range and Sierras, Central Oregon's Malheur Game Refuge, and the Grand Canyon on field trips between quarters or during the summer. The biology of the Cascade Mountains, San Juan Archipelago, caves of Washington, a host of lakes and streams, and the arid Palouse country of Eastern Washington are studied on weekend field trips.

THE BIOLOGY FACULTY

The members of the biology faculty have been chosen to represent as broadly as possible the diverse aspects of the discipline. Early in their university careers, students planning to major in biology are urged to consult with departmental advisers to assure the proper sequence of courses selected.

GERALD F. KRAFT (1961) Chairman.

Associate Professor. BA, San Jose State College; MS, Washington State University; PhD, Oregon State University.

A. CARTER BROAD (1964) Professor. BA, MA, University of North Carolina; PhD, Duke University.

HERBERT A. BROWN (1967) Associate Professor. BA, University of California, Los Angeles; PhD, University of California, Riverside.

*MAURICE A. DUBE (1963) Associate Professor. BS, Washington State University; MS, PhD, Oregon State University.

JOHN E. ERICKSON (1964) Associate Professor. BA, University of Omaha; AM, Indiana University; PhD, University of Oregon.

CHARLES J. FLORA (1957) Professor. BS, Purdue University; MEd, EdD, University of Florida.

RICHARD W. FONDA (1968) Professor. BA, Duke University; MS, PhD, University of Illinois.

HUBERTUS E. KOHN (1966) Associate Professor. PhD, University of Innsbruck, Austria.

JAL S. PARAKH (1966) Professor. BS, Osmania University, India; MS, University of Florida; PhD, Cornell University.

FREDERICK M. RHOADES (1977) Assistant Professor. BA, Swarthmore College; MS, Oregon State University; PhD, University of Oregon.

MERIBETH M. RIFFEY (1957) Associate Professor. BS, MS, Northwestern University; PhD, Washington State University.

***JUNE R. P. ROSS (1967) Professor. BSc, PhD, DSc, University of Sydney, Sydney, Australia.

DAVID E. SCHNEIDER (1966) Associate Professor. BS, Bates College; PhD, Duke University.

DONALD J. SCHWEMM (1960) Associate Professor. BS, MS, PhD, University of Michigan.

CLYDE M. SENGER (1963) Professor. BA, Reed College; MS, Purdue University; PhD, Utah State University.

**IRWIN L. SLESNICK (1963) Professor. AB, BS, Bowling Green State University; MS, University of Michigan; PhD, Ohio State University.

RONALD J. TAYLOR (1964) Professor. BS, Idaho State College; MS, University of Wyoming; PhD, Washington State University.

**DON C. WILLIAMS (1968) Professor. BA, Chico State College; MA, PhD, University of California, Davis.

*On Sabbatical Leave Winter 1980 and Winter 1981.

**On Sabbatical Leave 1979-80

***On Sabbatical Leave 1980-81

RESEARCH ASSOCIATE

Richard T. Haard (1974)

AAS, State University of New York; BS, University of Georgia; MS, PhD, Kansas State University.

Terence R. Wahl

BA, University of Washington.

BACHELOR OF ARTS

Major 50 credits plus Supporting Courses

Biology emphasis for liberal arts and other students.

- Biol 121, 122, 123, 323 or 325
- Electives to total 50 credits in biology selected with approval of major adviser
- Chem 115 and 251, or equivalent

Pre-medical and allied sciences emphasis.

- Biol 121, 122, 123, 312, 323, 485, and one course from 370, 471, 480 or 490
- Electives to total 50 credits in biology selected from Biol 208, 310, 311, 325, 340, 345, 348, 349, 366, 368, 408, 450, 464, 490
- Chem 121, 122, 123, and 351, 352, 353, 354, 355 (or 251*)
- Physics 131, 132, 133 (or 231, 331, 332)

Natural history emphasis.

- Biol 121, 122, 123, 325, 452 or 202, 424 or 203, 454 or 201, 456 and 461 or 205, 465 or 204, 463 or 206
- One course from Biol 370, 471, 480, 490
- Electives to total 50 credits in biology selected from Biol 307, 310, 311, 312, 452, 402, 404, 424, 453, 454, 456, 461, 463, 465
- Chem 115 and 251
- Geog 203 and 310
- Geol 211 or 101, 310 or 314
- Leisure Studies 101 or 171, 201, 322
- Recommended elective courses: Geog 251, 331, 421; Geol 311; Sci Ed 430; Hux 436, 482; PE 151, 216, 252; Physics 103 or 204; Soc 352, 422

(R. Taylor, Adviser)

*Not acceptable for pre-medical majors.

Biology

BACHELOR OF ARTS IN EDUCATION

Major Concentration 88-90 credits

Biology Emphasis.

- Biol 103, 121, 122, 123, 310, 311, 312, 325, 490
- One course from Biol 323, 379, or Chem 371
- One course from Biol 384, 485
- Biol 493
- One course from Biol 345, 424, 450, 452, 454, 456, 458, 460, 461, 463, 464, 465

Supporting Courses.

- Chem 115 (or 121, 122, 123) and 251 (or 351, 352, 353)
- Math 121 and 220
- Physics 101 (or 131, 132, 133)
- Geol 211 and 212

(J. Parakh, Adviser)

Combined Major — Biology/Chemistry

Major Concentration 98-100 credits

- Chem 121, 122, 123, 251, 333, 411, 412
- Biol 121, 122, 123, 325
- One course from Biol 471, 480, 490
- 10 credits from Biol 310 or 345, 311, 312
- Biol 485 or General Science 405
- Physical Science 492 and Biol 493
- Chem 371 or Biol 323
- Math 220 and Physics 131, 132, 133 (or 231, 331, 332)

(J. Parakh, Adviser)

NOTE: This program is specifically designed for students who wish to be recommended for teaching competence in both biology and chemistry. Students entering this curriculum are advised that this combination major contains more credits than the Bachelor of Arts in Education in either single discipline. Depending upon options chosen, the overall student program may involve more than 180 credits.

Teaching Competence

Recommendations for teaching competence with the chemistry-biology major concentration normally requires completion of the program with a grade point average of 2.50 or better in the chemistry and in the biology courses.

Combined Major — Biology/Physical Science

Major Concentration 95-97 credits

- Chem 121, 122, 123, 251
- Physics 131, 132, 133 or 231, 331, 332
- Physical Science 492
- Biol 121, 122, 123
- Biol 310 or 345, 311, 312, 325
- One course from Biol 471, 480, 490
- Biol 493
- Biol 485 or General Science 405
- Chem 371 or Biol 323
- 5 credits in geology
- Math 124 or 220

NOTE: This program is specifically designed for students who wish to be recommended for teaching competence in both biology and physical science. Students entering this curriculum are advised that this combination major contains more credits than the Bachelor of Arts in Education in biology. Depending upon options chosen, the overall student program may involve more than 180 credits.

BACHELOR OF SCIENCE

Pre-professional program for professional biologists, students pursuing graduate work, secondary teachers and related specialties.

Major Concentration 110 credits

Basic biology emphasis

- Biol 121, 122, 123, 310, 311, 312; 323 or 379 (or Chem 471, 472 and 473 or 474), 325, 340, 485, and one course from Biol 471, 480, 490
- Chem 121, 122, 123, 251 (or 351, 352 and 353)
- Geol 211
- Math 124 or 220
- Physics 131, 132, 133 (or 231, 331, 332)
- Biol 493 (teacher preparation only)
- Electives to be taken from biology, chemistry, computer science, geography, geology, mathematics, physics and Huxley College selected with approval of departmental adviser

(F. Rhoades, Adviser)

Ecology emphasis

- Biol 121, 122, 123, 311, 312, 325, 340, 490
- Complete the courses under one of the three concentrations listed below.

Student must register with the appropriate adviser.

- Animal ecology (D. Schneider, adviser): Biol 403, 460, 464
- Plant ecology (R. Fonda, adviser): Biol 379, 404, 452
- Aquatic ecology (G. Kraft, adviser): Biol 402, 403, 425*
- Chem 121, 122, 123, 333 — the appropriateness of other chemistry courses should be discussed with an adviser
- Geol 211
- Math 124 — the appropriateness of the math requirement should be discussed with an adviser
- Physics: two quarters, under advisement
- Electives selected with approval of adviser to total at least 110 credits. Some of the courses from which electives should be taken: Biol 323, 345, 402, 405, 406, 424, 425, 450, 463, 465, 480, 481, 485; Chem 351, 352, 353 (or 251), 411, 412, 413; Geog 331, 423, 424; Geol 310, 340; Huxley 331a, 363, 465; Comp Sci 110, 211; Math 125, 126

*See also *Freshwater Studies Program*.

Marine biology emphasis

- Biol 121, 122, 123, 310, 312, 325, 340, 403, 406, 407, 456, 490 and 460 or 461
- Chem 121, 122, 123, and 251 (or 351, 352, 353)
- Physics 131
- Math 220 (or 121, 124)
- Electives under advisement from the following list to total 20 credits: Biol 323, 361, 362, 460, 461, 468, 480, 485; Chem 333, 471, 472; Geol 211, 340; Huxley 321, 422, 423; Physics 132, 133
- Ichthyology is a strongly recommended course (Biol 462)

(D. Schneider and J. Ross, Advisers)

Combined Major — Biology/Chemistry

Major Concentration 110 credits

- Biol 121, 122, 123, 323, 345, 408, 471
- Chem 121, 122, 123, 333; 351, 352, 353, 354; 471, 472 and 473 or 474; 411, 412, 413 (or 461, 462, 463)
- One year college physics
- Math 124, 125

This program is specifically designed for students who wish to undertake graduate study in either molecular biology or biochemistry.

(D. Schwemmin, Adviser)

Combined Major — Biology/Mathematics

Major Concentration 110 credits

- Biol 121, 122, 123, 310, 311, 312, 323, 325
- One course from Biol 471, 480, 490
- Math 124, 125, 126, 241, 301, 331, 341, 342; Math/Comp Sci 335 (or Physics 332); Comp Sci 210, 439
- Chem 115, 251
- Physics 231, 331, 332 (or Math/Comp Sci 335)

(C. Senger, Adviser)

Minor Programs

Minor 25 credits

- Biol 121, 122, 123 plus a minimum of 14 additional credits in biology under advisement

Student advised to consult major department for remainder of credits.

DEPARTMENTAL HONORS

In addition to the general requirements for all honors students, a biology major who wishes to graduate "with honors" will enroll in Biology 396a,b,c and 496a,b,c upon advisement of the Departmental Honors Adviser with whom he will work out an individual plan of study and honors thesis.

GRADUATE STUDY

For concentrations leading to the Master of Education or the Master of Science degrees, see the *Graduate Bulletin*.

COURSES IN BIOLOGY

- 101 **PRINCIPLES OF GENERAL BIOLOGY (4)**
Energy relationships at all organizational levels of life, heredity, evolution, and man's impact on the biosphere.
- 103 **HUMAN BIOLOGY (4)**
Elementary human physiology: the functional anatomy of the human. Lectures and demonstrations. Not open to students with credit in Biol 348. Not applicable to a B.S. major in biology.
- 121 **INTRODUCTION TO PLANT AND ANIMAL BIOLOGY (5)**
Survey of plant and animal life, evolutionary and ecological relationships.
- 122 **INTRODUCTION TO CELLULAR BIOLOGY (3)**
Prereq: one quarter college chemistry. An introduction to the structure, function and development of cells.

Biology

- 123 INTRODUCTION TO GENETICS (3)
Prereq: Biol 122. Principles of Inheritance. Analysis of examples from animals, plants and humans.
- 201-207 FIELD BIOLOGY OF THE NORTHWEST (3 ea)
Prereq: high school biology recommended. Recognition, life history, ecological relationships and distribution, evolutionary trends of representative groups of organisms. Field biology courses are not open to students who have credit for corresponding upper-division course.
- 201 Mushrooms, Molds and Mosses
 - 202 Flowering Plants, Conifers and Ferns
 - 203 Insects and other Terrestrial Arthropods
 - 204 Algae of the Northwest
 - 205 Marine Biology
 - 206 Birds of the Northwest
 - 207 Mammals of the Northwest
- 223 FOREIGN CHEMICALS AND NATURAL SYSTEMS (3)
Prereq: Biol 101 and Chem 101. An elementary treatment of the effect and mechanism of such currently encountered substances as pesticides, food additives, hallucinogenic drugs, and conventional drugs (alcohol, tobacco and coffee).
- 237 FOREIGN STUDY (2-5)
(See Biology 437.)
- 300 DIRECTED INDEPENDENT STUDY (1-6)
Conference Course Permit required from instructor before registering.
- 301 SURVEY OF MARINE INVERTEBRATES (2)
Prereq: Biol 101 or equivalent and permission of instructor. A laboratory and field study of intertidal and subtidal invertebrates found near the Sundquist Marine Laboratory; emphasis on identification and natural history of local marine invertebrates. Not available for credit toward a WWU biology major.
- 302 SURVEY OF COASTAL FISHES (2)
Prereq: Biol 101 or equivalent and permission of instructor. Taxonomic, anatomical, behavioral and ecological study of local freshwater and marine fish. Not available for credit toward a WWU biology major.
- 303 SURVEY OF COASTAL VEGETATION (2)
Prereq: Biol 101 or equivalent and permission of instructor. A laboratory and field study of the plant forms and communities characterizing the coastal areas adjacent to the Sundquist Marine Laboratory. Not available for credit toward a WWU biology major.
- 304 SURVEY OF MARINE ALGAE (2)
Prereq: Biol 101 or equivalent and permission of instructor. A laboratory and field study of the distribution, ecology and field recognition of the intertidal and subtidal algal habitats near the Sundquist Marine Lab. Not available for credit toward WWU biology major.
- 305 NATURAL HISTORY OF THE NORTHWEST (5)
Prereq: Biol 101. Kinds of plants and animals in the Northwest; their distribution and life histories; field trips to beaches, lakes and ponds, forests, mountains. Not applicable to a B.S. major in biology.
- 307 HUMAN POPULATIONS AND NATURAL RESOURCES (3)
Prereq: Biol 101. Growth of human populations; changes in natural resources resulting in growth; prospects and consequences of population increases and resource utilization.
- 308 HUMAN REPRODUCTION AND SEXUALITY (3)
Prereq: Biol 101 and junior standing. Anatomy, physiology and embryology of human reproduction; behavior, disease, fertility control and other topics related to human reproduction and sexuality.
- 310 THE BIOLOGY OF LOWER ORGANISMS (5)
Prereq: Biol 121, 122, 123. An introduction to the basic biology of bacteria, fungi, algae, lichens, protozoa and sponges with emphasis on ecological relationships of lower organisms to one another and to other organisms, their occurrence in nature, and the classification of organisms.
- 311 PLANT BIOLOGY (5)
Prereq: Biol 121, 122, 123. Basic physiological principles; evolutionary trends and adaptations in structural development and reproductive systems of higher plants — Bryophytes through Angiosperms.
- 312 ANIMAL BIOLOGY (5)
Prereq: Biol 121, 122, 123. A course that stresses the ways in which animals cope with the basic problems of survival: locomotion, nutrition and the utilization of food; integration of activities on both community and individual levels, reproduction and development.
- 323 CELLULAR, MOLECULAR AND DEVELOPMENTAL BIOLOGY (5)
Prereq: 14 credits in biology; Chem 251 or 351 and 352. Students planning to take both Biol 345 and 323 should take 345 first. Cell organelle structure and function, membrane phenomena, energy utilization and production, cellular biosyntheses, control of cellular activities, developmental processes at the cellular level.
- 325 ECOLOGY (5)
Prereq: Biol 312; and 310 or 311, chemistry and physics recommended. Community energetics and organismal-environmental relationships in marine, fresh water and terrestrial habitats.
- 334 BIOLOGY OF THE AGING PROCESS (3)
Prereq: Biol 101. Consideration of the physiological and molecular processes which accompany aging. Emphasis on well-documented and measurable changes associated with the aging process.
- 337 FOREIGN STUDY (2-5)
(See Biology 437.)
- 340 BIOMETRICS (5)
Prereq: Math 124 or 220; 10 hours of biology. Hand calculator with memory recommended. The design of biological experiments, appropriate statistical analysis of experimental data and design of computer programs specifically for statistical tests.
- 345 FUNDAMENTALS OF MICROBIOLOGY (5)
Prereq: Chem 121, 122 and 251; 10 credits in biology. Comparative morphology, taxonomy, physiology and relationship of microbes; bacteria, yeasts, molds and viruses.
- 348, 349 HUMAN ANATOMY AND PHYSIOLOGY (5 ea)
Prereq: Biol 101; Bio 348 prerequisite to 349. Structure and function of the human body; emphasis on physiological principles and homeostatic mechanisms.
- 361 BIOLOGY OF COMMERCIALLY IMPORTANT MARINE SPECIES (3)
Prereq: 15 credits in biology or environmental science. A course that deals with the life histories, ecological relationships, basic biology and commercial exploitation of economically important marine animals and plants. Emphasis on species of the Pacific Northwest.
- 362 FIELD TRIPS IN COMMERCIAL FISHERIES AND FISHERY LABORATORIES (2)
Prereq: concurrent enrollment in Biol 361. Afternoon, weekend or intersession field trips to commercial fishery laboratories of the Pacific Northwest. Students enrolled in this course will provide their own food, transportation (by car pool) and lodging if necessary on field trips. S/U grading only.

- 370 HUMAN GENETICS (4)**
Prereq: Biol 101; not open to students with credit in Biol 123 or 321. Basic principles of heredity, human genetic problems; radiation and mutation, chromosomal errors, eugenics.
- 379 PLANT PHYSIOLOGY (5)**
Prereq: Biol 311; Chem 251 or 351 and Chem 352. Basic principles of physiology including cell structure and function, plant-soil-water relationships, absorption and translocation of materials, transpiration, photosynthesis, respiration, mineral nutrition, growth and development, hormonal regulation.
- 384 PERSONAL AND SOCIAL IMPLICATIONS OF MODERN BIOLOGY (4)**
Prereq: Biol 101 or 122 and junior standing. Recent developments in biology and their impact on the individual and on society; emphasis on potential effects on individual values and social implications of selected developments in such areas as behavior control, genetic alteration and organ replacement.
- 396a,b,c HONORS TUTORIAL (2-5 ea)**
- 399 SEMINAR IN BIOLOGY (1)**
Prereq: 25 credits in biological sciences and permission of instructor. Outstanding developments, past and present, in the biological sciences. May be repeated for credit.
- 400 DIRECTED INDEPENDENT STUDY (1-6)**
Conference Course Permit required from instructor before registering.
- 402 LIMNOLOGY (5)**
Prereq: Biol 325. Physical and chemical characteristics of fresh water in relation to biotic communities; field trips.
- 403 PHYSIOLOGICAL ECOLOGY OF ANIMALS (5)**
Prereq: Biol 325 and 312. Field and laboratory studies of physiological responses of marine animals to environmental factors; methods for design and analysis of experiments.
- 404 PLANT ECOLOGY (5)**
Prereq: Biol 325; Biol 311 recommended. Ecology of plant communities with special emphasis on analysis, description, succession, and distribution. Weekend field trips included.
- 405 FIELD ECOLOGY (3)**
Prereq: Biol 325 and permission of instructor; Biol 452 and 404 recommended. Analysis and investigation of vegetation patterns in Arizona, California, or other regions. Field trip. May be repeated for credit.
- 406 GENERAL OCEANOGRAPHY (5)**
Prereq: one quarter of college physics, one quarter of college chemistry and one quarter of college biology. Studies in and interrelationship of biological, chemical, physical and geological oceanography. Limited laboratory study of oceanographic techniques. Normally offered in alternate years. Last offered 1978-79.
- 407 MARINE ECOLOGY (5)**
Prereq: Biol 325 (ecology). The interaction of physical, chemical, and biological processes in the functioning of marine ecosystems. Productivity, food webs, nutrient cycles and community ecology will be discussed. Investigative laboratory studies of local shallow-water marine and estuarine ecosystems.
- 408 THE BIOCHEMISTRY OF DRUG ACTION (3)**
Prereq: Biol 323 (or Chem 471), Chem 251; Biol 325 recommended. The effect and molecular mechanism of action of selected natural and synthetic chemical compounds, both naturally occurring and introduced, upon target and non-target organisms. Topics include selected drugs, pesticides, chemical mutagens and certain natural exochemicals produced by plants and animals. Normally offered in alternate years. Last offered 1978-79.
- 423 FIELD ENTOMOLOGY (1-2)**
Prereq: Biol 312. Insect collecting and field identification; preparation of insect collections; intersession course of one or two weeks duration.
- 424 ENTOMOLOGY (5)**
Prereq: Biol 312. Insects: their morphology, physiology, metamorphoses, classification and economic importance.
- 425 AQUATIC ENTOMOLOGY (3)**
Prereq: Biol 312; 424 recommended. Classification and ecological relationships of insects in streams and lakes.
- 430 SCIENTIFIC WRITING FOR BIOLOGISTS (3)**
Prereq: 40 credits in biology and permission of instructor. The techniques of writing a biological journal article; elements of style; line drawings, lettering and reproduction of figures; reading and reviewing biological papers.
- 437,337,237 FOREIGN STUDY (2-5)**
A study of biological topics particularly appropriate to the course offering. Presently offered only in Guadalajara. These courses are offered only through the Study Abroad program. Contact Foreign Study Office, OM 400, for information.
- 445m COMMON LOCAL FLORA AND VERTEBRATES (5)**
Natural history of the terrestrial and freshwater environment of the Puget Sound region; taxonomic survey of plants and vertebrates and their interrelationships. Offered only during the summer quarters as a component of the Natural History Institute. Not applicable to a B.S. major in biology.
- 445n MARINE NATURAL HISTORY OF THE NORTHWEST (5)**
The marine environment of the Puget Sound region; taxonomic survey of plants and animals of the communities and their interrelationships. Offered only during summer quarters as a component of the Natural History Institute. Not applicable to a B.S. major in biology.
- 445t NATURAL HISTORY OF THE NORTHWEST: LABORATORY (7)**
Prereq: concurrent enrollment in Biol 305 and acceptance in the Natural History Institute. Natural history of terrestrial and fresh-water environments; observations and identification of representative plants and animals; patterns of vegetation zonation and structure of natural communities. Emphases will be on higher plants and insects, their form, function and interaction. A field and laboratory course offered only as a component of the Natural History Institute. Not applicable to a B.S. major in biology. Summers only.
- 450 PARASITOLOGY (5)**
Prereq: Biol 312; two quarters of college chemistry. Representative animal parasites with emphasis on structural and physiological adaptations of parasite and host.
- 452 SYSTEMATIC BOTANY (5)**
Prereq: Biol 311. Taxonomy of higher plants with emphasis on the characteristics and phylogeny of flowering plant families; collection and identification of local species.

Biology

453a ALPINE ENVIRONMENT AND VEGETATION (5)

Prereq: Biol 325 (ecology) or equivalent. Open to Institute participants only. The environment of the Olympic, Cascade and Rocky mountains; the nature of the alpine flora and the plant communities of these mountains; the interactions between environmental regimes and plant species that produce the vegetative pattern of the alpine environment. Offered only during the summer as a component of the Alpine Institute.

453b ALPINE FAUNA (5)

Prereq: Biol 325 (ecology) or equivalent. Open only to Institute participants. The animals of the mountains; niches occupied by resident and transient species; adaptations to alpine conditions. Offered only during the summer as a component of the Alpine Institute.

454 MYCOLOGY (5)

Prereq: Biol 310. Taxonomy of the fungi with emphasis on morphology, phylogenetic trends, collection and identification of common species. Several weekend field trips are required.

456 ALGAE (5)

Prereq: Biol 310. Collection, culture, identification, classification, distribution and economic importance of marine and fresh-water algae.

458 BRYOPHYTES (5)

Prereq: 10 credits in biology. Collection, identification, distribution and evolution of mosses and liverworts. Normally offered in alternate years. Last offered 1978-79.

460 INVERTEBRATE ZOOLOGY (5)

Prereq: Biol 312. Classification, anatomy, physiology, development and general biology of invertebrate animals.

461 MARINE INVERTEBRATE ZOOLOGY (5)

Prereq: Biol 325. Laboratory and field study of local marine invertebrates.

462 ICHTHYOLOGY (5)

Prereq: Biol 312. Form and function of fishes; life histories; behavioral adaptations; ecological relationships; distribution; evolution and classification; socio-economic value.

463 ORNITHOLOGY (5)

Prereq: Biol 121, 122 or 101. Evolution of morphological adaptations of birds, classification, distribution; annual cycle including migration, breeding and population dynamics; laboratory study, field trips. Normally offered spring quarter of alternate years. Last offered spring 1979.

464 VERTEBRATE ZOOLOGY (5)

Prereq: Biol 312. Selected topics in the basic biology of the major groups of vertebrate animals; classification, life cycles, elementary physiology, and structure of representative forms; consideration of their role in ecosystems.

465 MAMMALOLOGY (5)

Prereq: Biol 312. Structural and physiological adaptations population dynamics, distribution and classification of mammals with laboratory emphasis on local species. Normally offered in alternate years. Last offered spring 1979.

466 COMPARATIVE VERTEBRATE ANATOMY (5)

Prereq: Biol 312. Morphology and evolution of organic systems of major vertebrate groups.

467 GENERAL VERTEBRATE EMBRYOLOGY (5)

Prereq: Biol 312. Development of the vertebrates; laboratory study of embryos of the frog, chick, and pig with application to human development.

468 INVERTEBRATE EMBRYOLOGY (5)

Prereq: Biol 368, 460 or 461. Development of invertebrate animals; laboratory study of local, marine invertebrates. Taught only at the Shannon Point Marine Center during the spring or summer quarters. Normally offered in alternate years. Last offered 1977-78.

471 PHYSIOLOGICAL GENETICS (5)

Prereq: Biol 323 and Biol 321 or 123. Structure and chemical composition of genetic material; genetic systems of bacteria, viruses, yeasts and molds; aspects of biochemical genetics of man applying to the nature of gene functions.

475 STRUCTURE AND DEVELOPMENT OF VASCULAR PLANTS (4)

Prereq: Biol 311. A study of plant organs and their tissues from the standpoint of origin, differentiation, growth and maturation. Normally offered in alternate years. Last offered 1978-79.

480 ADVANCED GENETICS (5)

Prereq: Biol 123. Genetic mechanisms and interactions; chromosome behavior; cytogenetics; mutation, crossing over, the gene.

481 PHYSIOLOGICAL ECOLOGY OF PLANTS (5)

Prereq: Biol 311 and Biol 325. Field and laboratory study of physiological responses of plants to environmental factors; methods of design and analysis of experiments. Normally offered in alternate years. Last offered 1978-79.

485 HISTORICAL AND PHILOSOPHICAL PERSPECTIVES OF BIOLOGY (5)

Prereq: 20 credits in science, 15 in biology. The origins and development of biology as a science viewed in historical and philosophical perspective; the interaction of biology and society.

486 SPECIAL PROJECT IN HISTORICAL AND PHILOSOPHICAL PERSPECTIVES OF BIOLOGY (1)

Prereq: concurrent enrollment in Biol 485.

490 PRINCIPLES OF ORGANIC EVOLUTION (4)

Prereq: Biol 121, 122, and 123. Principles, patterns, processes, and mechanisms of evolution in the organic world.

493 TEACHING BIOLOGICAL SCIENCE (3)

Prereq: 15 credits in biological science. Recent trends in biology and science education; critical study of modern curriculum materials, clinical analysis of teaching and laboratory work. For biology teachers in secondary schools and in higher education.

496a,b,c HONORS TUTORIAL (2-5 ea)



'Sky-Viewing Sculpture' in 'Red Square.'

GRADUATE COURSES

The following courses are offered for graduate credit for persons enrolled in the department's graduate program. For course descriptions and other information about the graduate program, see the current Graduate Catalog.

500 SPECIAL PROJECTS (1-6)

Individual conference.

503 ADVANCED TOPICS IN ECOLOGY (4)

514 VEGETATION OF WASHINGTON (4)

515 PLANT GEOGRAPHY OF NORTH AMERICA (4)

559 PLANT SPECIATION (4)

569 TOPICS IN DEVELOPMENTAL AND COMPARATIVE MORPHOLOGY (4)

571 ADVANCED TOPICS IN GENETICS (4)

577 ADVANCED TOPICS IN PHYSIOLOGY (4)

578 PROTEIN STRUCTURE, FUNCTION AND EVOLUTION (4)

579 ENZYMOLOGY LABORATORY (3)

583 ADVANCED TOPICS IN BIOSYSTEMATICS (4)

584 POPULATION AND COMMUNITY BIOLOGY (4)

595 TEACHING PRACTICUM (1)

599 SEMINAR IN BIOLOGY (2)

690 THESIS RESEARCH (1-12)





BUSINESS ADMINISTRATION

College of Business and Economics

The field of business administration covers a wide variety of responsibilities in both private and public organizations. National data reveal that the business administration major is the most frequent choice of undergraduate students and also is the major preferred by many employers.

MODEL FOR CURRICULUM

Development of the business administration curriculum has been guided by standards of the American Assembly of Collegiate Schools of Business. Required coursework provides opportunities for students to develop:

1. Their knowledge of the economic and social environment within which business functions;
2. Their knowledge of the major functional areas of business;
3. Their perceptual and analytical skills

important to management decision-making; and

4. The basis for growth and advancement in their selected career.

Students normally devote most of the freshman and sophomore years to acquiring a broad general education background. Introductory courses in accounting, economics, business law, and mathematics will normally be completed by the end of the sophomore year. Junior and senior years are devoted to upper-division business requirements and pursuing elective coursework selected according to individual interest and/or need. Elective coursework helpful for developing oral and written communication skills is particularly recommended. The faculty is available to advise students on these choices.

ORGANIZATION OF CURRICULUM

Coursework offered within the department

may be broadly classified into several fields which cover general management, business law, finance, marketing, operations, and personnel and industrial relations. In addition to required courses in each field which are identified under major requirements, students may specialize in a field, such as finance, by adding appropriate electives. The Accounting and Economics Departments provide complementary required and elective coursework.

CONTINUING EDUCATION

In addition to regular daytime classes, the department offers a number of evening classes. These classes are intended to serve both regular degree-oriented students and persons whose interests and objectives may involve only a few courses. Mature students who have not completed formal prerequisites, but who have equivalent experience, may have prerequisites waived. Such persons are urged to contact the course instructor prior to registration.

ADVANTAGES OF EARLY DECLARATION OF MAJOR

Faculty of the College of Business and Economics provide individual advising for students who express interest in majoring, minoring or taking elective coursework. Students who declare a major are assigned to a permanent faculty adviser who will assist them to graduation.

Several courses in business law, economics and mathematics which are required or recommended for majors and minors also may satisfy general education requirements in mathematics and social sciences. Careful planning may save time for additional electives.

An early declaration of major also provides faculty with an improved basis for class scheduling.

PRACTICAL EXPERIENCE

A limited number of student internships are available for well-qualified students. There are several existing internship programs which provide the student with active business experience. In addition, special intern programs can be arranged. These one-quarter internships are normally arranged for late in the junior or early in the senior year so that experiences may be shared in subsequent classes.

BUSINESS ADMINISTRATION FACULTY

E. LEROY PLUMLEE (1976) Chairman.
Associate Professor. BBA, Texas Tech University;

MS, Northern Illinois University; DBA, Texas Tech University.

ROOSEVELT BUTLER (1979) Assistant Professor. BS, Prairie View University; MA, Washington State University.

LOUIS CONCORDIA (1979) Associate Professor. BS, Drexel University; MBA, University of San Francisco; PhD, University of Northern Colorado.

GEORGE JENKINS (1978) Assistant Professor. Purdue University; BBA, Indiana Northern University; MEd, PhD (ADD), Wayne State University; PhD candidate, University of Michigan; CDP.

KENNETH S. KELEMAN (1977) Assistant Professor. BA, MS, San Diego State University; PhD, University of Utah.

MAXWELL C. KING (1978) Assistant Professor. BA, Stanford University; MBA, Harvard Graduate Business School.

ROBERT C. MEIER (1978) Professor. BS, University of Indiana; MA, University of Indiana; PhD, University of Minnesota.

JOHN S. MOORE (1970) Associate Professor. BS, University of North Dakota; MSBus, JDLaw, University of Colorado; CPA, State of Colorado; PhD, University of Washington.

EUGENE OWENS (1975) Professor. BA, University of Arizona; MS, Purdue University; MS, George Washington University; PhD, University of California, Los Angeles.

ROBERT T. PATTON (1970) Professor. BSME, University of Michigan; MBA, University of Minnesota; PhD, University of Washington.

FARROKH SAFAVI (1969) Professor. BA in Journalism, BS in Economics, MBA, University of Teheran; MBA, DBA, University of Southern California.

KENLEY SNYDER (1977) Lecturer. BA, Wheaton College; MBA, University of Michigan; PhD, University of Oregon.

BARBARA J. UNGER (1979) Assistant Professor. BS, College of Notre Dame; MA, University of Washington.

DANIEL M. WARNER (1978) Assistant Professor. BA, University of Washington; JD, University of Washington; MA, Western Washington University.

Transfer students should contact the department adviser about their major prior to registering so as to assure that they enter the sequence correctly and receive departmental evaluation of course work completed at other institutions.

BACHELOR OF ARTS

Major 94 credits

- Acctg 251, 252, 350; BA 271, 301, 303, 311, 322, 330, 356, 360, 380, 495
- Econ 201, 202, 306, 311
- Math 155, 156, 256
- Twelve credits in upper-division business administration elective courses under advisement

Authorized for use in satisfaction of this requirement are: OA 301 and Acctg 354.

Combined Major — Business Administration/Computer Science 95 credits

- Acctg 251, 252, 350

Business Administration

- BA 271, 301, 303, 311, 330, 356, 360, 403, 495
- CS 210, 217, 310, 350, 351, 352, 353, 470, 471
- Econ 202, 306
- Math 155, 156, 240

Minor 25 credits

- Acctg 251, 252; BA 301, 303; Econ 201, 202

GRADUATE STUDY

For concentration leading to the Master of Business Administration degree, consult the Graduate School.

The specific courses for the M.B.A. will be numbered 511 through 520. At the time of this printing the courses are undergoing final revision and approval by WWU committees. The courses, their titles and descriptions will appear in the 1979-80 issue of WWU's class schedule.

PREREQUISITES

Prerequisites for a particular course indicate its level of analysis and tool requirements. The exceptional student who feels he has already acquired these skills elsewhere, or can readily acquire them, must secure special permission for enrollment from the instructor and chairman.

COURSE NUMBERING SYSTEM

The first digit follows the University policy of numbering for the year in which the course is normally taken. The second digit identifies an academic area as follows:

- 0 Management
- 1 Finance
- 2 Personnel
- 3 Marketing
- 4 Unused
- 5 Quantitative
- 6 Production
- 7 Legal
- 8 Miscellaneous
- 9 Policy

COURSES IN BUSINESS ADMINISTRATION

201 INTRODUCTION TO BUSINESS (4)

A survey of the field particularly directed to the needs of students majoring in office administration and business education. Recommended for students not intending to specialize in the fields of business economics.

215 PERSONAL FINANCE AND INVESTMENTS (3)

Sources of personal income, saving and consumer spending patterns. Development of techniques for planning and budgeting consumption expenditures and saving, with special emphasis on the use of saving allocations to achieve personal goals: real property, insurance, financial investment, retirement, estate and tax planning.

271 LAW AND THE BUSINESS ENVIRONMENT (4)

Historical development of legal institutions, the judicial process, and impact of the law upon individual and business decision making.

300 READINGS IN BUSINESS ADMINISTRATION (1-5)

Prereq: permission of instructor and department chairman.

301 INTRODUCTION TO MANAGEMENT (4)

Analysis of the process of management: planning, organization, leadership, control, communication, and decision making. Concepts of power, authority and influence. The role of philosophy and values in organizations.

303 HUMAN RELATIONS IN ORGANIZATIONS (4)

Prereq: BA 301. Individual and group behavior in organizations. Case problems and experiential learning exercises are utilized.

311 CORPORATE FINANCE (4)

Prereq: Acctg 350, BA 301, 356. Structure and operation of financial management; problems of internal financial analysis, forecasting, planning and control, capital supply and budgeting; dividend policy, mergers, acquisitions.

322 PERSONNEL ADMINISTRATION (4)

Prereq: BA 301. Recruitment, selection, utilization, and development of human resources, with emphasis on employee-management relations and relevant behavioral regulations.

330 PRINCIPLES OF MARKETING (4)

Prereq: BA 301. Institutions, functions, problems and policies in the distribution of industrial and consumer goods; pricing, costs, and governmental regulations.

355 BUSINESS STATISTICS (4)

Prereq: Math 155, 156, 256. Quantitative methods used in research, analysis and decision making: estimation, inference, hypothesis testing, analysis of variance, regression correlation, time series, index numbers, forecasting, and Bayesian decision theory.

356 QUANTITATIVE METHODS (4)

Prereq: Math 155, 156, 256. Quantitative methods used in research, analysis and decision making: critical path, optimal path, queuing, production and inventory decision models, and linear programming, dual, non-linear and dynamic programming.

360 OPERATIONS MANAGEMENT (4)

Prereq: Acctg 350 BA 301, 303, 356. Fundamentals of operations management, including tools for analyzing, designing and controlling operating systems.

370 LAW OF COMMERCIAL TRANSACTIONS I (4)

Prereq: Acctg 251. Legal principles underlying the law of contracts, personal property and secured transactions.

371 LAW OF COMMERCIAL TRANSACTIONS II (4)

Prereq: BA 370. Legal principles underlying the law of agency, negotiable instruments, sales, partnerships, and corporations.

372 LAW OF COMMERCIAL TRANSACTIONS III (4)

Prereq: BA 370. This course is intended to cover law not considered in BA 370 and 371 which is important to many accounting, business administration and pre-law students. Application of legal concepts to problem situations.

390 BUSINESS HISTORY OF THE UNITED STATES (3)

Prereq: Econ 202, or Lib St 200 and permission of instructor. Business history of the United States. Review and analysis of the organizational methods, performance, climate and entrepreneurship of American business from 1780 to the present.

400 DIRECTED INDEPENDENT STUDY (1-6)

Prereq: permission of instructor and department chairman.

401 ORGANIZATIONAL BEHAVIOR (4)

Prereq: BA 301, 303. Individual and group behavior in the organizational setting with special emphasis on assessing and improving organizational effectiveness.

402 SEMINAR IN ORGANIZATIONAL THEORY (4)

Prereq: BA 301. Current research: measuring organizational effectiveness, planning, leadership, patterns, and current problems.

403 MANAGEMENT INFORMATION SYSTEMS (3)

Prereq: BA 301, CS 110. Decision process and the information requirements of decision-makers. Application of computers to contemporary business education, and governmental information systems.

404 ORGANIZATIONAL DEVELOPMENT (4)

Prereq: BA 301, 303. Current research and application to planned organizational change and internal training techniques.

411 SMALL BUSINESS FINANCE (4)

Prereq: BA 311. Financial operations of small businesses with emphasis on capital sources and proposal development. Case studies of successful enterprises will be used to demonstrate potential scope of entrepreneurial activity.

412 INVESTMENTS (4)

Prereq: BA 311. Security investment, analysis and forecasting of security markets; industry studies, portfolio construction, security selection; corporate government and revenue bonds; efficient portfolio management for different classes of institutions and individuals.

413 CAPITAL BUDGETING (4)

Prereq: BA 311. Techniques of assessing the desirability of capital investment options and other factors relating to the investment decisions. Theory and case studies.

414 FINANCIAL INSTITUTIONS AND MARKETS (4)

Prereq: BA 311 or Econ 311. Structure and functions of the money and capital markets; the saving investment process and financial intermediaries; supply and demand for loanable funds and the level and structure of interest rates.

415 BUSINESS FINANCIAL POLICY (4)

Prereq: BA 311. Case study analysis is used to provide an understanding of major financial policy issues such as capital structure determinations, use of surplus earnings and approaches to short-term financing.

416 RISK AND INSURANCE (3)

Prereq: senior standing. Personal and organizational risk and the means by which such risk may be minimized, transferred or otherwise managed to avoid serious financial loss.

417 SPECIAL INTEREST SEMINARS IN BUSINESS ADMINISTRATION

418 SECURITIES ANALYSIS (3)

Prereq: BA 311 or equivalent. Investment characteristics of securities issued by private and public organizations.

422 COMPENSATION ADMINISTRATION AND THEORY (4)

Prereq: BA 301, 322. Examination of theories, models, and procedures required to develop compensation and reward systems in organizations. Economic, psychological, and social elements of compensation. Determination of compensation structures and differentials, forms of compensation and reward, compensation levels.

425 INDUSTRIAL RELATIONS ADMINISTRATION (4)

Prereq: BA 322. Cases, lectures, and collective bargaining simulation are used to develop administrative skill in dealing with union-management relations. Nature of unions, institutional forces conditioning collective bargaining practices, and administrative practices dealing with unions.

426 CURRENT ISSUES IN PERSONNEL AND INDUSTRIAL RELATIONS (4)

Prereq: BA 322. Current problems in policy and practice used in personnel and industrial relations administration.

427 SYSTEMS OF DISPUTE SETTLEMENT (4)

Prereq: BA 322 or Econ 325. Public and private dispute settlement systems, particularly in labor relations, commerce, and public issues. Emphasis on quasi-judicial and nonjudicial systems, nonjudicial methods including arbitration, fact-finding, and mediation.



Business Administration

428 SELECTION AND TRAINING IN BUSINESS AND INDUSTRY (4)

Prereq: BA 322. Organizational objectives as related to selecting and training human resources in business and industry. Selection and training models; assessment methods; criterion problems and evaluation methodologies.

430 MARKETING RESEARCH (4)

Prereq: BA 330, 356. Marketing problems posed by executive decision; techniques applicable to product selection, advertising and motivation research; research methodology; research design and decision models in marketing; individual research projects.

431 ADVERTISING (4)

Prereq: BA 330. Promotional objectives and strategies of the firm; organization of advertising function; media selection and evaluation; psychological aspects; new developments such as use of computer and mathematical models.

432 SALES MANAGEMENT (4)

Prereq: BA 330. Nature of personal selling and retailing; emphasis on management of sales personnel and the merchandising effort.

433 MARKETING MANAGEMENT (4)

Prereq: BA 330, 356. Objectives, strategies and organization of marketing departments in large and medium-sized firms. Emphasis upon operating, control and evaluation.

460 PROBLEMS IN OPERATIONS MANAGEMENT (4)

Prereq: BA 360. Case study of operating problems. Emphasis upon manufacturing or service industries will vary. May be repeated for credit with alternative course content.

467 BUSINESS SIMULATION (4)

Prereq: BA 356, 360 or equivalents. Introduction to simulation techniques as they apply to business and economics. Basic concepts, applications and problems associated with use of simulation.

469 FIELD STUDY IN OPERATIONS MANAGEMENT (4)

Prereq: BA 360 and permission of instructor. Field-based study of theory applied to current operating problems.

470 BUSINESS TAX PLANNING (3)

Prereq: Acctg 350. Impact of federal, state of Washington and local taxation upon business organization, location and operation. Comparable Canadian federal and provincial taxes.

471 GOVERNMENT REGULATION OF BUSINESS OPERATIONS (3)

Prereq: BA 271 or 370. Impact of federal, state and local government regulation upon business operation.

480 INTERNATIONAL BUSINESS (4)

Prereq: BA 311, 330, 380. Special problems and issues which arise in the conduct of international business.

481 THE ROLE OF BUSINESS IN AMERICAN SOCIETY (3)

Prereq: BA 380. Development of American capitalism and its legal, philosophical, and ethical foundations.

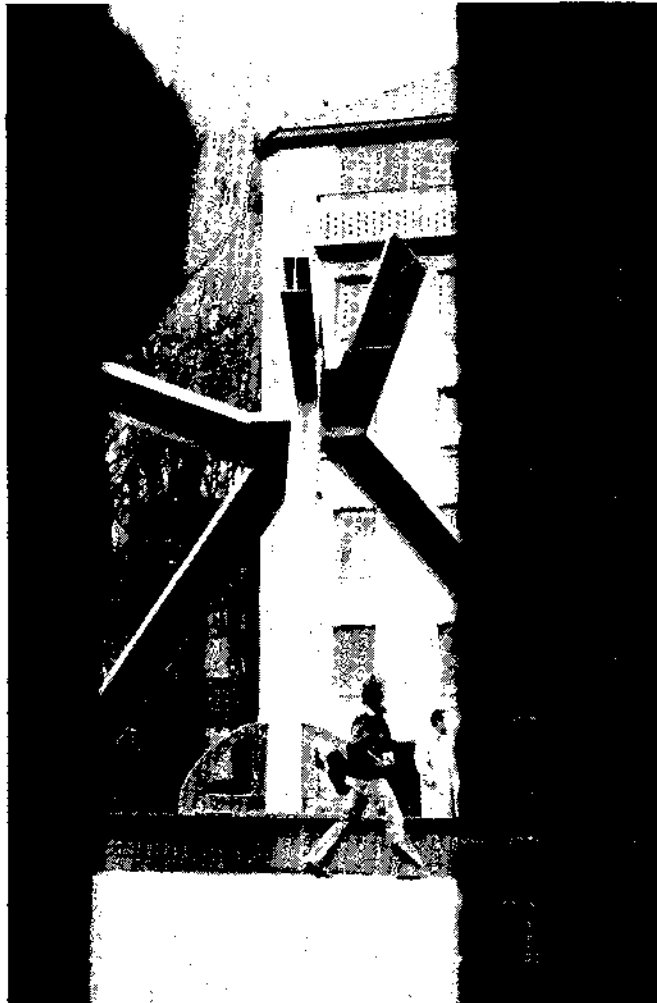
485 REAL ESTATE (4)

Prereq: BA 271 or equivalent. Real estate law; government regulation of real estate use; development, marketing and financing of commercial and residential real estate.

495 BUSINESS POLICY (4)

Prereq: BA 303, 311, 330, 360. Case study of policy making and administration from a general management point of view. Emphasis on problem analysis, the decision-making process, administration and control, and development of policies and objectives.





CHEMISTRY

College of Arts and Sciences

Chemistry is the study of matter and its transformations. It has a major relationship to most other areas of natural science and technology and has played a significant role in most scientific advances during the past century as well as many important public policy issues. Because of this, the study of chemistry can provide entrance to a wide variety of careers in industry, government or teaching as well as a good foundation for further study in chemistry graduate programs or professional schools as dentistry, medicine, law or business.

The Chemistry Department is housed in Haggard Hall, centrally located adjacent to the library on the main campus. The laboratory facilities, equipment and instrumentation in the department are modern and readily available to chemistry students. In addition the department has access to a

variety of special campus facilities such as the Computer Center, Electron Microscope Laboratory and the Science Education Center.

THE CHEMISTRY FACULTY

The Chemistry Department faculty is young, vigorous and strongly committed to providing the undergraduate student with a quality, personalized education. All department members hold the Ph.D. degree and most are engaged in experimental research, primarily with junior and senior level chemistry majors who have elected to pursue research study. In addition to providing instruction and academic advisement, faculty members are readily available to work with individual students on career plans and academic problems.

Chemistry

- DONALD M. KING (1966) Chairman. Associate Professor. BS, Washington State University; PhD, California Institute of Technology.
- MARION BESSERMAN (1952) Associate Professor. BS, University of Washington; MS, Purdue University; PhD, University of Washington.
- JOSEPH R. CROOK (1970) Associate Professor. BS, University of Nevada; PhD, Illinois Institute of Technology.
- LOWELL P. EDDY (1957) Associate Professor. BS, MS, Oregon State University; PhD, Purdue University.
- GEORGE A. GERHOLD (1969) Professor. BS, University of Illinois; PhD, University of Washington.
- GEORGE S. KRIZ, JR. (1967) Professor. BS, University of California, Berkeley; PhD, Indiana University.
- GARY M. LAMPMAN (1964) Professor. BS, University of California, Los Angeles; PhD, University of Washington.
- JOHN A. MILLER (1966) Associate Professor. BS, Oregon State University; PhD, Iowa State University.
- EDWARD F. NEUZIL (1959) Professor. BS, North Dakota State College; MS, Purdue University; PhD, University of Washington.
- DONALD L. PAVIA (1970) Associate Professor. AB, Reed College; MS, PhD, Yale.
- SALVATORE F. RUSSO (1968) Associate Professor. BA, Wesleyan University; PhD, Northwestern University, Evanston.
- JOHN A. WEYH (1968) Professor. BA, College of Great Falls; MS, PhD, Washington State University.
- JOHN C. WHITMER (1969) Professor. BS, University of Rochester; MS, PhD, University of Michigan.
- MARK L. WICHOLAS (1967) Professor. AB, Boston University; MS, Michigan State University; PhD, University of Illinois.
- H. WILLIAM WILSON (1966) Professor. BSc, University of Alberta; PhD, University of Washington.

RESEARCH ASSOCIATES

- James D'Argaville Clark (1964)
BSc, Capetown; BSc, University of London; PhD, Institute of Paper Chemistry, Lawrence College.
- Gordon W. Mitchell (1979)
BS, University of Washington and University of British Columbia.

PROGRAMS AND CAREER OPPORTUNITIES

The programs of study offered by the Chemistry Department are diverse and challenging, and provide the following benefits to the student:

- A wide variety of accredited programs designed to meet diverse career goals.
- Provision for transfer students to complete degree programs without loss of time or credit.
- A faculty committed to quality undergraduate education.
- Close student-faculty contact and relatively small classes.
- Direct access to modern laboratory equipment and instrumentation.
- Opportunity for research work at the junior/senior level under the direction of a faculty adviser.

The Chemistry Department offers three basic degree programs: Bachelor of Science, Bachelor of Arts, and Bachelor of Arts in Education. Within each of these programs, the student has considerable freedom in selection of courses and options, but all three have a common core of study:

- One year of general chemistry and one year of college-level calculus (first year)
- One year of organic chemistry, one year of college physics and one quarter of analytical chemistry (second year)
- One year of physical chemistry (third year)

This provides the foundation for elective courses in the student's area of interest. Through choice of degree programs and electives, the student can prepare for careers in industry or government, teaching at the secondary level, or further study at the graduate level.

Students planning to major in chemistry or to begin university transfer programs involving chemistry courses are advised to consult the department at the beginning of the first year to arrange for proper sequence of courses.

Students planning to transfer to Western after completing two years of college study elsewhere should complete as many of the following program requirements as possible prior to transfer in order to avoid delays in degree work completion:

- One year of general chemistry
- One quarter or one semester of analytical chemistry
- One year of organic chemistry
- One year of college-level calculus
- One year of college-level physics

The *Bachelor of Arts* and *Bachelor of Science* programs are designed for students interested in industrial or governmental careers or graduate study. The two programs are similar except that the B.S. program provides greater depth and, with proper choice of electives, leads to a degree approved by the American Chemical Society.

The *Bachelor of Arts in Education* provides several program emphases (chemistry-biology, chemistry-mathematics, and chemistry-physics) as well as straight preparation in chemistry. Although requirements within these options differ in detail, the three programs are similar enough that the prospective teacher need not choose among them until the sophomore or junior year. Successful graduates are qualified to teach in their areas of concentration at the middle

school or high school level. Prospective teachers with qualifications in more than one area will have a distinct advantage in seeking such positions. Detailed descriptions of each of these degree programs and course descriptions are given below.

BACHELOR OF SCIENCE DEGREE

Major Concentration 110 credits

- Chem 121, 122, 123, 333
- Chem 351, 352, 353, 354, 355
- Chem 434, 441, 461, 462, 463, 464, 465
- Supporting courses: Physics 231, 331, 332, Math 105*, 124, 125, 126
- Electives, selected under departmental advisement in chemistry, biology, physics and mathematics to total 110 credits including above required courses

NOTE: Western Washington University is approved by the American Chemical Society for certification of students who complete a program which meets standards set by the Society. These may be met by including in the Bachelor of Science program Math 301 or Math 201 and 202, and at least nine elective credits in chemistry courses numbered 400 and above or in approved courses in biology, computer science, geology, mathematics and physics. At least two of the nine credits must be in chemistry laboratory courses and at least six credits in courses other than research. In addition, course work in computer science or statistics is strongly recommended as is a reading knowledge of a foreign language (particularly German).

A typical four-year program leading to a Bachelor of Science (ACS certified) is outlined below:

First Year

Chem 121, 122, 123; Math 105, 124, 125

Second Year

Chem 351, 352, 353, 354, 355, 333; Math 126, Physics 231, 331, 332

Third Year

Chem 461, 462, 463, 464, 465; Math 201 and 202 (or 301)

Fourth Year

Chem 434, 441 plus electives (see above.)

*Five credits less of required courses if student begins sequence with Math 124.

Combined Major — Chemistry/Biology

Major Concentration 110 credits

- Chem 121, 122, 123, 333; 351, 352, 353, 354, 471, 472 and 473 or 474, 411, 412, 413 or 461, 462, 463
- Biol 121, 122, 123, 323, 345, 408, 471
- One year college physics
- Math 124, 125

This program is specifically designed for students who wish to undertake graduate study in either molecular biology or biochemistry.

BACHELOR OF ARTS DEGREE

The Bachelor of Arts degree (major or minor) can be combined with a variety of other programs on campus. Careful program planning and early advisement is strongly suggested.

Major 56 credits plus Supporting Courses

- Chem 121, 122, 123, 333, 351, 352, 353, 354, 355, 461, 462, 463, 464, 465, 434 or 441, plus elective
- Supporting courses: one year college physics and Math 105, 124, 125

Minor 24 or 25 credits

- Chem 121, 122, 123
- A minimum of 9 or 10 credits under approval of the Chemistry Department from Chem 251, 333, 351, 352, 353, 354, 371, 461, 462, 463 (or 411, 412, 413), 482, 483

BACHELOR OF ARTS IN EDUCATION

Chemistry

Major — Senior High School

45 credits plus Supporting Courses

- Chem 121, 122, 123, 333
- Chem 351, 352, 353, 354, 461, 462, 463
- Phys Sci 492
- Supporting courses: one year college physics and Math 105, 124, 125



Chemistry

Combined Major — Chemistry/Biology

Major Concentration 98-100 credits

- Chem 121, 122, 123, 251, 333
- Chem 411, 412 or 461, 462
- Biol 121, 122, 123, 325
- One course from Biol 471, 480, 490
- 10 credits from Biol 310 or 345, 311, 312
- Biol 485 or Gen Sci 405
- Phys Sci 492 and Biol 493
- Chem 371 or Biol 323
- Math 220 or Physics 131, 132, 133 (or 231, 331, 332)

NOTE: This program is specifically designed for students who wish to be recommended for teaching competence in both biology and chemistry. Students entering this curriculum are advised that this combination major contains more credits than the Bachelor of Arts in Education in either single discipline. Depending upon options chosen, the overall student program may involve more than 180 credits.

Teaching Competence

Recommendation for teaching competence with the Chemistry-Biology major concentration normally requires completion of the program with a grade point average of 2.50 or better in the chemistry and in the biology courses.

Combined Major — Chemistry/Mathematics

Major Concentration
78 credits plus Supporting Courses

This concentration provides depth leading to recommendation for teaching competence in both areas. It satisfies requirements for both a major and a minor.

- Chem 121, 122, 123, and 461, 462, 463 or 411, 412, 413
- 9-11 credits in chemistry to include a minimum of five credits in organic chemistry under departmental advisement
- Phys Sci 492
- 40 credits in mathematics to include methods courses under departmental advisement
- Supporting courses: one year college physics

Combined Major — Chemistry/Physics

Major Concentration
73 credits plus Supporting Courses in Mathematics

This concentration provides depth leading to recommendation for teaching competence in both areas. It satisfies the requirements for both major and minor.

- Chem 121, 122, 123
- Chem 461, 462, 463 or 411, 412, 413
- 9-11 credits in chemistry including five credits in organic chemistry under departmental advisement
- Physics 225 or 355, 231, 331, 332, 381, 371 or 441
- 8 credits in physics under departmental advisement
- Phys Sci 492
- Supporting courses: Math 105, 124, 125, 126

Minor 25 credits

Same as Bachelor of Arts minor above

Extended Minor 35-37 credits

- Chem 121, 122, 123, 461, 462, 463 (or 411, 412, 413), Phys Sci 492
- 6-8 credits under departmental advisement from Chem 251, 333, 351, 352, 353, 354, 441

To obtain minor approval a minimum of four credits of those required must be taken in chemistry at Western Washington University under Chemistry Department advisement.

Teaching Competence

Recommendation for teaching competence in chemistry normally requires completion of one of the above majors or the extended minor with a grade point of 2.5 or better in the chemistry courses.

DEPARTMENTAL HONORS

In addition to the general requirements for all honors students, a chemistry major who wishes to graduate "with honors" must complete Honors 361, 461; upper division chemistry courses — 30 credits for an Arts and Sciences major; 25 credits for a Teacher Education major; Chemistry 498; at least 4 credits in Chemistry 396 a, b, c or 496 a, b, c.

GRADUATE STUDY

For concentrations leading to the Master of Education or the Master of Science degrees, see *Graduate Bulletin*.

COURSES IN CHEMISTRY

- 101 CHEMICAL CONCEPTS (4)**
Designed for general education purposes for students without high school chemistry. Fundamental topics of chemistry such as: atoms and molecules, periodic table, organic and bio-chemistry, radioactivity. Applications to selected topics: household and industrial chemistry, energy sources, food additives and other foreign compounds, the environment. Emphasis of the course will vary; consult the class schedule.
- 115 GENERAL CHEMISTRY (5)**
Principles and laws of chemistry developed from the properties, structure, and reactions of matter; an abbreviated course in general chemistry for students not requiring Chem 121, 122 in their programs.
- 121, 122, 123 GENERAL CHEMISTRY I, II, III (5 ea)**
Prereq: Math 103 or one and one-half years of high school algebra. Each course prerequisite to the next. Scientific measurements: atoms, molecules, and chemical bonding; mole concept and stoichiometry, chemical nomenclature. States of matter, changes of state, solutions, oxidation-reduction, acid-base concepts, chemical kinetics, chemical equilibrium, equilibrium in aqueous solutions; electro-chemistry; selected topics such as coordination, nuclear or thermochemistry. Elementary algebra used to express chemical concepts. Laboratory.
- 208 INDUSTRIAL CHEMISTRY (3)**
Prereq: Chem 115 or 121. Industrial chemistry and chemical technology in the contemporary world.
- 209 INDUSTRIAL CHEMISTRY LABORATORY (2)**
Prereq: Chem 208 or concurrent. Small scale experiments of industrial processes; field trips to chemical industries.
- 251 ELEMENTARY ORGANIC CHEMISTRY (5)**
Prereq: Chem 115 or 121. Reactions, nomenclature, and uses of carbon compounds; an abbreviated course in organic chemistry primarily for persons not requiring the Chem 351-354 series.
- 302 CHEMICAL LITERATURE (1)**
Prereq: Chem 352. Primary, secondary and tertiary sources of published chemical information. Satisfactory/Unsatisfactory grading used in this course.
- 305 GLASS WORKING (1-2)**
Prereq: permission of instructor. One hour of demonstration and three hours of lab per week. Basic glass working and construction of simple glass apparatus. May be repeated once for credit. S/U grading.
- 307 AUTOMOTIVE CHEMISTRY (3)**
Prereq: Chem 115. Lectures and laboratory dealing with a variety of chemical subjects pertaining to the construction and operation of motor vehicles. Examples of topics include fuels, lubricants, exhaust emissions and batteries. Laboratory experiments dealing with these topics will be included.
- 308 INTRODUCTION TO POLYMER CHEMISTRY (3)**
Prereq: Chem 115, Tech 333 or Chem 208. Types of polymers, methods of polymerization, and preparation of important commercial thermoplastic and thermosetting plastics. Addition and condensation polymers are prepared in the laboratory.
- 317 THE CHEMISTRY AND PHYSIOLOGY OF FOREIGN COMPOUNDS (4)**
Prereq: Chem 251 (or 351) and Biol 101. A detailed consideration of chemical and physiological effects taken from the following categories: mutagens, carcinogens, food additives, antibiotics, vitamins, steroidal hormones, chemical contraceptives, and mechanism of drug action. Normally offered summer quarter.
- 333 INTRODUCTORY ANALYTICAL CHEMISTRY (5)**
Prereq: one year of general chemistry. Theory and practice of gravimetric, volumetric, potentiometric and spectrophotometric methods of analysis. Selected analytical topics such as ion exchange resins, non-aqueous solvents, chelates, extractions, chromatography.
- 340 CHEMICAL PERIODICITY (2)**
Prereq: Chem 123. Descriptive inorganic chemistry. Properties of the elements and compounds. Group trends of the representative elements and of the transition elements.
- 351, 352, 353 ORGANIC CHEMISTRY (4,4,3)**
Prereq: Chem 122; each course prerequisite to the next. Chemistry of carbon compounds with emphasis on structural theory, reactions, and mechanisms.
- 354 ORGANIC CHEMISTRY LABORATORY I (2)**
Prereq: Chem 352 or concurrent. Techniques of organic chemistry: reactions, separations and syntheses of organic compounds.
- 355 ORGANIC CHEMISTRY LABORATORY II (2)**
Prereq: Chem 354 and 353 or concurrent. Techniques of organic chemistry: reactions, separations; syntheses and introduction to practical spectroscopy.
- 371 ELEMENTARY BIOCHEMISTRY (4)**
Prereq: Chem 251. Outlines of structures and metabolisms of carbohydrates, lipids, proteins, and nucleic acids; biochemical functions of vitamins, hormones, and some co-enzymes; basic properties of enzymes. Laboratory portion of course illustrates material presented in lecture.
- 396a,b,c HONORS TUTORIAL (2-5 ea)**
- 399 SEMINAR IN CHEMISTRY (1)**
Prereq: 25 credits in chemistry. Presentation and discussion of papers in chemistry. Satisfactory/Unsatisfactory grading used in this course.
- 400 PROJECT IN CHEMISTRY (1-3)**
Prereq or concurrent: Chem 461 and Chem 333. Students with junior status in chemistry must have and maintain an overall 3.0 g.p.a. in chemistry courses. Permission of instructor required. Individual projects under supervision. Presentation and discussion of projects encouraged. Satisfactory/Unsatisfactory grading used in this course.
- 410 SPECIAL TOPICS (1-3)**
Prereq: permission of instructor. Specialized lectures on a conference basis for a particular area of interest.
- 411, 412, 413 ELEMENTARY PHYSICAL CHEMISTRY I, II, III (4 ea)**
Prereq: one year of college chemistry, one year of college physics, Math 124 or 220. (1) Classical thermodynamics including first, second, and third laws; thermochemistry. (2) Chemical equilibria, the phase rule, solutions, colligative properties, and kinetics. (3) Concepts of molecular bonding and structure; gases, liquids, solids, electro-chemistry. Three hours of lecture material will be supplemented with problem solving, mathematical review sessions, and laboratory experiments related to lecture material.
- 417 ADVANCED TOPICS IN CHEMISTRY (3)**
Prereq: Chem 461 (or concurrent) and permission, and any additional prerequisites as listed. A series of courses which are taught on an irregular basis by individual instructors. These courses may be offered subject to enrollment. The student will have to check the class schedule to determine which are being offered in any given quarter. Normally this will be by posted notice in the Chemistry Department.
- 417a Natural Products Chemistry**
Prereq: Chem 333.

Chemistry

- 417b Organic Reactions
Prereq: Chem 353.
- 417c Physical Organic Chemistry
Prereq: Chem 353, Chem 463 or concurrent.
- 417d Organic Photochemistry
Prereq: Chem 353.
- 417e Stereochemistry
Prereq: Chem 353.
- 417f Quantum Chemistry
Prereq: Chem 463, Math 125.
- 417g Molecular Spectroscopy
Prereq: Chem 463, Math 125.
- 417h Statistical Thermodynamics
Prereq: Chem 463, Math 125.
- 417j Theoretical Inorganic Chemistry
Prereq: Chem 441.
- 417m Enzyme Chemistry
Prereq: Chem 463 or 413, 471.
- 417n Physical Biochemistry
Prereq: Chem 463 or 413, 471.
- 417p Chemical Applications of Group Theory
Prereq: any one of the following courses — Chem 461, Physics 381, or Physics 391.
- 434 INSTRUMENTAL ANALYSIS (4)
Prereq: Chem 333; Chem 463 prerequisite or concurrent. Theory and experimental techniques of optical, electrical, and other physical measurements applied to chemical analysis.
- 441 ADVANCED INORGANIC CHEMISTRY (4)
Prereq or concurrent: Chem 462. Chemical periodicity, bonding and structure of inorganic molecules, transition metal and coordination chemistry, and the chemistry of the non-metallic elements.
- 454 QUALITATIVE ORGANIC ANALYSIS (4)
Prereq: Chem 123, 353 and 355. Identification and characterization of organic compounds by chemical and spectroscopic methods.
- 461, 462, 463 PHYSICAL CHEMISTRY (4,4,3)
Prereq: one year of college physics, Math 125, and one year of general chemistry; each course prerequisite to the next. Atomic and molecular structure, states of matter, solutions, chemical thermodynamics and equilibria, chemical kinetics, and electro-chemistry.
- 464, 465 PHYSICAL CHEMISTRY LABORATORY (2 ea)
Prereq: Chem 333 and 461, 462, 463; Chem 464 and 465 may be taken concurrently with Chem 462 and 463 respectively. Experiments designed to illustrate some concepts and techniques of physical chemistry; also formal report writing.
- 471, 472, 473 INTRODUCTORY BIOCHEMISTRY (3 ea)
Prereq: Chem 123, 353 or concurrent, and Biol 101 or 120; each course prerequisite to the next. Chemistry of carbohydrates, proteins, nucleic acids, and lipids; intermediary metabolism of these substances; reaction mechanisms leading to biosynthesis of various compounds of biological importance.
- 474 INTRODUCTORY BIOCHEMISTRY LABORATORY (2)
Prereq: Chem 123, 354 and Chem 472 or concurrent. Analysis of carbohydrates, amino acids, proteins, lipids, and nucleic acids by means of current techniques: isolation and purification of enzymes and measurement of enzyme kinetics.
- 482 NUCLEAR CHEMISTRY (3)
Prereq: Chem 123, Physics 133 or equivalent, and Math 125. Theoretical and applied nuclear and radio-chemistry.
- 483 NUCLEONICS LABORATORY (2)
Prereq: Chem 123 or Physics 133 or 231. General experimental techniques in nuclear and radiochemistry for chemistry, biology, geology and physics majors.
- 496a,b,c HONORS TUTORIAL (2-5 ea)
- 498 RESEARCH PROJECT IN CHEMISTRY (6: 3 in each of two successive quarters)
Prereq: permission of instructor. Investigation of a problem in chemistry under departmental sponsorship and supervision. The project must extend over a minimum of two quarters with credit granted after the presentation of an oral report at a seminar and submission of an acceptable written report. Satisfactory/Unsatisfactory grading used in this course.

GRADUATE COURSES

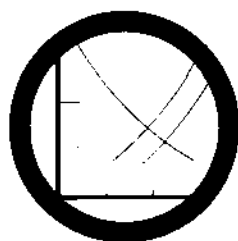
The following courses are offered for graduate credit for persons enrolled in the department's graduate program. For course descriptions and other information about the graduate program, see the current Graduate Catalog.

- 510 SPECIAL TOPICS (1-3)
- 511 ADVANCED LABORATORY METHODS (1-3)
- 517 ADVANCED TOPICS IN CHEMISTRY
517a Chromosomal Proteins and Chromatin Structure (1)
517b Stereochemistry (3)
517c Organic Photochemistry (3)
517d Chemical Applications of Group Theory (3)
- 531 SPECIAL TOPICS IN ANALYTICAL CHEMISTRY (3)
- 541 THEORETICAL INORGANIC CHEMISTRY (3)
- 551 PHYSICAL ORGANIC CHEMISTRY (3)
- 552 CHEMISTRY OF NATURAL PRODUCTS (3)
- 553 ORGANIC REACTIONS (3)
- 561 ADVANCED PHYSICAL CHEMISTRY (3)
- 562 THEORETICAL CHEMISTRY (3)
- 563 MOLECULAR SPECTROSCOPY (3)
- 571 GENERAL BIOLOGICAL CHEMISTRY (3)
- 572 CHEMISTRY OF BIOLOGICAL PROCESSES (3)
- 573 ENZYME CHEMISTRY (3)
- 574 PHYSICAL BIOCHEMISTRY (3)
- 581 ADVANCED NUCLEONICS (3)
- 600 SPECIAL PROJECTS (2-6)
- 695 SEMINAR (1)
- 696 INTERNSHIP IN CHEMISTRY IN THE COMMUNITY COLLEGE (9-12)
- 698 RESEARCH (3)





WILSON LIBRARY



ECONOMICS

College of Business and Economics

By any measure, economics is one of the most important and exciting fields in the social sciences and is the only discipline among the social sciences included in the Noble Prize awards. The most challenging task of economics is the study of how to best use natural and man-made resources in the satisfaction of human wants. Since most of mankind's activities involve economic considerations, it can be said economics is the study of one of the fundamental aspects and determining forces of human life. Today, more than ever, the problems agitating society are predominantly economic. The concerns of inequality, discrimination, pollution, the energy crisis, and growth are heavily economic. Their solutions, too, will draw heavily on economics. Whether as intelligent citizens or as professional economists, we need the perspective of economics if we are going to understand and deal with the realities of life in the late twentieth century.

The areas that economists devote most of their analytical skills to are the processes of production, distribution and consumption of commodities and services. The knowledge of why certain products are produced or consumed, why shortages occur, and what the repercussions of a certain change in production or consumption might be, may all be essential for economic decision-making. In this context, the study of how and why individuals make choices from among alternative courses of action in production and consumption, for example, involves an analysis of man's economic motivation. Similarly, a knowledge of income distribution trends and a theoretical as well as humanistic understanding of the social and economic repercussions of various patterns of distribution can move a society to political action. It is the economist who most typically provides the data, statistical methods and theories to help in the analysis of these basic problem areas. A vast number of economic problems

derive directly from these areas of concern. Are depressions important? What about inflation and unemployment? Should we worry about poverty and income inequality? Is stagnation our biggest problem, or is growth an even bigger one? The analysis and tools of the economist convert these issues to more than hot air. The study of economics produces the educated modern citizen as well as the trained professional who can intelligently understand and cope with these problems. Economic analysis is increasingly required in dealing with such diverse social problems as poverty, crime, health care, resource exhaustion, and many more.

The field of economics consists of many areas of interest and specialization where the concerns and methods of economics are selectively applied. For example, the historical area deals with the history of the development of different economies and economic ideas. The area of economic development analyzes the performances of both developed and "backward" economies. Some economists specialize in the examination of taxation and government spending, banking and money supply, sophisticated mathematical methods, government policies, and international economic problems. Still others engage primarily in analyzing the performance of a nation's total economy, or only that of a small unit like a business firm.

Since economics is a discipline involved in such far-reaching concerns of modern society, economists are not only employed as teachers and researchers in the nation's colleges and universities, but also at all levels of government in the nation's banking and financial institutions, and labor unions. In view of the technical and complex economic problems confronting the modern business firm, one of the most rapidly growing areas of employment in the profession is the employment of business economists. Business economists are heavily involved in planning, forecasting, production and market analysis, pricing, as well as government policy monitoring.

The economist's tools consist particularly of an exposure to economic ideas and analysis of statistical methods, and of computer techniques. While many employment opportunities are available to the university graduate, the person who wishes to pursue a career as a professional economist should plan to do some graduate study.

The economics program provides two options under the Bachelor of Arts degree. Option I is designed to provide the student not only with a theoretical and substantive background in

economics, but also includes the appropriate quantitative skills. Under Option I, graduates have found employment at various levels in public and private organizations, government, business and industry. It also provides excellent preparation for continued study at the graduate level. Option II requires a minor and is designed to provide a liberal arts degree with individualized coursework under advisement. Students must consult with an adviser prior to the selection of Option I or Option II as their major program.

ECONOMICS FACULTY

- K. PETER HARDER (1970) Chairman. Associate Professor. BA, University of Puget Sound; MA, PhD, University of Nebraska.
- ROBERT P. COLLIER (1976) Professor and Dean of the College of Business and Economics. BA, Reed College; PhD, Stanford University.
- RICHARD FRYE (1975) Assistant Professor of Economics and Huxley College. BS, United States Naval Academy; PhD, University of Rhode Island.
- *ERWIN S. MAYER (1953) Professor. AB, Hunter College; PhD, University of Washington.
- MICHAEL K. MISCHAIKOW (1964) Professor. BA, School of Commerce and Finance, Bulgaria; MBA, Hochschule fur Welthandel, Austria; MA, PhD, Indiana University.
- HOWARD E. MITCHELL (1955) Professor. BA, Whitworth College; MA, PhD, University of Washington.
- DAVID M. NELSON (1977) Assistant Professor. BA, Whitworth College; MA, PhD, University of Oregon.
- ALLAN G. SLEEMAN (1977) Assistant Professor. BS, London School of Economics.

Transfer students should contact the department adviser about their major prior to registering so as to assure that they enter the sequence correctly and receive departmental evaluation of coursework completed at other institutions.

BACHELOR OF ARTS

Major 85-90 credits

Basic Core

- Econ 201, 202, 301, 302, 303, 311
- Option I or Option II

Option I

- Econ 406, 407
- One course from Econ 381, 385 (or Hist 360)

**On Sabbatical Leave 1979-80*

- Math 155, 156, 256
- BA 355
- Geog 207
- Choose one of the following: (a) Acctg 251, 252, or (b) 8 credits from mathematics or computer science (other than Math 100, 105, 124, 151, 155, 156, 256) or (c) 8 credits from philosophy (other than Phil 111)
- 20 elective credits in economics under advisement, not otherwise required

This program is geared to serving the needs of those students who intend to pursue further study in economics or who are seeking professional preparation in economics.

Option II

- 39 elective credits in economics must be taken under advisement. Up to 14 credits of appropriate work in mathematics, computer science and statistics may be included in these elective credit hours, *but only with prior written approval by the student's adviser.*
- A minor in an area to be chosen by the student under advisement

This option is intended to serve the needs of those students seeking a less specifically defined as well as less professionally oriented major than offered under Option I. It is particularly suitable for the student who has wide-ranging interests in the liberal arts. This option must be accompanied by a minor selected under advisement.

Combined Major — Economics/Mathematics 100 credits

This concentration for students who wish considerable depth in both areas satisfies both a major and a minor for the B.A. degree.

- Econ 201, 202, 301, 302, 311
- Acctg 251, 252, 350
- 12 upper-division credits in economics and business administration selected under departmental advisement
- Econ 381 (or History 360)
- Math 105, 124, 125, 126, 201, 202, 241 (Math 301 may be substituted for 201, 202)
- Math 341 and 342; or 441, 442, 443
- Math 201 may be taken concurrently with Math 125; Math 202 may be taken concurrently with 126
- Comp Sci 110 or 210
- 8 credits under advisement in upper-division courses in mathematics/computer science

Combined Major — Economics/Accounting 110 credits

- Econ 201, 202, 301, 302, 303, 311, 381 or 385
- 14-15 additional credits in upper-division economics courses under advisement
- Acctg 251, 252, 350, 352, 353
- 8 additional credits in upper-division accounting courses under advisement
- BA 301, 303, 311, 355 or 356
- Four additional credits in upper-division business administration courses under advisement
- Math 155, 156, 256*

Minor 25 credits

- Econ 201, 202
- Additional courses selected under departmental advisement; at least 10 credits must be at upper-division level

BACHELOR OF ARTS IN EDUCATION

Minor 23-25 credits

(Alternate minor for other than business education majors for teaching competency recommendation.)

- Econ 201, 202; Acctg 251 or BA 201
- 10 credits in upper-division courses selected under prior advisement

DEPARTMENTAL HONORS

In addition to the general requirements for all honors students, an economics major who wishes to graduate "with honors" must complete Economics 491h; a reading knowledge of a foreign language and two years of mathematics; must attain a grade average of 3.5 in upper-division economics courses; must pass a comprehensive examination in economics.

GRADUATE STUDY

For concentrations in economics leading to the Master of Arts degree, see the *Graduate Bulletin*.

PREREQUISITES

Prerequisites for a particular course indicate its level of analysis and tool requirements.

*Students who plan to pursue graduate study should substitute Math 124, 125, 201, 202 for 155 and 156.

Economics

The exceptional student who feels he has already acquired these skills elsewhere, or can readily acquire them, must secure special permission for enrollment from the instructor.

COURSES IN ECONOMICS

- 190 CURRENT ECONOMIC ISSUES (3)**
Examination of the major economic problems of our time. Designed to introduce the general student to the most visible economic aspects of modern society, such as inflation, economic growth and recession, pollution, unemployment, etc.
- 301 PRINCIPLES OF ECONOMICS I. INTRODUCTION TO MACRO-ECONOMICS (5)**
An overview of the modern economy as a system for dealing with the problem of scarcity, with particular emphasis on the market economy. An evaluation of successes, deficiencies, and possible alternative futures.
- 302 PRINCIPLES OF ECONOMICS II. INTRODUCTION TO MICRO-ECONOMICS (4)**
Analysis of the operation and decision making of economic units in a market economy: various competitive conditions; supply, demand, resource allocation, shortages, controls, social costs, and social benefits.
- 301 INTERMEDIATE MACRO-ECONOMICS (4)**
Prereq: Econ 201 and 311. Determinants of the level of income, employment and output in the economic system.
- 302 INTERMEDIATE MICRO-ECONOMICS (4)**
Prereq: Econ 202; Math 156. The theory of pricing under conditions of perfect and imperfect market structure; relation of demand, production, costs and prices; functional income distribution; general equilibrium theory.
- 303 THE HISTORY OF ECONOMIC THOUGHT (5)**
Prereq: Econ 201 and 202 or Lib St 200. Development of economic thought with emphasis on period following Adam Smith.
- 306 MANAGERIAL ECONOMICS (4)**
Prereq: Econ 202, Acctg 350, Math 156, BA 355 and/or 356. Application of economic principles to the decision-making process. Demand, costs and market structure and their relation to pricing, product choice, capacity and profit level decision making.
- 311 MONEY AND BANKING (4)**
Prereq: Econ 201 or Lib St 200 and permission of instructor. Nature and functions of money, monetary institutions, instruments of monetary policy and their influence on economic activity through changes in money and credit.
- 325 ECONOMICS OF LABOR (5)**
Prereq: Econ 201, 202. Economics of the labor market; development and functioning of labor unions and collective bargaining.
- 338 ECONOMIC ANALYSIS AND INDUSTRIAL MANAGEMENT (5)**
Prereq: Math 100 or equivalent. Introduction to structure of markets, production and price theory; application to organization management and operation of business enterprise. Not applicable to a major in economics.
- 381 AMERICAN ECONOMIC HISTORY (5)**
Prereq: Econ 201 and 202, or Lib St 200 and permission of instructor. American economic development from seventeenth century to present; emphasis on resource endowment and evolving social and economic institutions; role of government in this development.
- 383 ENVIRONMENTAL ECONOMICS (4)**
Prereq: Econ 202. Economic analysis of environmental quality as a public good. Theory of economic efficiency, the "optimal amount" of pollution; welfare criteria for resource allocation. Implications of the no-growth economy. Listed jointly as Huxley 383.
- 385 THE ECONOMIC HISTORY OF EUROPE: 800-1800 (4)**
Prereq: Econ 201 or 202, or Lib St 200 and permission of instructor. Development of European economies and their economic institutions. Emphasis on the evolution of the major market economies and their most characteristic features.
- 388 DISCRIMINATION AND RESOURCE UTILIZATION (4)**
Prereq: Econ 201 and 202, or Lib St 200. Effects of racial and other forms of discrimination on resource utilization; departures from market norms; policies to alleviate consequences of discrimination.
- 396a,b,c HONORS TUTORIAL (2-5 ea)**
- 400 DIRECTED INDEPENDENT STUDY (1-6)**
Prereq: 20 credits in economics and business administration and prior consultation with instructor.
- 401 ADVANCED MACRO-ECONOMICS (4)**
Prereq: Econ 301; BA 355 recommended. Examination of current issues in macroeconomic theory and policy. Emphasis on recent U.S. experience, with particular attention given to inflation, unemployment, and the balance of payments. Includes selective reading in current professional journals.
- 402 ADVANCED MICRO-ECONOMICS (4)**
Prereq: Econ 302 or 306, and Math 156 or equivalent; BA 355 or 356 and/or Econ 475 recommended. Application of quantitative and theoretical tools in key areas of applied microeconomics. Emphasis on benefit-cost analysis, demand forecasting, corporate finance, and natural resource model building. Selective reading in current professional journals.
- 406 ECONOMIC RESEARCH (3)**
Prereq: Econ 301, 302 or 306, and BA 355 or 356; Econ 475 recommended. Research methods and methodology with emphasis on those tools needed to develop and complete research projects. S/U grading.
- 407 SENIOR RESEARCH SEMINAR (3)**
Prereq: Econ 406, BA 355. Research and presentation of an extended paper on an individually chosen topic with guidance given by instructor.
- 410 PUBLIC EXPENDITURE AND TAXATION (5)**
Prereq: Econ 201. The efficiency, equity and stabilization impacts of public expenditure and revenue programs; emphasis on problems and institutions at the national level.
- 412 BUSINESS FLUCTUATIONS AND FORECASTING (4)**
Prereq: Econ 301 and BA 355. Characteristics and major explanations of the prosperity-depression cycle in business, with major emphasis on forecasting.
- 415 STATE AND LOCAL PUBLIC FINANCE PROBLEMS (4)**
Prereq: Econ 201. Problems and issues in the finance of state and local government services.
- 417 SPECIAL INTEREST SEMINARS IN ECONOMICS**
See current class schedule for courses offered under this heading.
- 417a The Economics of Energy (3)**
Prereq: Econ 201 and 202. The role of energy in the modern economy, and the key aspects of energy supply and demand. Of special interest are the areas of energy shortages, substitutes, price shifts, and their implications for domestic economic policy, living standards and international trade and finance.

- 417b Comparative Industrialization: 19th Century (4)
Prereq: Lib St 200, or Econ 385. Comparative industrialization in the 19th century. Analysis of the forces, patterns, and repercussions of industrialization in several major Western economies.
- 417c Current Economic Issues (3)
Prereq: Lib St 200 or Econ 201. Current economic issues such as inflation, wage-price control, shortages, pollution, discrimination, and others. (Offered summer quarter only.)
- 417d Taxation and Education in Washington State (3)
Prereq: Lib St 200 or Econ 201 or equivalent experience. The system of educational finance in Washington state, and an evaluation of alternative methods.
- 417e Health Economics (4)
Prereq: permission of instructor. Theory and application of cost-benefit and cost-effectiveness analyses to the evaluation of alternative health programs for the purpose of efficient planning and allocation of resources.
- 425 LABOR MOVEMENTS IN THE UNITED STATES (3)
Prereq: Econ 201 or Lib St 200. Development of labor movements in the United States from 1800.
- 442 INDUSTRIAL ORGANIZATION AND PUBLIC POLICY (4)
Prereq: Econ 302 or 306. The relation of market structure to performance. Particular attention paid to monopoly, oligopoly, workable competition, and public policy, including anti-trust policy and the costs and benefits of regulation.
- 445 CURRENT TRENDS IN ECONOMICS
See current class schedule for courses offered under this heading. (May be taken for credit only once in two years.)
445a Trends in Economic Education (3)
Prereq: teaching experience in social studies.
445b Economics in Business Decision Making (3)
445c Audio-Visual Materials for Economic Education (2)
Prereq: teaching experience in social studies. Surveys by grade level and subject area audio-visual materials available for teaching economics and describes how these materials can be used effectively. Participants will have the opportunity to review and critique selected AV materials. Students registering for 445c must also register for 445a. Offered summer quarter.
- 461 INTERNATIONAL ECONOMICS (5)
Prereq: Econ 201 and 202 or Lib St 200 and permission of instructor. International trade and monetary relations and their impact on the domestic economy. Analysis of trade, tariffs quotas, balance of payments, foreign exchange, international financial arrangements and world interdependence.
- 471 MATHEMATICAL METHODS IN ECONOMICS (4)
Prereq: Econ 301, 302; and Math 156 or permission of instructor. Offered by arrangement. Representation of economic systems in linear and non-linear models. Optimization (extrema of functions of several variables); existence and stability of equilibrium solutions; constrained optimization (Lagrangian methods). Simple dynamic systems.
- 475 ECONOMETRICS (4)
Prereq: BA 355. Simple and multiple regression analysis, methods and problems of single equation and simultaneous equation estimation.
- 480 URBAN ECONOMICS (4)
Prereq: Econ 202. Economic forces behind urbanization. Economic analysis of urban problems, including land use, transportation and environment. Urban public finance; welfare economics and efficient resource allocation. Listed jointly as Huxley 480.
- 482 REGIONAL ECONOMICS (4)
Prereq: Econ 201 and Geog 207. Problems, resource endowment, and principal policy issues related to economic growth of a region.
- 483 RESOURCE ECONOMICS (4)
Prereq: Econ 202; Geog 207 recommended. Theories for the efficient allocation of natural resources over time. Benefit-cost analysis as a criterion for public choice. Effects of property rights; distributional considerations social cost. Listed jointly as Huxley 483.
- 485 COMPARATIVE ECONOMIC SYSTEMS (4)
Prereq: Econ 201 or Lib St 200. A comparative analysis of the major economic systems; a critical appraisal of underlying philosophies, structures and individual performance.
- 486 ECONOMIC DEVELOPMENT (4)
Prereq: Econ 201 and 202. Causes and conditions characterizing the process of economic development. An evaluation of alternative approaches toward development policies.
- 491h HONORS SEMINAR (3)
496a,b,c HONORS TUTORIAL (2-5 ea)
- GRADUATE COURSES
The following courses are offered for graduate credit for persons enrolled in the department's graduate program. For course descriptions and other information about the graduate program, see the current Graduate Catalog.
- 500 SPECIAL PROJECTS (1-6)
Individual conference.
- 501 SEMINAR IN MACRO-ECONOMIC THEORY (4)
- 502 SEMINAR IN ADVANCED ECONOMIC ANALYSIS (4)
- 503 SEMINAR IN HISTORY OF ECONOMIC THOUGHT (4)
- 505 SEMINAR IN ECONOMIC HISTORY (4)
- 510 SEMINAR IN PUBLIC ECONOMICS (4)
- 511 SEMINAR IN FINANCIAL INSTITUTIONS AND MONEY (4)
- 518 SEMINAR IN THE THEORIES OF BUSINESS BEHAVIOR (4)
- 525 SEMINAR IN LABOR ECONOMICS (4)
- 553 SEMINAR IN ADMINISTRATIVE CONTROLS (4)
- 561 SEMINAR IN INTERNATIONAL ECONOMICS (4)
- 575 SEMINAR IN QUANTITATIVE ANALYSIS (4)
- 582 SEMINAR IN REGIONAL ECONOMICS (4)
- 698 SEMINAR IN RESEARCH AND WRITING (4)
- 699 THESIS (4-9)





EDUCATION

School of Education

DEPARTMENT OF EDUCATION FACULTY

*ARNOLD M. CALLEGOS (1973) Professor of Education and Dean, School of Education. BA, University of the Americas (Mexico City campus); MA, Fresno State College; EdD, University of California, Los Angeles.

ALDEN L. NICKELSON (1962) Chairman. Professor of Education and Biology. BS, MA, PhD, University of Washington.

CHARLES M. ATKINSON (1975) Associate Professor. BA in Ed, MEd, Central Washington State College; EdD, Utah State University.

HORACE O. BELDIN (1965) Professor. BS, MS, University of Oregon; PhD, Syracuse University.

THOMAS BILLINGS (1964) Professor. BS, PhD, University of Oregon.

RICHARD T. BISHOP (1966) Assistant Professor. PhD, University of Chicago; MA, Michigan State University.

LESLIE BLACKWELL (1968) Associate Professor. BA, Washington State University; MEd, EdD, University of Washington.

ROBERTA A. BOUVERAT (1970) Assistant Professor. BA, MEd, Western Washington State College; PhD, The Ohio State University.

DON W. BROWN (1954) Associate Professor. BS, MA, University of Nebraska; EdD, Colorado State College.

RICHARD J. L. COVINGTON (1970) Associate Professor. BA, Doane College; MEd, Whittier College; EdD, University of California, L.A.

LEE A. DALLAS (1968) Associate Professor. AB, Gettysburg College; MEd, EdD, Temple University.

HELEN F. DARROW (1969) Professor. BS, Wilson Teachers College; MA, Northwestern University; MA, University of California, Los Angeles; EdD, Teachers College, Columbia University.

MARIE D. EATON (1975) Lecturer. BA, Pomona College; MEd, PhD, University of Washington.

HOWARD M. EVANS (1972) Associate Professor BS, Eastern Oregon College; MA, EdD, University of Illinois.

FLORA FENNIMORE (1969) Associate Professor. BA, Mt. Angel College; MA, EdD, Washington State University.

F. RICHARD FERINGER (1962) Associate Professor of Education. BS, University of Minnesota; EdD, University of California, Los Angeles.

PAUL FORD (1970) Professor. AB, Dartmouth College; MEd, EdD, Harvard University.

- SHEILA FOX (1977) Lecturer. BA, Western Washington State College; MEd, University of Washington; PhD, University of Washington.
- BURTON L. GROVER (1969) Associate Professor. BS, MA, PhD, University of Minnesota.
- C. MAX HIGBEE (1962) Professor. BA, Simpson College; MS, Washington State University; PhD, University of Iowa.
- **F. HERBERT HITE (1968) Professor. BA, MA, College of Puget Sound; EdD, Washington State University.
- PETER J. HOVENIER (1970) Associate Professor. BA, University of California, Santa Barbara; MA, Brigham Young University; MA, PhD, Stanford University.
- SAMUEL P. KELLY (1965) Professor of Education and Dean of Graduate Affairs and Research. BA, BA in Ed, MEd, Western Washington State College; PhD, University of Chicago.
- *ROBERT H. KIM (1971) Associate Professor of Education/Ethnic Studies. BA, Hankuk University for Foreign Studies; BA, MA, EdD, George Peabody College.
- MARVIN L. KLEIN (1978) Associate Professor. BS, MS, Southern Illinois University; PhD, University of Wisconsin, Madison.
- JOHN J. KNIGHT (1975) Assistant Professor. BA in Ed, Wisconsin State University; MS in Special Ed, Portland State University; EdD, Indiana University.
- GEORGE S. LAMB (1965) Professor. AB, Macalester College; MA, University of Washington; PhD, University of Minnesota.
- ROBERT A. McCRACKEN (1963) Professor. BA, MA, PhD, Syracuse University.
- PATRICK J. McINTYRE (1977) Associate Professor. B.Chem.Eng., The Catholic University of America; MS, Polytechnic Institute of Brooklyn; PhD, University of Wisconsin.
- WILLIAM R. MILES (1977) Assistant Professor. BA, MA, Colgate University; PhD, University of Wisconsin, Madison.
- DONALD E. MOON (1966) Associate Professor of Technology and Education. BS in Ed, California State College, California, Pa.; MA, Teachers College, Columbia University; EdD, Oregon State University.
- THEODORE A. MORK (1971) Associate Professor. BA, MEd, Western Washington State College; PhD, Syracuse University.
- ROBERT H. PINNEY (1971) Associate Professor. BA, University of Washington; EdD, Stanford University.
- ***RAY S. ROMINE (1966) Associate Professor. BS, Eastern Montana College; MEd, Colorado State University; PhD, University of Oregon.
- LEONARD SAVITCH (1967) Associate Professor. BS, Pennsylvania State; MA, Teachers College, Columbia University; PhD, University of Washington.
- CYNTHIA D. SCHULZ (1978) Lecturer. BA, Western Michigan University; MS, PhD, Southern Illinois University.
- MAURICE L. SCHWARTZ (1968) Professor of Geology and Education. BS, MA, PhD, Columbia University.
- SY SCHWARTZ (1967) Associate Professor. BS, MS, EdD, Wayne State University.
- VAL D. SPANGLER (1977) Lecturer. BA, MA, University of Michigan; JD, University of Michigan School of Law.
- RICHARD O. STARBIRD (1962) Professor. BA, Heidelberg College; MA, Columbia University; EdD, Teachers College, Columbia University.
- MARIAN J. TONJES (1975) Assistant Professor. BA, MA, University of New Mexico; EdD, University of Miami.
- JOHN C. TOWNER (1972) Professor. BS, MSE, Wisconsin State University; PhD, University of Minnesota.
- JOHN F. UTENDALE (1972) Associate Professor. BS, University of Alberta; MEd, Eastern Washington State College; EdD, Washington State University.
- PHILIP B. VANDER VELDE (1967) Assistant Professor. BA, Calvin College; MA, PhD, Michigan State University.
- STEWART VAN WINGERDEN (1951) Associate Professor. BA in Ed, Western Washington State College; MA, Colorado State College; EdD, Washington State University.
- MARY W. WATROUS (1957) Professor. AB, University of Nebraska; MA, Gonzaga University; EdD, University of Washington.
- PAUL WOODRING (1939) Distinguished Service Professor Emeritus of the University. BSEd, Bowling Green State University; MA, PhD, Ohio State University. Honorary degrees: LHD, Kalamazoo College; PhD, Coe College; LittD, Ripon College; LHD, Bowling Green State University; LLD, University of Portland.

OVERVIEW

The Education Department has the responsibility for providing the professional studies necessary to become a qualified teacher. Also, the department is responsible for screening students for admission and for evaluating their progress during their professional studies.

Admission to Teacher Education

The University shares with the profession as a whole the important responsibility for the selection of potential teachers. Admission to the University does not automatically admit the student to teacher education programs.

Application

Students will apply for admission to a specific professional studies program during the introductory professional course or before taking a second professional course in the Department of Education. Such application is to be made at the Admissions and Advisement Office of the School of Education, Miller Hall 202. Secondary students must apply prior to enrolling in Education 398.

Students with prior records involving a felony should report to the Certification Officer, Miller Hall 204, prior to any course work in education (as required by WAC 180-80-200 (4): RCW 28A.70.140).

*On Sabbatical Leave Winter & Spring 1980

**On Sabbatical Leave Spring 1980 & 1981

***On Sabbatical Leave Fall 1979 & Winter 1980

Education

Admission Standards

These standards apply generally to all teacher preparation programs. Education students are expected to meet the professional education requirements in the catalog current at the time they are admitted to a professional studies program.

English Competence: A grade of "B" or better in the general education course in English composition is generally acceptable evidence of competency for admission to the elementary and special education programs. Those with lower than a "B" may take the English competency exam administered through the Testing Center. All secondary education candidates will be required to take and pass a common English competency test prior to admission to Secondary Education.

Speech Competence: All candidates for admission to teacher education are expected to demonstrate adequate speaking ability. A grade of "C" or better in Speech 100, 302 or similar performance course is deemed evidence of minimal competence.

Scholarship: A cumulative grade point average of 2.5 overall and in work taken at WWU to be counted toward the degree is required for admission to all certification programs. This must be achieved prior to consideration for admission.

Students, after being admitted to teacher education, must maintain both a minimum 2.5 cumulative grade average and a 2.5 GPA in work taken at Western. If either of these grade point averages falls below 2.5, students will be dropped from the teacher education program. Students may petition the program area for reinstatement, and faculty action of the program area may deny or grant reinstatement or grant reinstatement with conditions. (Check academic departments for major, minor grade point average requirements.)

Credit is given in courses graded "A," "B," "C," "D," "S" and "P." However, the grade of "D" represents poor work which is not acceptable in the major, minor, supporting courses for majors or minors, English composition, professional education and educational psychology courses required for a degree or certification nor for fifth-year courses. Professional studies courses taken more than twice will not be counted toward certification.

Admission Classifications

On the basis of standards listed above,

students will be *admitted* or *admitted with provisions* or *not admitted*. Students may not continue to take any professional education courses toward certification if *not admitted* or *admitted with provisions* to a teacher preparation program.

Courses common to all programs:

- Education 310 The Teacher and the Social Order
- Education 411 Foundations of Education (Students may defer Education 411 to the fifth year by substituting for this undergraduate requirement Education 390, Professional Practicum and Seminar, or Education 131, Introduction to Early Childhood Education)
- Psychology 351 Psychology of Human Learning and Instruction

To this common core, students will add either Elementary Teaching or Secondary Teaching according to choice of teaching level and will choose either the campus-based or field-centered program to complete their requirements as listed below:

I. Campus-Based Program

Secondary Teaching

- Education 398 Seminar in Secondary Education
- Education 420 Instruction in Secondary Schools
- Psychology 353 Adolescent Psychology
- Psychology 371 Evaluation in the Secondary School
- Education 495 Supervised Teaching, Secondary

Elementary Teaching

- Education 385 Foundations of Reading Instruction
- Psychology 352 Child Development and Education
- Psych 316 for special education or by advisement
- Psychology 372 Evaluation in the Elementary School
- Education 494 Supervised Teaching, Elementary

(Students electing the Professional Concentration for Elementary Teachers will follow variations in this required program. Individual programs are developed from the areas described in the concentration.)

II. Field-Centered Program

The student completes, on campus, Education 310, Psych 351 and Psych 353 if secondary; or Education 310, Psych 351 and Psych 352 or 316 by advisement if elementary. Secondary teachers will also take Education 398 on campus. The remainder of the professional program is satisfied by Education 491, Laboratory for Elementary Teaching, or Education 492, Laboratory for Secondary Teaching, and Education 494 or 495 (Supervised Teaching). These are offered in clinical school centers extending over two quarters away from the campus.

Students are urged to make an early choice of options. Careful advance planning is essential to the completion of teacher preparation within the normal four-year university program or study. See Programs I, II, III, and IV following.

Consult the Office of Field Services, Miller Hall 206, for further information regarding the Field-Centered Program.

SUPERVISED TEACHING

All teacher preparation programs require supervised teaching. The requirement in supervised teaching for the provisional certificate is generally 16 credits, with the exception of Special Education which requires 32 credits. The following conditions apply to these courses in both campus-based and field-centered programs.

The student, under advisement, may seek to develop teaching competence in two fields if he has adequate academic background. He may also obtain recommendations for both secondary and elementary levels if he has an appropriate major field and the elementary teaching minor, and undertakes student teaching at both levels either within the 16 credit requirement or by an additional experience. However, two different experiences in the same quarter cannot be arranged.

Prerequisites for Supervised Teaching

- (a) Admission and continued good standing in the professional studies program. (See "Admission to Teacher Education" under School of Education listing.)
- (b) Completion of at least 128 credits.
- (c) Secondary teachers — at least 30 credits in the proposed teaching major with grade average and program acceptable to the department for teaching recom-

mendation. A methods class in the major area is strongly recommended. Completion of Education 310, 398, 420, Psychology 351, 353, 371.*

- (d) Elementary teachers in Program II — (Elementary Minor) completion of Educ. 310, 385, Psych 351, 352, 372, and courses in four areas of the basic core *including Education 485*: recommendation of readiness for supervised teaching from the elementary adviser.
- (e) Elementary teachers in Program III — Education 485 and completion of a sufficient portion of the Professional Concentration to warrant the adviser's recommendation of readiness to undertake supervised teaching.
- (f) A chest x-ray in compliance with state law.

Application for Supervised Teaching

Application for supervised teaching must be filed in January preceding the academic year in which the student intends to do the work. Students will consult with program advisers before making such application. They will indicate a first, second and third choice as to when they wish to begin their field work and as to geographic areas in which placement opportunities are available. It is necessary that the students keep the Office of Field Services (Miller Hall 206) informed of any changes or cancellations so that openings may be made available to other students.

Students planning to enroll in supervised teaching fall quarter are advised that eligibility must be established by the close of spring quarter and that they are expected to begin their work with the fall opening of the public school. These students will register for Education 490 in addition to their other supervised teaching courses.

Completion of application for supervised teaching does not indicate approval or admission to any program. Admission to Elementary, Secondary or Special Education must be granted and continued good standing must be maintained before final assignment can be made in student teaching.

Time Involvement

All work in field programs and supervised teaching is considered full time and normally

*Students in the field-centered programs satisfy some of these requirements in other ways. Please see adviser.

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requires seven clock hours plus class preparation time and seminars. Students may not register for other course work during this time period. Outside work or other demanding commitments, which could affect the quality of work in teaching, must be approved by both the Director of Field Services and the appropriate program adviser.

Placement Locations

Field-centered clinical and student teaching programs are available in school districts in Whatcom/Skagit counties and the greater Seattle area. One-quarter supervised teaching placements are also made in these locations on a space-available basis.

PROFESSIONAL STUDIES PROGRAMS

The following programs either lead to or provide courses for the Bachelor of Arts in Education degree with an endorsement for teaching at the elementary or secondary levels and/or in a specific subject area. Ordinarily, the student will elect just one of these programs (the minimum for a degree). However, students wishing to broaden their preparation for greater employability may choose to prepare in more than one area or level. In such cases, study programs will be developed with appropriate advisers to avoid duplication of courses.

Students uncertain of teaching level and/or teaching field should consult advisers in the various programs and/or major fields. Education 390, Professional Practicum and Seminar, also provides exploratory opportunities through actual contact with more than one school level.

Common to all programs is the core of general university requirements for the B.A. degree outlined under "Requirements for Bachelor's Degrees, General University Requirements."

History 391, Washington State History and Government, is no longer required of all candidates for teacher certification. Only those majoring in social studies or history or those expecting to teach Washington State history must complete the course.

PROGRAM I SECONDARY TEACHING

[Grades 7-12]

Program Office — Miller Hall 306

The Secondary Teaching Program offers alternative routes toward Washington State certification. The program is competency-based and students are required to demon-

strate teaching competence according to established criteria.

Certification

Verification of program completion for State of Washington certification will be granted upon completion of the following:

1. The professional studies program in Secondary Teaching.
2. A baccalaureate degree with a certifiable major.

Students with a bachelor's degree with a certifiable major may be admitted to the program in Secondary Teaching.

Teaching Major

The academic majors listed below are accepted for secondary teaching. Students are directed to contact the appropriate academic department for advisement. Departmental sections of the catalog describe the requirements for each major.

Art
Biology
Biology-Chemistry (S)
Biology-Physical Science
Business Education (S)
Chemistry
Chemistry-Mathematics
Chemistry-Physics
Earth Science
Earth Science-Physical Science
English
English-Speech
Ethnic Studies-Social Studies
Foreign Language
General Science (J)
Geography
Geography-Social Studies
History
History-Social Studies
Home Economics
Industrial Arts
(Technology)
Mathematics
Music Specialist
Physical Education
Physical Science
Physics (S)
Physics-Mathematics
Political Science-Social Studies
Speech

Majors followed by (S) are certifiable for senior high only; those followed by (J) are certifiable for junior high or middle school.

A teaching minor is often desirable. Check departmental offerings for availability and requirements.

Professional Studies

The professional studies program normally requires three quarters of resident study including supervised teaching.

All students in secondary teaching are required to complete:

- Ed 310, The Teacher and the Social Order (3)
- Ed 398, Instruction in Secondary Schools I (2)
- Psych 351, Human Learning and Instruction (3)
- Psych 353, Adolescent Psychology (4)

Thereafter students must choose either the campus-based program or the field-centered program.

A. Campus-based program — (One quarter on campus and one-quarter of supervised teaching).

- Psych 371, Evaluation in the Secondary Schools (3)
- Ed 411, Foundations of Education (4)
- Ed 420, Instruction in Secondary Schools II (3)
- Ed 495, Supervised Teaching — Secondary (8-16)

B. Field-centered program — (A laboratory quarter and one quarter of supervised teaching in the public schools supplemented by seminars).

- Ed 492, Laboratory in Secondary Teaching (16)
- Ed 495, Supervised Teaching — Secondary (8-16)

Students enrolled in fall quarter supervised teaching are expected to start when the school to which they are assigned, opens.

Admission to Secondary Teaching

Application should be made at the School of Education Admissions and Advisement Office in Miller Hall 202. Students apply for admission to the Secondary Teaching Program prior to taking Education 398 and prior to admission, must provide evidence of English competence, speech competence and scholarship as indicated in the "Overview" section.

Students should consult the Admissions and Advisement Office, Miller Hall 202, for more information.

On the basis of the evidence provided, students will be "Admitted" or "Admitted with Provisions" or "Not Admitted." Students who have been admitted with provisions must remove any deficiencies prior to taking education courses at the 400 level.

Students admitted must successfully complete a minimum of one professional studies course each calendar year. Those who do not meet this requirement will be dropped and must reapply to Secondary Teaching before continuing with professional studies courses.

Supervised Teaching Placement

Applications for placement in Education 492 or 495 are normally received each January for the following academic year. These field experiences are offered with the cooperation of teachers in the public schools of western Washington. Students must satisfactorily complete the prerequisites for Education 492/495 prior to beginning their field experience.

Students who hold a baccalaureate degree should apply for placement in Education 492 or 495 as soon as they are admitted to Western Washington University.

PROGRAM II ELEMENTARY TEACHING

[Grades K-8]
[Academic Major — Elementary Minor]
Program Office — Miller Hall 251



Education

A. Teaching Major

In consultation with the Office of Admissions and Advisement (Miller Hall 202), select an appropriate major and consult with academic department adviser for planning and approval of major. See department sections of the catalog for specifications.

B. Elementary Teaching Minor

Basic Core (25-26 credits)

- Ed 485 Basic Reading Instruction (4)
- Eng 440 English for the Elementary School (4)
- Math 281 Theory of Arithmetic (4)
- Math 481 Mathematics in Grades 1 through 8 (4)
- Soc St Ed 425 Social Science for the Elementary School (3) or Ed 426a,b Social Studies in the Elementary Curriculum (4)
- Sci Ed 380 Science for the Elementary School (3), *plus one course from:*
 - Sci Ed 381 Science for the Elementary School (3)
 - Sci Ed 383 Biological Science for the Elementary School (3)
 - Sci Ed or Geol 384 Earth Science for the Elementary School (3)
 - Sci Ed or Phys Sci 382 Physical Science for the Elementary School (3)
- Twelve credits in areas other than the major to be selected under advisement

C. Professional Studies

Students will elect either the campus-based or field-centered program outlined above in "Overview" section.

PROGRAM III PROFESSIONAL CONCENTRATION FOR THE ELEMENTARY TEACHER

Program Office — Miller Hall 251

This 85-credit concentration fulfills all professional requirements for certification with recommendation for general classroom teaching in the elementary grades (K-8) when accompanied by a 40-credit *Academic Study in Depth*.

In addition to the standards for admission to teacher education, students enrolling in the Professional Concentration for the Elementary Teacher are required to furnish (1) evidence of at least ten days of full-time observation and participation in an elementary school classroom; (2) at least two letters of recommendation; and (3) success-

ful completion of one quarter of Ed 399. Application forms and advisement are available in Miller Hall 251.

A. Professional Courses

Plan with adviser for 85 credits of work from the following five blocks within the specified minimum and maximum credits.

Block A

Minimum of 4 credits in each of 4 areas from 1-5; Maximum, 30 credits

- Area 1 Teaching as a Profession — Select from Ed 131, 390, 399*
- Area 2 Human Relations — Select from Ed 391, 399; Speech 407*
- Area 3 Foundations of Education — Select from Ed 310, 399, 411*
- Area 4 Elementary Methods and Analysis — Select from Ed 399, 421*
- Area 5 Child Development and Learning — Select from Ed 399; Home Econ 320; Psych 316, 351, 352, 372*

The normal expectation is that students will be continuously enrolled in Ed 399 each quarter to a maximum of five times. A limit of one credit in Ed 399 may be applied to each area above.

Students in the two-quarter clinical program normally take Ed 310, 399, 491, Psych 351 and 352 for 28-29 credits.

Students in the one-quarter, campus-based program normally take Ed 310, 399, Psych 351, 352 and 372, and additional courses under advisement.

Block B

Minimum of 5 credits in each of areas 6-9
Maximum, 36 credits

- Area 6 Language Arts — Select from Ed 385, 439, 485, 488, 493ef; Eng 440 or Ed 424; Lib Sci 405*
- Area 7 Social Studies Education — Select from Hist 391 or alternative; Soc St Ed 425* or Ed 426ab
- Area 8 Mathematics Education — Select from Math 281, 481*
- Area 9 Science Education — Select from Sci Ed 380, 381, or 383, or Sci Ed/Geol 384 or Sci Ed/Phys Sci 382*

Block C

Minimum of 3 credits
in each of two areas from 10-13
Maximum, 20 credits

**Consult adviser or Coordinator of Elementary Education for additional courses appropriate for application to the 85 credit total.*

- Area 10 Physical Education — PE 306
- Area 11 Art Education — Art 380
- Area 12 Music Education — Music 350
- Area 13 Industrial Arts Education — Tech 350

Block D

Minimum of 16 credits; Maximum, 32

- Area 14 Student Teaching and Field Experience (Ed 491, 494)

B. Academic Study in Depth

The candidate will develop an academic concentration of 40 credits by extending one area from areas 5-13 with prior approval of the elementary adviser and consultation with appropriate departments. Overlap of courses is possible between those taken to satisfy general university requirements or the 85-credit professional concentration and those taken to satisfy this academic concentration.

The student is expected to identify a central theme or focus for the academic study and select courses appropriate to the development of that theme. At least 20 of the 40 credits must be in courses in which the main emphasis is not teaching strategies; at least 20 credits must be taken in departments other than education.

Work in the Academic Study in Depth should be initiated early in the student's program, preferably when a sophomore, before seeking formal admittance to the Professional Concentration for Elementary Teachers.

PROGRAM IV TEACHING IN SPECIAL EDUCATION

Program Office — Miller Hall 318

A. Major for Elementary Special Education

- Education 360, 361, 461, 462, 462a, 466
- Elementary Basic Core
 - Education 485 (4)
 - Education 424 or English 440 (4)
 - Education 426 or Soc Studies Ed 425
 - Math 281 or 481 (4)
 - Science Education 380 (3)
- Electives: 7-11 credits selected under advisement from the following: Education 261 (1) (may be repeated for a maximum of three (3) credits); *Mental Retardation*: Ed 465; *Emotionally Disturbed*: Ed 463; *Learning Disability*: Ed 460a,b,c; *Elementary Education*: Ed

439, 488, Lib Sci 405, a second course in math education and in science education.

- Minor for Elementary Special Education*
- The above major must be accompanied by an academic minor in an area approved by the adviser. Minors are offered in most of these areas; see department section of the General Catalog and departmental advisers for specifications.

B. Major for Secondary Special Education

- The student will complete a teaching major from the approved list in Program I for Secondary Teaching.
 - Minor* (required for teaching recommendation in special education at the secondary level)
- Special Education courses: Ed 360, 361, 461, 462, 462a, 466
- Elementary Education courses: Ed 485, plus at least one course from Ed 424, 426, 439; Eng 440; Lib Sci 405; Math 281, 481; Soc St Ed 425; Sci Ed 380, 381

C. Professional Studies

- Complete the campus-based or the field-centered program outlined in the General Catalog for either the elementary or secondary level, depending on level of preparation (A or B above); for endorsement in special education, add Ed 494 or 495 as appropriate and Ed 498, Supervised Student Teaching — Special Education.

PROVISIONAL CERTIFICATION OF DEGREE HOLDERS

*Admissions and Advisement —
Miller Hall 202*

U.S. citizens or persons declaring citizenship intent who hold a bachelor of arts or bachelor of science degree from an accredited institution may be admitted to a program leading to the provisional teaching certificate. This individually prescribed program normally entails three to four quarters of residence study, including student teaching.

Persons selected for this program must have demonstrated academic ability, a broad liberal arts preparation, a major field acceptable for public school teaching, and realistic career plans.

Some of the hours from this program may be applied toward the traditional fifth year

Education

leading to the standard (continuing) certificate. To meet full requirements for this certificate, the balance of credits required in planned areas of study must be completed after at least one year of teaching and evidence must be presented of three years of teaching experience which, judged as a whole, are satisfactory.

Note: Special arrangements are possible for individuals who hold the bachelor's degree, have little or no professional preparation, but have one year or more of successful paraprofessional experience in the public schools. Such individuals may be recommended for certification, provided that they successfully complete one quarter of residence study on campus, other study as required in their individual program, and student teaching.

FIFTH YEAR OF STUDY FOR TEACHERS HOLDING PROVISIONAL CERTIFICATES

The provisional certificate is valid for three years from the date of issuance, and may be renewed once for a second three-year period upon completion of an approved 12 quarter hours of the fifth year. To continue teaching in Washington after the expiration of the provisional certificate, the teacher must have completed an approved fifth year of study leading to the standard (continuing) certificate.

The standard (continuing) certificate is issued after completion of the fifth year of study and at least three years of satisfactory teaching experience. It is valid for teaching at any level in the public schools of Washington on a continuing basis unless there is a service gap of seven consecutive years.

The fifth year of study may be satisfied in combination with one of the programs leading to a master's degree or by an approved study program without an advanced degree as its goal. Under either program the student files a fifth-year plan with the Office of Admissions and Advisement, Miller Hall 202.

The plan for each student is developed with the assistance of local school officials and university advisers and is to be approved before courses are taken.

State regulations for the standard certificate include the following general specifications:

- Credit — 45 quarter hours of approved study in addition to bachelor's degree from a four-year institution with a state approved program in teacher education.
- Correspondence credit limited to 5 quarter hours
- One-half or more of the 45 credits in upper-division and/or graduate study
- Course work to include both academic and professional studies
- One-half or more of work to be earned through recommending institution, or an approved out-of-state institution; courses taken out-of-state require prior approval of preservice recommending institution
- Limited amount of fifth-year study allowed prior to teaching with prior approval of recommending institution
- Three years teaching experience which judged as a whole are satisfactory; recent teaching experience is of particular concern

The University accepts for fifth-year study only those courses completed with a grade of "C" or better. Grades of "P" may apply if a statement from the instructor is provided indicating that the grade represents at least a "C" level equivalency. Such statement is obtained on the student's initiative and filed with the School of Education Office of Admissions and Advisement.

GRADUATE STUDY

For a number of concentrations in education leading to the Master of Education degree and the cooperative doctorate in school administration offered by Washington State University, in cooperation with WWU, see the *Graduate Bulletin*.

COURSES IN EDUCATION

KEY TO COURSE NUMBERS: The first digit follows the University policy of numbering for the year in which the course is normally taken. The second digit signifies the following course groups:

- 0 Introductory
- 1 Foundations
- 2 Curriculum and Instruction
- 3 Child and Youth Education
- 4 Administration and Supervision
- 5 Educational Media and Student Personnel Administration
- 6 Special Education and the Disadvantaged
- 7 Statistics and Research and Adult Education Administration
- 8 Reading
- 9 Supervised Teaching or Practicums

(See *Psychology* section for courses in *Educational Psychology*.)

109 INTRODUCTION TO EDUCATION (3)

History, sociology, philosophy and psychology of education; alternative to Education 310 for Fairhaven College students only.

- 131 **INTRODUCTION TO EARLY CHILDHOOD EDUCATION (3)**
Review of the field in terms of history, philosophy, and professional opportunities; observation of young children.
- 221 **TEACHER AIDE CONSULTATION (3)**
Provides specific training and consultation in the field to teacher aides who work with Native American students. S/U grading only.
- 222 **ISSUES IN INDIAN EDUCATION FOR TEACHER AIDES (3)**
Provides a perspective of various approaches and models to Indian education. Reviews educational materials and current trends in policies and regulations in Indian education at the national and state levels.
- 261 **PRACTICUM ORIENTATION TO SPECIAL EDUCATION (1)**
Guided observation and career exploration in special education; may be repeated for a maximum of 3 credits. S/U grading.
- 300 **DIRECTED INDEPENDENT STUDY (1-6)**
Prereq: permission of department; prior to admission a one-page description of project or research proposal must be presented. Supervised individual projects.
- 310 **THE TEACHER AND THE SOCIAL ORDER (3)**
Prereq: sophomore status. Dominant aspects of society as they interact with schools and teaching.
- 331 **CREATIVE LEARNING EXPERIENCES IN EARLY CHILDHOOD EDUCATION (3)**
Materials and teaching strategies designed to elicit creative responses in young children through storytelling, art, music, body movement, puppetry, creative dramatics, and other media of expression.
- 340 **PARAPROFESSIONAL ADVISEMENT (3)**
Prereq: employment or anticipated employment in campus-based student services and permission of instructor. Course work emphasizes the nature of the helping relationship; an overview of philosophical issues which confront paraprofessionals; and the development of specific job requirement skills.
- 360 **INTRODUCTION TO EXCEPTIONAL CHILDREN (3)**
Prereq: admission to a professional studies program or permission of instructor. Problems and methods of identifying and teaching children who are handicapped or gifted.
- 361 **PRACTICUM IN SPECIAL EDUCATION (4)**
Prereq: permission of instructor. Program of observations and participation in recreational and academic activities.
- 385 **FOUNDATIONS OF READING INSTRUCTION (2)**
Study-reading in content areas; speed reading; basic principles of teaching reading; standardized and informal reading testing.
- 390 **PROFESSIONAL PRACTICUM AND SEMINAR (3)**
Prereq: permission of instructor. Observation, participation and related seminars to enable each student to make a suitable professional decision. S/U grading.
- 391 **HUMAN RELATIONS (1-4)**
A study and practicum in interpersonal relationships as they affect teacher-student interaction.
- 398 **INSTRUCTION IN SECONDARY SCHOOLS I (2)**
Prereq: admission to secondary teaching program. Introduction to general teaching competencies common to middle school and high school. Special academic and professional advisement. S/U grading.
- 399 **SEMINAR IN ELEMENTARY EDUCATION (1)**
Prereq: permission of adviser; completion of 10 days of full-time observation and participation in an elementary school; open only to students in the Professional Concentration for the Elementary Teacher. Teaching as a profession, methods of instruction, human relations in the classroom, self-evaluation of candidates as potential teachers; observation and field experiences. Repeatable for a maximum of 5 credits. S/U grading.
- 400 **DIRECTED INDEPENDENT STUDY (1-6)**
Prereq: permission of department; prior to admission a one-page description of project or research proposal must be presented. Supervised individual projects.
- 401 **TEACHING WORD ATTACK SKILLS IN READING (2)**
Prereq: teaching experience or permission of instructor. Phonics and other friends. Directed mainly toward primary grade teachers, this workshop stresses the latest techniques and materials for teaching word attack skills. Systems of phonics will receive in-depth study. Techniques for achieving independent use of all word attack skills, singly and in combination, will be presented.
- 402 **AIDING SECONDARY DISABLED READERS (2)**
Prereq: teaching experience or permission of instructor. Directed toward middle school and high school classroom teachers, this workshop will concentrate on practical suggestions, teaching techniques and materials proven to be useful in aiding disabled teenage readers. Both reading in the content areas and developmental reading skills will be considered.
- 410 **TEACHING THE CULTURALLY DIFFERENT CHILD (4)**
Prereq: Ed 310 or equivalent. Analysis of legal, political and cultural forces influencing education of the culturally different child, of his family, community and values, and of school curricula provisions for cultural identity.
- 411 **FOUNDATIONS OF EDUCATION (4)**
Prereq: admission to a professional studies program. Differing views of man and learning as they relate to educational aims, methods and content.
- 413 **HISTORY OF AMERICAN EDUCATION (4)**
Historical development of formal education emphasizing the impact of cultural forces on evolution of the American system of public education.
- 414 **COMPARATIVE EDUCATION (3)**
Educational systems in the major countries, including Canada; backgrounds, aims, types, and present functions; comparison with the American system.
- 416 **PERSISTENT PROBLEMS IN EDUCATION (3)**
Seminars in socio-philosophical problems as they relate to education; different seminars deal with different problems and related sociological and philosophical theory.
- 417 **SEMINARS IN SPECIALIZED AREAS**
417b Education in Developing Countries (3)
417c Computer Techniques for Classroom Solving (3)
Prereq: Ed 444 or equivalent
417d Montessori and Early Childhood Education (3)
Prereq: teaching experience or permission of instructor.
- 420 **INSTRUCTION IN SECONDARY SCHOOLS II (3)**
Prereq: Ed 398. To be taken one or two quarters prior to student teaching. Secondary methods including observation, planning, curriculum, strategies and models, simulation or micro teaching.
- 421 **INSTRUCTION IN THE ELEMENTARY SCHOOL (3-5)**
Organizing learning experiences, selecting methods or processes and materials appropriate to the maturation and rate of development of children.

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- 422 THE ELEMENTARY CURRICULUM (3)
Prereq: student teaching, teaching experience, or permission of department. Historical and analytical study of the curriculum of the elementary school.
- 423cd CURRICULA IN BASIC LANGUAGE ARTS SKILLS IN SECONDARY SCHOOLS (3)
Prereq: admission to a professional studies program. Designed for those who will be working in development and implementation of curricula to meet new accountability standards. Involves study of these standards and work with actual public school materials.
- 424a,b,x LANGUAGE ARTS IN THE ELEMENTARY CURRICULUM (4)
Functions and programs of language arts in the curriculum including reading, writing, speaking, listening. Letters indicate grade level of emphasis in various sections of the course:
(a) Primary
(b) Intermediate
(x) Early Childhood
- 424c,d LANGUAGE ARTS IN THE SECONDARY CURRICULUM (3)
Functions and programs of language arts in the secondary curriculum.
(c) Junior High - Middle School
(d) Senior High
- 425 THE SECONDARY CURRICULUM (3)
Prereq: supervised teaching, teaching experience, or permission of instructor. Development, evaluation and change of the secondary curriculum; for those wanting to evaluate and design curriculum in various school districts.
- 426a,b SOCIAL STUDIES IN THE ELEMENTARY CURRICULUM (4)
Functions, programs, and materials in the social studies. Letters indicate grade level of emphasis in various sections of the course:
(a) Primary
(b) Intermediate
- 426c,d SOCIAL STUDIES IN THE SECONDARY CURRICULUM (3)
Prereq: teaching experience or permission of department. Functions, programs, and materials in the social studies. Letters indicate grade level of emphasis in various sections of the course:
(c) Junior High
(d) Senior High
- 427 ADULT EDUCATION: AN EMERGING FIELD (4)
Prereq: permission of instructor. The needs of adult learning as related to adult developmental stages, the types of sponsoring institutions which operate programs, the structure of those programs and generalizations of adult learning problems.
- 428 WORKSHOP IN INSTRUCTION (2-5)
Prereq: teaching experience. Offered in conjunction with a summer conference, emphasizing an aspect of instruction; topics vary from summer to summer.
- 429 DISCIPLINE IN THE ELEMENTARY SCHOOL (3)
Prereq: student teaching (or concurrent), teaching experience, or permission of instructor. Analysis of child development and learning theories as they relate to classroom behavior and learning environments. Development of teaching strategies designed to prevent and/or solve behavior problems.
- 431 TRENDS AND ISSUES IN EARLY CHILDHOOD EDUCATION (3)
Prereq: permission of instructor. An in-depth study of the historical and philosophical bases of the education of young children and an examination of trends and issues in psychological theory as they relate to current programs.
- 432 NURSERY EDUCATION (3)
Prereq: Ed 431 or permission of instructor. Development of curriculum for nursery school age children, emphasizing experiences which develop language, perceptual, motor, creative and interpersonal competencies. (Also offered as Home Econ 420.)
- 433 KINDERGARTEN AND PRIMARY EDUCATION (3)
Prereq: Ed 431 or permission of instructor. Historical background; recent trends; organization of facilities and materials for kindergarten and primary programs; curriculum development based upon research in this area.
- 438 SCHOOL-HOME-COMMUNITY RELATIONSHIPS (3)
Problems of communication and interaction among teachers, parents, and paraprofessionals, administrators, and community; conferencing, planning meetings, community survey, PR publications, use of mass media.
- 439 IMPROVEMENT OF WRITING SKILLS FOR CHILDREN (2-4)
Appropriate sequence of skills in composition for children; techniques implementing creative writing and improving fundamental skills.
- 441 ANALYSIS AND STRATEGIES OF TEACHING (3-5)
Prereq: one course from the educational psychology or foundations area, or permission of instructor. Systematic study of teaching; observation; analysis and development of teaching skills and strategies; individual projects.
- 442 WORKING WITH STUDENT TEACHERS (3)
Prereq: teaching experience. Techniques for the orientation of student teachers, major problems which confront student teachers, and evaluation of their achievement.
- 443 THE COMMUNITY COLLEGE (3)
Prereq: senior or graduate status. History, objectives, organization, and role of the public community college; special attention to the expanding system in the state of Washington.
- 444 INSTRUCTIONAL MANAGEMENT SYSTEMS (3)
Prereq: permission of instructor. Survey of both manual and automated systems including Computer-Managed Instruction Systems (CMI) and Computer-Assisted Instructional Systems (CAI).
- 445 CURRENT TOPICS IN EDUCATION (1-3)
Prereq: teaching experience or permission of instructor. Repeatable with different subject content subject to approval by the department.
(a) Adult Education Administration
(b) Educational Administration
(c) Reading
(d) Foundations
(e) Learning Resources/Library Science
(f) Secondary Education
(g) Special Education
(h) Student Personnel Administration
(i) Elementary Education
(k) Early Childhood Education
(n) Community Education
(p) Interprogram Topics
- 450 INTRODUCTION TO LEARNING RESOURCES (3)
Prereq: an introductory professional education course. The role and application of educational media and technology in the teaching-learning process; laboratory.
- 451 PRACTICUM IN LEARNING RESOURCES (3)
Prereq: Ed 450. Preparation of inexpensive instructional materials for classroom utilization; selection, evaluation, utilization of major types of audiovisual materials and equipment; organization and curricular integration of educational media.

- 456 PRINCIPLES AND PRACTICES OF INDIVIDUALIZED INSTRUCTION AND CONTINUOUS PROGRESS EDUCATION (4)**
Prereq: practicing teacher. Survey of practices related to most individualized programs and how such practices and programs relate to certain principles of learning; emphasis on types and uses of alternative learning materials found in such programs and systems for monitoring and managing learner progress.
- 457a PRACTICUM IN DEVELOPING SEQUENCES OF PROGRAMMED INSTRUCTION (3-5)**
Programmed learning as application of theories of learning; practice in developing specific behavioral objectives; writing short programs in field of interest.
- 457b PRACTICUM IN DEVELOPING INSTRUCTIONAL PACKAGES (3-5)**
Identification of instructional problems in area of interest, task analysis, identification of entry behavior; writing measurable objectives; construction of criterion-referenced tests, designing instructional strategies, constructing comprehensive learning activity packages; informal critique of an instructional package.
- 457c PRACTICUM IN DEVELOPING INSTRUCTIONAL GAMES AND SIMULATIONS (3-5)**
Systematic preparation of instructional games and/or simulations. Emphasis is on: planning prior to constructing games and simulation materials; and, informally, critiquing both teacher and commercially developed games and simulation kits.
- 457d PRACTICUM IN FIELD TESTING COMMERCIAL AND TEACHER-PREPARED INSTRUCTIONAL MATERIALS (3)**
Introduction to a variety of evaluation procedures used to assess students' cognitive and affective responses to selected instructional materials; utilization of a selected set of evaluation procedures to field-test specific materials with a view to determine how effectively and efficiently they bring about intended outcomes.
- 458 MANAGING ORGANIZATIONAL CHANGE (4)**
Prereq: upper-division or graduate standing required. This course examines the process of organizational change on three major dimensions: (1) system diagnosis, (2) conflict management, and (3) stress management. Psychological and physiological aspects of conflict, stress and change in organizations and individuals will be explored.
- 460 SEMINAR IN SPECIAL EDUCATION**
Prereq: Ed 360 or teaching experience or assignment. Specific problems of exceptional children. Specific methods or curricula for teaching certain exceptional children — course content will vary from time to time.
- 460a Specific Learning Disorders (2-5)**
- 460b Seminar in Special Education: Early Identification of Handicapped Children (4)**
Prepare teachers and other school personnel to identify handicapped children and to interpret diagnostic test results and information provided by experts concerning students.
- 460c Seminar in Special Education: Diagnostic Teaching of (Preschool or Primary) Children (4)**
Identify learning problems, select instructional strategy(ies), and management procedure(s) for children with different behavior and learning problems. May be repeated with the second age group for a total of 8 credits.
- 460d Seminar in Special Education: Education of Visually Handicapped Children (2)**
Information and skills necessary for teachers and other school personnel to work with visually handicapped children in their regular classes.
- 461 PRECISION TEACHING — A METHODOLOGY FOR THE DYSFUNCTIONAL CHILD (5)**
Prereq: Ed 360 or teaching experience or permission of instructor. Theoretical background and practical experience in the skills of precision teaching. Training and experience in pinpointing and assessing classroom behavior, developing plans for remedial problems, collecting continuous measurements for evaluating the remediation program, and making decisions regarding additional ongoing programming.
- 462 CURRICULUM FOR THE EXCEPTIONAL CHILD (4)**
Prereq: for summer offering, teaching or student teaching experience; for academic year, Ed 461 and concurrent enrollment in Ed 462a. Identification and etiology of most prevalent handicaps found in special education classes; curriculum development and adaptation; selected methods and materials basic to teaching these handicapped children.
- 462a CURRICULUM FOR THE EXCEPTIONAL CHILD: PRACTICUM (3)**
Prereq: Ed 461 and concurrent enrollment in Ed 462. Practicum in assessment, curriculum organization, instruction and evaluation of pupil progress for exceptional children. S/U grading.
- 463 EDUCATION OF MALADJUSTED CHILDREN (4)**
Prereq: Ed 360. Review of past and present procedures in the education of emotionally disturbed children, and an in-depth analysis of the application of the major theoretical models to the education of emotionally disturbed children.
- 464 THE EDUCATIONALLY DISADVANTAGED: SEMINAR (2-4)**
Prereq: Conference Course Permit required from instructor before registering. Psychological, sociological and educational characteristics of children who are underachieving in school due to differences in their cultural/experiential backgrounds; analysis of instructional strategies for underachieving children.
- 465 ACTIVITIES FOR EDUCATION OF THE HANDICAPPED (3)**
Prereq: Ed 360 or permission of instructor. Experiences designed to provide knowledge of and ability to use equipment and material in teaching arts and crafts to handicapped children. S/U grading.
- 466 GUIDANCE FOR THE HANDICAPPED CHILD (4)**
Prereq: Ed 360, 361. Application of techniques in guiding and counseling exceptional children and communicating their characteristics to parents and others influential in meeting their needs.
- 467 SEMINAR IN PRECISION TEACHING (4)**
Prereq: Ed 461 or equivalent. Mastery of precision teaching techniques and: charting conventions, acceleration analysis, curriculum planning, summary analysis, and accountability; individual projects.
- 473 EDUCATIONAL STATISTICS (5)**
Prereq: Math 240 or equivalent, or permission of instructor. Statistics applicable to description of school data and research in education, primarily selected analysis of variance and correlation procedures; computer applications.
- 475 EVALUATING PUPIL GROWTH (3)**
Prereq: teaching experience or permission of instructor; for experienced teachers and research workers. Evaluative techniques related to significant or complex objectives; assessing outcomes of innovative teaching.
- 476 SUBSTITUTE TEACHING (2)**
Prereq: student teaching. Analysis and development of materials and strategies unique to substitute teaching.
- 477 TEACHING HIGHER LEVEL THINKING ABILITIES (3-5)**
Prereq: Psych 316, 351. Cognitive functions and teaching strategies that promote higher level thinking abilities in students, based primarily on the work of Taba.

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- 478 **TEACHING PROBLEM SOLVING (2)**
Application of research in the development of problem solving and teamwork skills for teachers and administrators.
- 479 **INQUIRY DEVELOPMENT (3-5)**
Systematic preparation of teachers in strategies related to development of autonomous and productive inquirers; instruction in four main types of action necessary to stimulate and sustain inquiry: searching, processing data, discovering, and verifying.
- 480 **CONFERENCE IN READING (1-3)**
Prereq: teaching experience. Repeatable with different themes.
- 481 **DEVELOPMENTAL READING IN THE SECONDARY SCHOOL (4)**
For pre-service and experienced classroom teachers, grades 6-12. Developmental reading skills, reading skills specific to content areas, and basic study skills. Suggestions for dealing with the wide range of reading achievement. Not a course in remedial reading.
- 484 **THE TEACHING OF READING IN CONTENT FIELDS (4)**
Techniques of teaching reading and applying reading to studying in social sciences, mathematics, English, and other content areas in upper intermediate and secondary grades.
- 485 **BASIC READING INSTRUCTION (3-4)**
Prereq: Ed 385 or teaching experience. Basic reading instruction in grades K-8; methods and materials for teaching reading, reading readiness; word attack skills; word reading skills, comprehension skills; grouping; lesson planning.
- 486 **PROBLEMS IN CORRECTIVE READING INSTRUCTION (4)**
Prereq: permission of instructor. Analysis, correction, and prevention of reading problems; refinement of group and informal testing, supervised practicum with pupils having mild disabilities in reading.
- 4811 **INDIVIDUALIZED READING INSTRUCTION (4)**
Principles and practices of individualized reading with emphasis on problems in organizing classroom programs for meeting individual interests and needs.
- SUPERVISED LABORATORY TEACHING — Courses 490-496 and 498 offer varied opportunities for laboratory study in the classroom and for student teaching. Practice in the classroom is an integral part of professional preparation. See "Supervised Teaching" section for prerequisites, time of application, etc.**
- 490 **OBSERVATION AND PARTICIPATION (3)**
Prereq: permission of department. Guided observation of experienced teachers and limited participation in teaching situations. S/U grading.
- 491 **LABORATORY FOR ELEMENTARY TEACHING (16)**
Prereq: recommended for supervised teaching. Supervised observation and practice of elementary teaching to precede Ed 494. A field assignment in the public schools is coordinated with seminar and conference instruction. Supervision is provided by selected public school personnel and university faculty. S/U grading.
- 492 **LABORATORY FOR SECONDARY TEACHING (16)**
Prereq: recommended for supervised teaching. Supervised observation and participation in teaching related roles. A field assignment in the secondary public schools is coordinated with seminar instruction in secondary education. Individual guidance and supervision are provided by public school personnel and university faculty. S/U grading.
- 493e,f **INDIVIDUALIZED INSTRUCTION IN READING — LANGUAGE ARTS IN THE ELEMENTARY SCHOOL (6ea)**
Integration of reading, writing, speaking, listening and use of children's books as functional tools of the communication process; laboratory experience in developing individualized language activities with children in school settings. S/U grading only.
- 494 **SUPERVISED TEACHING — ELEMENTARY (8-16)**
Prereq: permission of department. (See student teaching prerequisites above.) Supervised experience providing opportunities to develop and demonstrate teaching competence at the primary and/or intermediate grades. May be repeated with varied assignment. S/U grading.
- 495 **SUPERVISED TEACHING — SECONDARY (8-16)**
Prereq: permission of department. (See student teaching prerequisites above.) Supervised experience providing opportunities to develop and demonstrate teaching competence at the junior high (middle school) or senior high school level. May be repeated with varied assignment. S/U grading.
- 496 **PRACTICUM IN DIAGNOSIS AND PRESCRIPTION IN TEACHING (2-3)**
Prereq: teaching experience. Defining objectives behaviorally; developing sequential learning activities; analyzing pupil readiness; prescribing appropriate strategies for continuous individual progress; applications with students in classrooms. May be repeated with varied content to a total of nine credits.
- 498 **SUPERVISED TEACHING — EXCEPTIONAL CHILDREN (8-16)**
Prereq: Ed 360 and 462 and student teaching or teaching experience. Supervised teaching experience providing opportunities to develop and demonstrate teaching competence for exceptional children. S/U grading.
- 499 **ELEMENTARY STUDY IN ENGLAND (3,6)**
Practicum and theory of elementary education in England; e and f must be taken in sequence. Offered summers in England.
499e Teaching Practicum in an English Elementary School (3)
499f Workshop in Philosophy, Curricula, Methods and Materials of English Elementary Education (6)

GRADUATE COURSES

The following courses are offered for graduate credit for persons enrolled in the department's graduate program. For course descriptions and other information about the graduate program, see the current Graduate Catalog.

- 500 **SPECIAL PROJECTS (1-6)**
Individual conference.
- 501 **INTRODUCTION TO EDUCATIONAL RESEARCH (4)**
- 510 **CULTURAL AND LINGUISTIC DIVERSITIES IN AMERICAN EDUCATION (4)**
- 511 **SEMINARS IN SOCIAL THEORIES AFFECTING EDUCATION (3)**
- 512 **SEMINAR IN EDUCATIONAL PHILOSOPHY (4)**
- 513 **SEMINAR IN PSYCHOLOGY AND SOCIOLOGY OF EDUCATION (4)**
- 516 **SEMINARS IN PHILOSOPHY OF EDUCATION (3ea)**
- 518 **CURRENT ISSUES IN HIGHER EDUCATION (3)**
- 521 **SEMINAR IN ELEMENTARY CURRICULUM (4)**
- 522 **SEMINARS IN SECONDARY CURRICULUM (4)**
- 524 **SEMINAR IN SECONDARY SCHOOL LANGUAGE ARTS CURRICULUM (2-4)**
- 531 **SEMINAR IN EARLY CHILDHOOD EDUCATION (3)**
- 532 **TEACHING AND LEARNING OF ELEMENTARY SCHOOL SUBJECTS (4)**

- 533 SEMINAR: THE ELEMENTARY SCHOOL CHILD (4)
- 538a,b,c,d CASE STUDIES IN SCHOOL ADMINISTRATION (2-3)
- 539 EDUCATIONAL LEADERSHIP (3)
- 540 POLITICS OF EDUCATION (3)
- 541a THEORY IN EDUCATIONAL ADMINISTRATION (3)
- 541b PUBLIC SCHOOL ORGANIZATION AND ADMINISTRATION (3)
- 541c SCHOOL LAW (3)
- 541e COLLECTIVE BARGAINING IN PUBLIC SCHOOLS (3)
- 542a,b,c,d FIELD PROJECT IN EDUCATIONAL ADMINISTRATION (2-3)
- 543a SUPERVISION IN THE PUBLIC SCHOOLS (3)
- 543b SEMINAR IN SCHOOL PERSONNEL ADMINISTRATION (3)
- 543c DEVELOPING STAFF AND COMMUNITY RELATIONS (3)
- 544a SYSTEMS APPROACH AND EDUCATIONAL MANAGEMENT (3)
- 544b COMPUTER TECHNOLOGY AND EDUCATION (3)
- 544c PLANNING FOR INSTRUCTIONAL INNOVATION (3)
- 545 SEMINAR IN PUBLIC SCHOOL FINANCE (3)
- 546a,b,c,d ADMINISTRATIVE RESEARCH TOPICS (2-3)
- 547a,b,c,d READINGS IN SCHOOL ADMINISTRATION (2-5)
- 548 ADMINISTRATION AND THE INTERNATIONAL SCHOOL (2-6)
- 549 SEMINAR IN SCHOOL ADMINISTRATION (3)
- 550 ORGANIZATION AND ADMINISTRATION OF EDUCATIONAL MEDIA PROGRAMS (3)
- 551 SEMINAR IN LEARNING RESOURCES (3)
- 555 MIDDLE SCHOOL CURRICULUM DESIGNS AND INSTRUCTIONAL STRATEGIES (2-6)
- 556 STUDENT PERSONNEL ADMINISTRATION (4)
- 557a,b,c SEMINARS: COLLEGE STUDENT PERSONNEL ADMINISTRATION (4 ea)
- 558 STUDENT DEVELOPMENT COUNSELING FOR STUDENT PERSONNEL ADMINISTRATORS (3)
- 559 RESEARCH IN COLLEGE STUDENT PERSONNEL ADMINISTRATION (1-3)
- 560 SEMINARS IN SPECIAL EDUCATION (2-5)
- 561 ADVANCED PROBLEMS IN SPECIAL EDUCATION (3-5)
- 562 ETIOLOGY OF MENTAL RETARDATION (3)
- 563 CURRICULUM AND METHODS OF INSTRUCTION FOR THE MENTALLY RETARDED (3)
- 564 EDUCATIONAL TECHNIQUES FOR MALADJUSTED CHILDREN (4)
- 565 SEMINAR IN EDUCATION OF MALADJUSTED CHILDREN: ADVANCED THEORY (4)
- 566 COUNSELING AND GUIDANCE FOR THE HANDICAPPED CHILD (4)
- 570 COMMUNITY EDUCATION (4)
- 571 SEMINAR IN COMMUNITY EDUCATION (4)
- 575 ASSESSING EDUCATIONAL QUALITY (3)
- 576 ADULT EDUCATION ADMINISTRATION (5)
- 577 LEARNING PROBLEMS OF ADULTS (4)
- 578 CURRICULUM PLANNING FOR ADULT EDUCATION PROGRAMS (4)
- 581 SECONDARY AND ADULT READING PROGRAMS (4)
- 583 READING AND CHILDREN'S LITERATURE (4)
- 584 PSYCHOLOGY OF READING (4)
- 585 SEMINAR IN READING EDUCATION (3-4)
- 587 IMPROVEMENT OF INSTRUCTION IN READING (4)
- 589 SEMINAR IN LANGUAGE ACQUISITION AND READING DEVELOPMENT (4)
- 590 SEMINAR IN DEMONSTRATION TEACHING AND SUPERVISION (3)
- 592a,b,c FIELD EXPERIENCE IN ADMINISTRATION FOR THE PRINCIPAL (2-6)
- 592d FIELD EXPERIENCE IN EARLY CHILDHOOD EDUCATION (2-6)
- 592e FIELD EXPERIENCE IN ELEMENTARY SCHOOL LEADERSHIP (2-6)
- 592f FIELD EXPERIENCE IN STUDENT PERSONNEL ADMINISTRATION (2-6)
- 592g FIELD EXPERIENCE IN COMMUNITY EDUCATION LEADERSHIP (2-6)
- 592h,i,j,k FIELD EXPERIENCE IN ADULT EDUCATION (2-6)
- 594a,f,g,h PRACTICUM IN READING DIAGNOSIS AND REMEDIATION (4 ea)
- 594j,k,m PRACTICA IN ACTION RESEARCH (3 ea)
- 596a ADVANCED PRACTICUM: EARLY CHILDHOOD EDUCATION (2-6)
- 596b ADVANCED PRACTICUM IN TEACHING: ELEMENTARY SCHOOL (2-6)
- 596c ADVANCED PRACTICUM: SECONDARY EDUCATION (2-6)
- 598 PRACTICUM IN SPECIAL EDUCATION (4)
- 599 FIELD STUDY OF ELEMENTARY EDUCATION IN ENGLAND (2-5)
- 600 SPECIAL PROJECTS IN EDUCATION (2-5)
- 602 ADVANCED SEMINAR IN ELEMENTARY EDUCATION (4)
- 603 SEMINAR: PROBLEMS IN EARLY CHILDHOOD EDUCATION (3)
- 609 CURRENT TOPICS IN EDUCATION (1-5)
- 642a,b,c,d FIELD PROJECT IN EDUCATIONAL ADMINISTRATION (2-5)
- 643 ADMINISTERING THE IMPROVEMENT OF CURRICULA (3)
- 644a,b,c SEMINARS IN EDUCATIONAL MANAGEMENT: ADVANCED SYSTEMS THEORY (5 ea)
- 647a,b,c,d SEMINARS FOR SCHOOL PRINCIPALS (4 ea)
- 676 INSTRUCTIONAL SYSTEMS THEORY AND COMMUNITY COLLEGE INSTRUCTION (4-6)
- 686 SEMINAR FOR READING SPECIALISTS (4)
- 690 FIELD PROJECT OR THESIS (6-9)
- 692a,b,c FIELD EXPERIENCE IN ADMINISTRATION FOR THE PRINCIPAL (2-6)

LIBRARY SCIENCE

Library Science constitutes an instructional unit attached to the Department of Education.

Employment opportunities in librarianship are good. As long as the information

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explosion continues, there will be demand for trained personnel to organize and service the variety of materials being produced. To qualify as a professional school librarian the student must meet requirements for the provisional teaching certificate as well as minimum state standards set forth in the minors below.

It should be noted that the term library (or learning resources) includes, in addition to traditional printed material, films, filmstrips, recordings, tapes and any other media for storing, transmitting or retrieving information. Western includes them in its library training program.

Minor — Library Science Elementary

- 24 credits selected under advisement from the following:
 - Lib Sci 309, 401, 402, 403, 404, 405, 407, 410
 - Ed 422, 445e, 450, 451

Minor — Library Science Secondary

- 24 credits selected under advisement from the following:
 - Lib Sci 308, 401, 402, 403, 404, 407, 410
 - Ed 425, 445e, 450, 451

Fifth-Year Program for Learning Resources Specialists

The following program is recommended for teachers preparing to become specialists in learning resources:

A. Common Core

- Lib Sci 401, The Library in the School
- Ed 450, Audiovisual Communications: Basic
- Ed 451, Audiovisual Communications: Advanced
- Ed 541b, Public School Organization and Administration
- Tech 240, Visual Communications and Graphic Arts

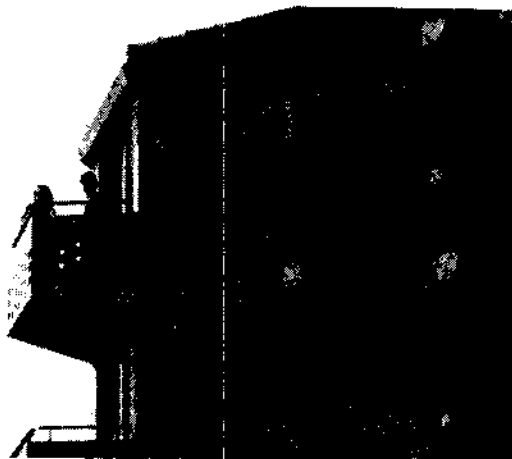
B. One concentration from the following (some expertise in the area selected is prerequisite):

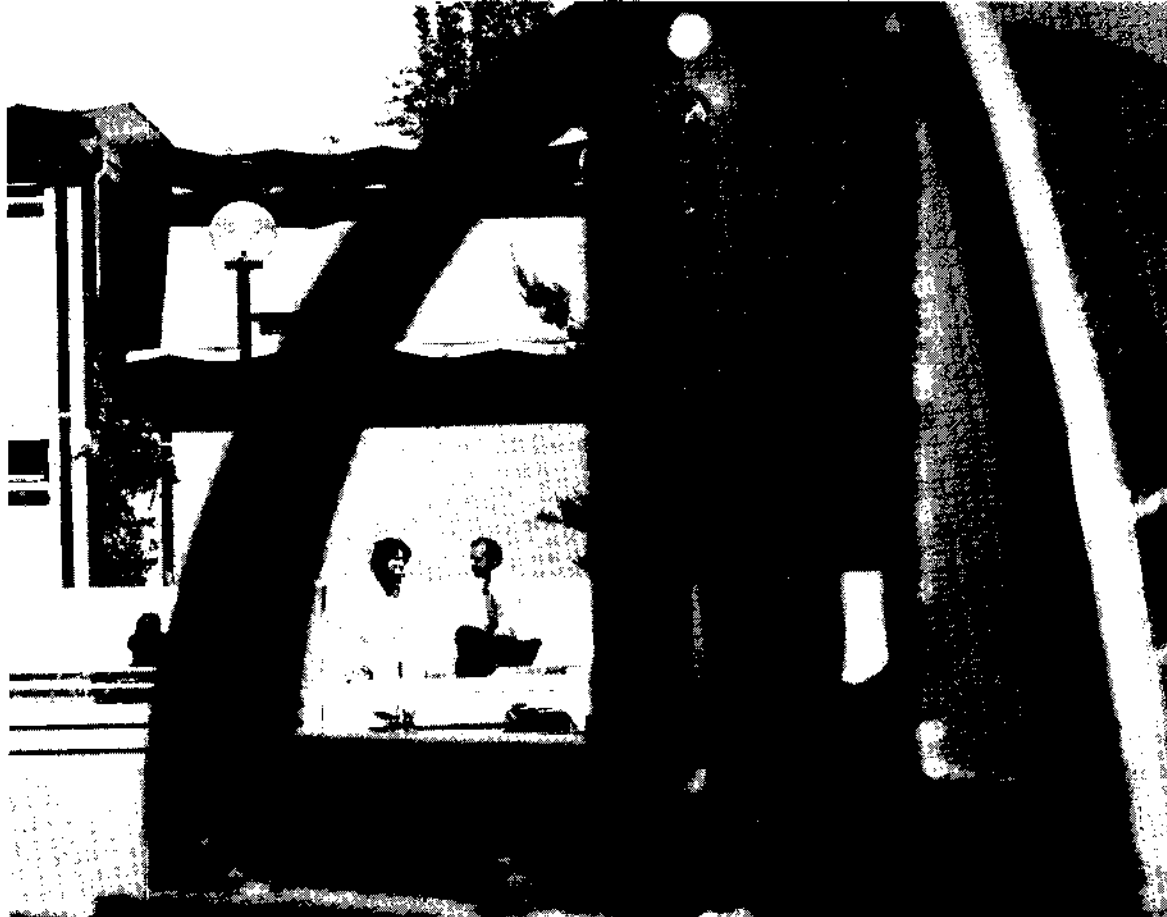
- Library Science:* Lib Sci 402, 403, 404, 405, 407; Education 422, 425
- Administration:* Ed 422, 425, 475, 543a, 545a, 546, 550
- Graphics:* Tech 419, 440, 449, 469, 540, 544

Students interested in the above areas should seek advisement in Miller Hall 177.

COURSES IN LIBRARY SCIENCE

- 125 LIBRARY ORIENTATION (1)
Introduction to books and libraries, and to the Wilson Library in particular, with emphasis on effective use of standard reference tools.
- 308 BOOK SELECTION (3)
Young adult and adult books suitable for libraries.
- 309 STORYTELLING (3)
Selection, adaptation, and presentation of stories for elementary school children.
- 401 THE LIBRARY IN THE SCHOOL (3)
The organization and maintenance of effective materials-centered libraries in elementary and secondary schools.
- 402 ORGANIZATION OF MATERIALS (3)
Principles of classification and cataloging; making unit cards, adapting printed cards, and organizing a shelf list and dictionary catalog.
- 403 BASIC INFORMATION SOURCES (3)
Evaluation of basic information sources and practice in their use.
- 404 THE LIBRARY IN THE SOCIAL ORDER (3)
Social, educational, and cultural implications of the role of the library in society.
- 405 BOOKS AND MATERIALS FOR ELEMENTARY SCHOOLS (4)
Prereq: permission of instructor. Reading and evaluation of books and learning resource materials available to children at the elementary level; emphasizes wide reading, criteria for book selection, critical analysis of books and materials, use of library resource materials, correlation of books and materials with the curriculum, study of current content trends, and the employment of ways to use books and materials innovatively.
- 407 BOOKS AND MATERIALS FOR YOUNG ADULTS (4)
Prereq: permission of instructor. Reading, discussion, and uses of books relevant to junior high/middle school student and his curriculum; in-depth study of multicultural literature, realistic fiction, self-concept literature, mystical fiction and poetry; critical analysis of selected pieces of adolescent literature.
- 410 WRITING AND ILLUSTRATING CHILDREN'S BOOKS (4)
Prereq: Lib Sci 405 or permission of instructor. An analysis of the illustrations and writing of children's and adolescents' literature; techniques of composition and illustrations fundamental in writing, illustrating, and binding a piece of elementary or adolescent literature.





ENGLISH

College of Arts and Sciences

The Department of English offers majors in English for the liberal arts student and for the teacher education student.

Under its curriculum in English, the department offers students a flexible program in which they can construct a major that meets their own educational goals. The core of the major is the historical and critical study of literature. The department also has offerings in creative writing, linguistic study of English and English education.

A liberal arts English major has been one of the dominant liberal arts degrees, acquainting the student as it does with the literature of past and present, providing education in critical analysis and effective expression. As a result, the liberal arts English major has provided graduates with a sound basis for pursuing careers in law, publishing, certain

positions in business, and a number of non-technical government positions.

In teacher education, the department prepares majors for teaching at the secondary and the elementary levels. Students are urged to support their major by means of auxiliary courses in drama, reading, linguistics, speech, journalism, or work in subjects that are similarly related to English language and literature.

ENGLISH FACULTY

DOUGLAS B. PARK (1979) Chairman.
Associate Professor. AB, Hamilton College; PhD, Cornell University.
ROBERT D. BROWN (1965) Professor of English. AB, MA, PhD, Indiana University.

English

- MEREDITH B. CARY (1964) Professor. BA, Central Missouri State College; MALS, University of Michigan; MA, Michigan State University; PhD, University of Washington.
- MARJORIE J. DONKER (1967) Associate Professor. BA, Western Washington State College; MA, PhD, University of Washington.
- RICHARD L. FRANCIS (1969) Associate Professor. AB, Kenyon College; MA, Duke University; PhD, Yale University.
- JUDITH GREENBERG (1977) Assistant Professor. BA, University of Wisconsin; MFA, University of Oregon.
- ROBERT E. HUFF (1964) Professor. AB, MA, Wayne State University.
- KENNETH B. INNIS (1966) Associate Professor. AB, AM, Indiana University; PhD, University of Kansas.
- ELLWOOD G. JOHNSON (1963) Associate Professor. BA, MA, PhD, University of Washington.
- WILLIAM C. KEEP (1966) Associate Professor. BA, PhD, University of Washington.
- ***GOLDEN LARSEN (1956) Associate Professor. BS, MS, Utah State University; PhD, University of Washington.
- W. ROBERT LAWYER (1960) Associate Professor of English and Director of the Library. BA, PhD, University of Washington.
- ***LAWRENCE L. LEE (1962) Professor. BA, MA, PhD, University of Utah.
- TOMMY LEE (1972) Assistant Professor. BA, MA, University of Washington.
- **MERRILL E. LEWIS (1962) Professor. BA, MA, University of Oregon; PhD, University of Utah.
- REED B. MERRILL (1969) Associate Professor. BS, MA, University of Utah; PhD, University of Colorado.
- GEORGE M. MULDRUP (1960) Professor. BJ, MA, University of Missouri; PhD, Stanford University.
- JAMES H. O'BRIEN (1946) Professor. BA, Seattle University; MA, PhD, University of Washington.
- ROBERT A. PETERS (1964) Professor of English and Linguistics. BA, Ohio State University; MA, Western Reserve University; PhD, University of Pennsylvania.
- MARJORIE RYAN (1961) Professor. AB, MA, University of Michigan; PhD, University of Minnesota.
- KNUTE SKINNER (1962) Professor. AB, Colorado State College; MA, Middlebury College; PhD, University of Iowa.
- KEN M. SYMES (1967) Professor. BA, MA, Utah State University; PhD, University of New Mexico.
- EVELYN C. WRIGHT (1972) Assistant Professor. BS, Illinois State University; MA, PhD, Northwestern University.

BACHELOR OF ARTS

Major 70 credits

This major, appropriate for Bachelor of Arts candidates, consists of these required courses:

- Eng 304 (4 credits)
- Two courses from Eng 312a,b,c sequence (8 credits)
- Two courses from Eng 312d,e,f sequence (8 credits)

**On Sabbatical Leave Spring 1980

***On Sabbatical Leave 1980-81

- Two courses from Eng 312d,e,f sequence (8 credits)
- Eng 316 and 317 (8 credits)
- One course from among Eng 370 (4); 321 (3); 421 (5); 471 (3)

Electives: Of the remaining elective hours, at least 15 are to be distributed among courses offered at the 300 and 400 levels. The student may complete the English major in one of several ways: by studying particular periods or authors in either British or American literature in greater depth; by focusing on departmental offerings in creative writing, linguistics, or rhetoric; or by choosing courses from more than one of these areas. Students may consult with the undergraduate adviser for further advice.

Minors 24 credits

Except where noted, all minors are appropriate for both Bachelor of Arts and Bachelor of Arts in Education.

A. English 24 credits

(Not open to English majors.)

- Eng 201, 202, 304
- Electives to total 24 credits*

B. Creative Writing 24 credits

- Two courses from Eng 201, 202, 304
- Four creative writing courses including work in at least two genres
- Electives under advisement from the 300 and 400 levels

*Elementary education minors will take Eng 370, 440 or 441 and electives. Secondary education minors will take in addition to the above Eng 370, 442, 474 and electives.

C. Extended Minor 35 credits

(To accompany a history major for those who desire recommendation for a teaching competence combination appropriate for junior high or middle school.)

- Eng 201, 202, 304, 370, 442
- One of the following groups of courses: Eng 281, 282, 283; Eng 316, 317, 318; or three courses from the Eng 312 series
- Electives under advisement

D. Linguistics 24 credits

- Ling 201, 303
- Electives from linguistics, Eng 370-379 and Eng 470-479

E. Rhetoric 24 credits

- Eng 325, 354
- Electives under advisement from the 300 and 400 level†

F. Women's Literature

- Eng 201 — integrated section
- Two courses from Eng 338 series
- Electives under advisement, to be selected from the major figures and special topics courses focused on the work of women authors

DEPARTMENTAL HONORS

In addition to the general requirement for all honors students, an English major who wishes to graduate "with honors" must complete one course in the Eng 430-439 series, one course in criticism, and an upper-division course in philosophy or in literature read in a foreign language.

THE VERTICAL COMPOSITION PROGRAM

These courses are designed to allow the student to improve writing skills progressively throughout the four years of college. They do not constitute a minor; they are available to anyone interested. The courses consist of Eng 101, 201, 202, 203, 270, 301, 302, 325, 354, 401.

BACHELOR OF ARTS IN EDUCATION

Major Secondary 60 credits

- Eng 304, 316, 317
- Two courses from Eng 312a,b,c sequence
- Two courses from Eng 312d,e,f sequence
- Eng 370, 442, 474
- One course from Eng 443, 444, or Ed 424c,d
- Ed 481

The department strongly recommends that students include courses in world literature, Shakespeare, advanced composition, and literary theory and criticism in their electives.

Major Elementary 45 credits

- Eng 201, 202

†Especially recommended are Eng 470, *Transformational Grammar*; Anth 448, *Language and Culture in Society*; Speech 205, *Argumentation and Debate*; Speech 490, *Rhetorical Theory and Practice*; Greek and Roman; Ling 404, *Linguistics and Literature*.

- Eng 304, 370, 440 or 441
- Electives under departmental advisement

Students should consult the undergraduate adviser or the English education faculty adviser for distribution of electives as well as the *teacher certification requirement in the School of Education listing*.

Interdisciplinary Major Concentration

90 credits (Speech 45 credits & English 45 credits)

English: 45 credits

- Eng 304
- Two courses from Eng 312a,b,c
- Two courses from Eng 312d,e,f
- Eng 316, 317, 370, 442, 474
- Eng 325
- Electives

Speech: (See listing under Speech) 45 credits

Minor 24 credits

Except where noted, all minors are appropriate for both Bachelor of Arts and Bachelor of Arts in Education. See Bachelor of Arts listing.

Teaching Competence

Recommendation for teaching competence normally requires completion of the major or interdisciplinary major concentration. An exception is provided through the extended minor listed above. A grade of 2.5 or better in English is required.

GRADUATE STUDY

For concentrations leading to the Master of Education or Master of Arts degree, see *Graduate Bulletin*.

COURSES IN ENGLISH

General University Requirement Courses

English courses which satisfy GUR requirements are as follows:

Communications: 101, 201, 202, 203, 301, 302

Humanities: 214, 215, 216, 238, 281, 282, 283, 362

Non-Western and Minority Culture Studies: 234, 338

The following entries indicate courses routinely offered by the department. The lettered subheads offer examples of some but not all of the sections of these courses that will be offered during the period of this catalog. For more information about the courses and sections to be offered this year and next, please consult the "Class Schedule," the English Department's "Course Descriptions" and the "Guide for English Majors." The department makes every effort to offer all required courses at least once a year and all courses in the catalog at least once every two years.

English

- 100 REVIEW OF SYNTAX AND USAGE (5)
Emphasizes a basic command of standard written English such as correct usage and punctuation, sound sentence and paragraph structure, and avoidance of errors in diction. Graded S/U.
- 101 LANGUAGE AND EXPOSITION (4)
May not be taken concurrently with English 100. Practice in expository strategies such as finding information, focusing on a topic, organizing around a thesis, developing an idea, defining an audience; practice of basic expository types such as definition, comparison, classification, and analysis; and the reading of models of expository prose. Students wishing to satisfy Block A of the General University Requirements are urged to enroll in this course during their freshman or sophomore years.
- 201 INTRODUCTION TO FICTION WITH COMPOSITION (4)
Prereq: Eng 101 or equivalent. An introduction to the nature of fiction with an emphasis upon close reading. Composition is an integral part of this course.
- 202 INTRODUCTION TO DRAMA WITH COMPOSITION (4)
Prereq: Eng 101 or equivalent. An introduction to the nature of drama with an emphasis upon close reading. Composition is an integral part of this course.
- 203 INTRODUCTION TO POETRY WITH COMPOSITION (4)
Prereq: Eng 101 or equivalent. An introduction to the conventions of poetry with an emphasis upon close reading. Composition is an integral part of this course.
- 214 INTRODUCTION TO SHAKESPEARE (5)
Reading and discussion of a selected number of Shakespeare's plays: histories, comedies, tragedies and romances.
- 215 SURVEY OF BRITISH LITERATURE (5)
Reading and discussion of major works from each of the recognized periods of British literature with some attention to the historical context of the work.
- 216 SURVEY OF AMERICAN LITERATURE (5)
An overview of American literature and thought from 1620 to 1940.
- 231 STUDIES IN POPULAR LITERATURE (3)
Different types of popular literature will be treated from year to year. Consult the Class Schedule for current offerings.
- 234 INTRODUCTION TO AFRO-AMERICAN LITERATURE (5)
Survey of Afro-American experience and its expression during the past hundred years. Typical writers studied are Chesnut, Dunbar, Johnson, Toomer, McKay, Hughes, Bontemps, Larsen, Hurston, Wright, Ellison, Baldwin, Baraka, McPherson and A. Walker.
- 238 SOCIETY THROUGH ITS FICTION/DRAMA/POETRY (5)
A thematic approach to literature. Different themes will be treated from year to year, showing with various literary forms present society and its problems.
- 262 FILM AND DRAMA (4)
No prerequisite. A study of the relations between mediums. Students will examine the resources of the drama and of film. A nominal lab fee will be charged to cover the cost of films.
- 273 COMPETENCE AND CONFIDENCE IN STANDARD AMERICAN ENGLISH USAGE (3)
Lectures and recitations dealing with standard American English usage (idioms, stylistics, punctuation, the nature of correctness). Not applicable as part of the English major or minor. S/U grading.
- 281, 282, 283 WESTERN WORLD LITERATURE (5 ea)
Reading from classical and medieval, renaissance and neo-classical, romantic and modern literature. Not open to students with credit in Lib St 121, 122, 123.

For English majors and minors, all upper-division literature courses have English 304 as a prerequisite.

- 300 DIRECTED INDEPENDENT STUDY (1-3)
Conference Course Permit required from instructor before registering.
- 301 READING AND EXPOSITION (4)
Prereq: Eng 101 or equivalent. A course that emphasizes (1) advanced command of the language such as mastering a variety of sentence patterns and selecting appropriate diction, metaphors and levels of language; (2) advanced rhetorical strategies such as mastering complex organization schemes and mastering forms of the essay such as classification, definition, analysis, process, analogy, comparison and contrast, and cause and effect; (3) use of external evidence in composition; work in précis, paraphrase, and documentation from models of prose.
- 302 READING AND ARGUMENTATION (4)
Prereq: Eng 101 or equivalent. An advanced writing course which deals exclusively with argument as reading and writing problems, and allows for a variety of topical material.
- 304 CRITICAL INTRODUCTION TO POETRY (4)
Prereq: Eng 101 or equivalent. The course introduces the prospective English major to the vocabulary and grammar of technical discourse about poetry through the close reading of a variety of poetic texts and the writing of a number of expository essays.
- STUDIES IN LITERARY HISTORY — BRITISH. Number series 310-314 includes literature courses with an historical emphasis. Number series 410-414 includes advanced courses with an historical emphasis characterized by more sharply focused and intense study than on the 300 level.
- 312 PERIODS OF BRITISH LITERATURE (4 ea)
312a Medieval Literature
312b 16th and early 17th Century Literature
312c Late 17th and 18th Century Literature
312d Romantic Literature
312e Victorian Literature
312f Modern Literature
- 315 STUDIES IN CONTEMPORARY BRITISH AND AMERICAN LITERATURE (4)
Different sections of this course deal with developments in fiction, drama and poetry since 1900. See class schedule for offerings during time of this catalog.
- STUDIES IN LITERARY HISTORY — AMERICAN. Number series 316-319 includes literature courses with an historical emphasis. Number series 416-419 includes advanced courses with an historical emphasis characterized by more sharply focused and intense study than on the 300 level.
- 316, 317, 318 AMERICAN LITERARY HISTORY (4 ea)
American literature from its beginnings to the present with special attention to the cultural diversity out of which the literature emerged.
316 American Literature to 1850
317 American Literature, 1850 to 1914
318 American Literature, 1914 to the present

319 DEVELOPMENT OF AMERICAN LITERARY FORMS

- 319a American Novel to 1900 (5)
 319b American Novel Since 1900 (5)
 319c American Short Fiction (4)
 319d Modern American Drama (3)
 (Also offered as Th/D 426.)
 319e Modern American Poetry (4)

STUDIES IN LITERARY THEORY AND CRITICISM. Number series 321-329 includes courses with a theoretical or critical emphasis. Number series 421-429 includes similar courses characterized by more sharply focused and intense study than on the 300 level.

321 THEORY OF LITERATURE (3)

The nature and judgment of literature as a form of art; principles and problems; writing of critical studies.

325 INTRODUCTION TO RHETORIC (3)

Prereq: Eng 101. Rationale of informative and persuasive writing; classical and modern treatments of invention, arrangement, prose style.

STUDIES IN LITERARY GENRE AND LITERARY THEME. Number series 330-339 includes studies in themes, motifs and genres in literature. Number series 430-439 includes similar studies characterized by more intense study than on the 300 level.

332 FORMS OF THE NOVEL (4)

332a The Rogue Novel
 Traditional and contemporary picaresque literature, emphasizing both continuity and change.

333 FORMS OF SHORT PROSE FICTION (4)

333a Masterpieces of the Short Story and the Tale

337 FORMS OF SATIRE (4)

337a Satiric Fiction
 Varieties of satiric prose, mainly modern, with some attention to satiric theory.

338 WOMEN AND LITERATURE (4)

Prereq: Eng. 101. A study of major works by women including their treatment of intellectual and cultural issues. Different topics and genres will be treated from year to year.

STUDIES IN LITERARY EXPRESSION. Number series 350-359 includes courses in creative writing, advanced composition, personal essay, and argumentation. Number series 450-459 includes similar courses characterized by more sharply focused and intense study than on the 300 level. All these courses are graded S/U.

351 INTRODUCTION TO FICTION WRITING (4)

An introductory course open to students who have not previously taken a college course in fiction writing. Study of appropriate models. (Note: this course is not a prerequisite to 451a-z.) S/U grading only.

353 INTRODUCTION TO POETRY WRITING (4)

An introductory course in poetry writing. Open to students who have not previously taken a college course in poetry writing. Study of appropriate models. (Note: this course is not a prerequisite for 453 a-z.) S/U grading only.

354 INTRODUCTION TO THE WRITING OF NON-FICTION PROSE (3)

Prereq: Eng 301 or 302. Opportunity for writers to develop skills on a mature level. The personal essay, biographical sketch, extended argument and other forms. Individual projects. Study of appropriate models. S/U grading only.

STUDIES IN LITERATURE, GENERAL. Number series 360-369.

360 (320a) CANADIAN LITERATURE (4)

Reading of selected works, principally 20th century fiction from English Canada, with some attention to French writers in translation. Emphasis on the social and historical context of Canadian literature.

361 THE LITERATURE OF AFRO-AMERICA (5)

Investigation of ways Afro-American writers respond to social realities that seem to them unsatisfactory or unjust and literary forms they adopt to embody their views and solutions, whether by analysis, satire, protest, propaganda, or dramatic characterization.

362 THE BIBLE AS LITERATURE (5)

Prereq: Eng 101. Cultural backgrounds of the Old and New Testaments, together with a literary analysis of selected passages.

363 CULTURAL HEROES AND ANTI-HEROES IN AMERICAN LITERATURE (4)

Prereq: Eng 101 and a course in American literature or American history, or myth and folklore. The study of various heroic types of myth, legend and folklore represented in both serious and popular literature and in folklore.

364 CONTEMPORARY ISSUES IN LITERATURE: FICTION INTO FILM (4)

Prereq: Speech 345 recommended. A nominal lab fee will be charged to cover the cost of films. An examination of the relationship between fiction and film. Students will view films based on works of fiction and discuss the nature of each medium.

365 SEX ROLES: TRADITIONS, STEREOTYPES AND LIBERATION (4)

Prereq: one course from following: Anth 201, Soc 202, Eng 201, 202, 203. This course will use the tools of anthropology and literary criticism to determine the extent to which we make unconscious assumptions about sex roles. Stereotypes will be examined in the context of their relation to value systems, and their development will be traced through the history of the women's movement in America. (Also listed as Anth 365.) Offered summer only.

STUDIES IN ENGLISH LANGUAGE. Courses in American English, the history of the English language, transformational grammars, dialects, etc., are included in the number series 370-379 and 470-479.

370 INTRODUCTION TO AMERICAN ENGLISH (4)

Overview of various topics: history of the English language, sound system of English, structural morphology, some sentence transformations, English dictionaries, the writing system, American English dialects, characteristics of language, standard and non-standard English. Designed primarily for teaching candidates.

399a,b,c HONORS TUTORIAL (2-5 ea)

400 DIRECTED INDEPENDENT STUDY (1-3)

Conference Course Permit required from instructor before registering.

401 TECHNICAL AND BUSINESS REPORT WRITING (3)

Prereq: Eng 101 and upper-division standing. Theory and practice of writing with objectivity and clarity for business, industry and government. Students will work with a variety of formats and kinds of papers.

STUDIES IN LITERARY HISTORY — BRITISH. Number series 410-415 includes advanced courses with an historical emphasis characterized by more sharply focused and intense study than on the 300 level.

410 PERIOD STUDIES (2-5)

Different literary periods and movements will be treated from year to year.

410a Modern Irish Literature (4)

412 DEVELOPMENT OF BRITISH DRAMA (3 ea)

412a Medieval and Elizabethan-Jacobean

412b British Drama 1660-1900

412c 20th Century British Drama

Historical and critical study of the British drama, with emphasis upon the greater writers (exclusive of Shakespeare). Also offered as Th/D 421, 422, 423.

English

- 43 DEVELOPMENT OF THE BRITISH NOVEL (5 ea)
- 413a The Eighteenth Century
413b The Nineteenth Century
413c The Twentieth Century
- 414a-z STUDIES IN MAJOR BRITISH AUTHORS (3-5)
- Various single authors or combinations of authors will be studied from quarter to quarter. The course may be elected more than once. See Class Schedule for the various authors to be studied during the time of the catalog.
- STUDIES IN LITERARY HISTORY — AMERICAN. Number series 416-419.
- 416 SPECIAL TOPICS IN AMERICAN LITERARY HISTORY (3-5)
- 416a The West in American Literature (4)
416b The South in American Literature (4)
416c Writing in the Pacific Northwest (4)
- 417 STUDIES IN MASTERWORKS OF AMERICAN LITERATURE (3 ea)
- Research in the biographical/historical/critical backgrounds of American masterpieces.
- 418a-z STUDIES IN MAJOR AMERICAN WRITERS (4 ea)
- Various single authors or combinations of authors will be studied from quarter to quarter. The course may be elected more than once.
- STUDIES IN LITERARY THEORY AND CRITICISM. Number series 421-429 includes similar courses to 321-329 characterized by more sharply focused and intense study than on the 300 level.
- 421 HISTORY OF LITERARY CRITICISM (5)
- Prereq: 15 credits in literature. Reading and analysis of major documents of criticism, from Plato and Aristotle to 20th century critics.
- STUDIES IN LITERARY GENRE AND LITERARY THEME. Number series 430-439 includes similar studies to 330-339 characterized by more intense study than on the 300 level.
- 432 STUDIES IN FORMS OF THE NOVEL (3)
- 432a The Novel of Ideas
The philosophical novels of such writers as Diderot, Dostoevsky, Kafka, Koestler, Sartre, Camus, Kazantzakis, Robbe-Grillet.
- 439 MAIN CURRENTS IN LITERATURE (5 ea)
- 439a Classical Backgrounds
439b Romanticism
439c Realism and Naturalism
439d Post-Realism
- STUDIES IN ENGLISH EDUCATION. Number series 440-449.
- 440 ENGLISH FOR THE ELEMENTARY SCHOOL (4)
- Teaching reading, writing, speaking and listening; formal and informal methods; textbooks and materials.
- 441 WORLD LITERATURE FOR THE ELEMENTARY AND MIDDLE SCHOOL TEACHERS (4)
- Myth, legend, folk literature, epic, fairy tales and modern novels for children.
- 442 COMPOSITION FOR SECONDARY TEACHERS (4)
- Practice and instruction to improve the writing of students; emphasis on the nature of composition and skill in analyzing non-professional expository writing.
- 443 LANGUAGE IN SCHOOL PROGRAMS (4)
- Prereq: Eng 370. Knowledge of the English language applied to the teaching of English and language arts, grades K-12.
- 444 LITERATURE IN SECONDARY SCHOOLS (4)
- Survey of resources for teaching literature in secondary schools, methods and practice in teaching literary works in classrooms.
- 445 CURRENT TRENDS IN ENGLISH EDUCATION (1-5)
- Selected topics in the current developments in literature, composition and linguistics for the elementary and middle school classroom.
- 446 WORKSHOP IN THE TEACHING OF ENGLISH (3-5)
- Practical work in the teaching of English.
- 447 CONFERENCE ON CHILDREN'S LITERATURE (1-3)
- Prereq: junior status or experience as teachers, librarians or writers. A conference consisting of lectures, demonstrations and small group meetings. Also listed as Library Science 445a.
- STUDIES IN LITERARY EXPRESSION. Number series 450-459 includes courses similar to 350-359 characterized by more sharply focused and intense study than the 300 level. All these courses are graded S/U.
- 451a-z CREATIVE WRITING WORKSHOP: FICTION (4 ea)
- Opportunity for disciplined expression in writing fiction. Study of appropriate models. May be repeated for a total of three times with a limit of one course per quarter. S/U grading only.
- 452a-z CREATIVE WRITING WORKSHOP: DRAMA (4 ea)
- Opportunity for disciplined expression in writing drama for stage, film, television, or other media. Study of appropriate models. May be repeated for a total of three times with a limit of one course per quarter. S/U grading only. (Also offered as Theatre/Dance 485, 486, 487.)
- 453a-z CREATIVE WRITING WORKSHOP: POETRY (4 ea)
- Opportunity for disciplined expression in writing poetry. Study of appropriate models. May be repeated for a total of three times with a limit of one course per quarter. S/U grading only.
- 455 CREATIVE WRITING SEMINAR (4)
- Prereq: permission of instructor. Normally restricted to students who have had considerable writing experience. Team taught. Open to students working in any genre, including non-fiction prose. Such activities as group discussions, readings, performances and publication of a class magazine will be encouraged. Study of appropriate models. S/U grading only.
- 456 EXAMINING AND COMPOSING POETIC FORMS (4)
- This course combines the approaches of genre study and literary expression.
- 457 WRITING COMMERCIAL FICTION (4)
- Prereq: Eng 101 for non-majors; Eng 304 for majors and minors. Restricted to students who have a serious intention to write fiction for a popular, commercial market. Writing will be combined with a study of the market and appropriate models. S/U grading only.
- STUDIES IN LITERATURE: GENERAL. Number series 460-469.
- 460 (420a) STUDIES IN MODERN ENGLISH LITERATURE (4)
- Comparative study of the new literatures in English which have emerged from Africa, Australia, Canada, India, West Indies, since World War II. Such authors as Achebe, White, Soyinka, Laurence, Nalpaal.
- 461 (461a) MODERN LITERATURE IN TRANSLATION (3)
- Prereq: 15 credits in literature.
- 462 (461b) MYTH AND MODERN MAN (4)
- Prereq: Eng 101. A basic study of myth from several vantage: comparative religion, psychology, anthropology and philosophy. The application of myth analysis to the work of selected writers, like James Joyce, who used mythic motifs.

463 (461c) LITERATURE AND PSYCHOANALYSIS (5)

Prereq: Eng 101. Influence of psychoanalytic theory on the development of modern literature, aesthetics and criticism.

464 (461f) THE AFRO-AMERICAN AND THE LITERARY IMAGINATION (5)

Prereq: Eng 101. Study of Afro writers or ways various American writers have portrayed Afro-American's image, social role, psychology, etc. Typical writers studied are Dixon, Chesnut, Stowe, Melville, Whitman, Twain, Dreiser, Toomer, Wright, Faulkner, Ellison.

STUDIES IN ENGLISH LANGUAGE. Courses in American English, the history of the English language, transformational grammars, dialects, etc., are included in the number series 370-379 and 470-479.

470 TRANSFORMATIONAL GRAMMAR (3)

Introduction to phrase structure generation, sentence transformations, lexical and phonological features.

471 HISTORY OF THE ENGLISH LANGUAGE (3)

The historical development of the English language: phonology, morphology, syntax, semantics.

472 AMERICAN ENGLISH DIALECTS (3)

A study of the regional dialects of American English and their historical development.

474 ENGLISH USAGE (3)

Survey of standard American English usage. Designed primarily for teacher candidates.

499a,b,c HONORS TUTORIAL (2-5 ea)

GRADUATE COURSES

The following courses are offered for graduate credit for persons enrolled in the department's graduate program. For course descriptions and other information about the graduate program, see the current Graduate Catalog.

Registration in the 500-level courses requires graduate status and departmental approval. An adequate background [normally an undergraduate major or minor in English] and the ability to do independent work are prerequisites. Attention will usually be given to a limited topic: one writer or a small group of writers, selected works, a single form.

500 DIRECTED INDIVIDUAL STUDY (1-3)

501 INTRODUCTION TO GRADUATE STUDY IN ENGLISH (5)

Ten credits in creative writing courses are required of all M.A. students submitting a creative writing thesis, but no more than ten credits [exclusive of thesis credit] may be applied toward the minimum number of credits required for the degree. Registration for thesis credit may be scheduled, with approval of the department, at any time following the first quarter in residence.

502a FICTION WRITING SEMINAR (5)

502b ADVANCED FICTION WRITING SEMINAR (5)

503a,b SEMINAR IN PLAYWRITING (3)

504a POETRY WRITING SEMINAR (5)

504b ADVANCED POETRY WRITING SEMINAR (5)

510 SEMINAR IN RHETORIC (5)

513 SEMINAR IN TEACHING COLLEGE COMPOSITION (2)

IN THE FOLLOWING LITERATURE AND LINGUISTICS SEMINARS, the specific subject matter covered will vary from year to year.

520 SEMINAR IN ANGLO-SAXON LITERATURE (5)

521 SEMINAR IN MEDIEVAL LITERATURE (5)

522 SEMINAR IN 16-17TH CENTURY LITERATURE (5)

523 SEMINAR IN 18TH CENTURY LITERATURE (5)

524 SEMINAR IN ROMANTIC LITERATURE (5)

525 SEMINAR IN VICTORIAN LITERATURE (5)

526 SEMINAR IN MODERN LITERATURE (5)

527 POST-MODERN BRITISH LITERATURE (5)

531 SEMINAR IN AMERICAN LITERATURE: BEGINNINGS TO 1900 (5)

532 SEMINAR IN AMERICAN LITERATURE: 1900 TO PRESENT (5)

541 SEMINAR IN CHAUCER (5)

543 SEMINAR IN SHAKESPEARE (5)

545 SEMINAR IN MILTON (5)

560 SEMINAR IN LITERARY FORM (5)

587 SEMINAR IN LITERARY CRITICISM (5)

594 PRACTICUM IN TEACHING (2)

598 RESEARCH IN THE TEACHING OF ENGLISH (1-3)

600 DIRECTED INDEPENDENT RESEARCH (2-4)

690 WRITING REQUIREMENT (5)





FAIRHAVEN COLLEGE

FAIRHAVEN COLLEGE FACULTY

PHILLIP R. AGER (1965) Associate Professor and Dean of the College. BA ED, Western Washington State College; MA, University of Washington.

KATHRYN L. ANDERSON (1972) Associate Professor. BA, MA, University of Iowa; PhD, Claremont Graduate School.

JOSEPH BETTIS (1975) Professor. BA, Southern Methodist; BD, Drew; MA, PhD, Princeton.

MICHAEL J. BURNETT (1969) Associate Professor. BA, University of Illinois; MA, PhD, Claremont Graduate School.

W. GARY CLEVIDENCE (1969) Associate Professor. BA, Antioch College; MA, University of Michigan.

CONSTANCE P. FAULKNER (1968) Associate Professor. BS, PhD, University of Utah.

KENNETH D. FREEMAN (1971) Professor. AA, Mars Hill Jr. College; BA, Wake Forest University; MA, Emory University; PhD, Columbia University.

HARVEY M. GELDER (1948) Professor. BA, Colorado State College; MA, University of Missouri.

PAUL C. GLENN (1969) Assistant Professor. BA, University of Washington; MA, Stanford University.

WILLIAM H. HEID (1968) Professor. BA, Denison University; MS, PhD, University of Washington.

ANNIS J. HOVDE (1948) Professor. BA, MA, University of Washington.

*RAND F. JACK (1971) Associate Professor. AB, Princeton University; LLB, Yale University Law School.

ROBERT H. KELLER (1968) Associate Professor. AB, University of Puget Sound; BD, MA, PhD, University of Chicago.

C. DOUGLAS LUMMIS (1973) Associate Professor. BA, MA, PhD, University of California, Berkeley.

**DAVID T. MASON (1966) Associate Professor. AB, Reed College; MA, PhD, University of California, Berkeley.

JOHN C. McCLENDON (1971) Associate Professor. BA, MA, San Francisco State College.

DONALD B. McLEOD (1963) Professor. BA, Whitman College; MA, University of Montana.

DOUGLAS D. RICH (1977) Adjunct Assistant Professor and Director of Bridge Project. BA, Whitworth College; MDiv, San Francisco Theological Seminary; PhD, Washington State University.

**On Sabbatical Leave Spring 1980*

***On Sabbatical Leave Winter 1980 & Spring 1980*

THE THREE-STAGE CURRICULUM

[How Degrees Are Obtained]

Fairhaven College offers a complete baccalaureate curriculum comprising study at three stages; each contains core courses, support courses and transition requirements. Core courses, offered predominately within the first stage, provide interdisciplinary approaches to broad areas of knowledge. Support courses relate to the core in that they focus on or emphasize particular disciplines or problems. The completion of transition requirements, found at the end of each curricular stage, signifies student preparation for new levels of study and application.

Stage I: Exploratory Studies [50-70 credits]

- A. The Core Program
 1. Foundations Seminar (101; 5 credits)
 2. Perspectives Program (102-7; 30 credits)
 3. Learning Seminar (201; 5 credits)
 4. English Comp (3 credits)
- B. Additional Studies (7-27 credits)
- C. Transition Conference

Stage II: Specialized Studies [55-110 credits]

Completion of Fairhaven College Interdisciplinary Concentration or University Major, plus either:

- A. Concentration Seminar (301; 5 credits) or
- B. Major Support Group (402; 5 credits)

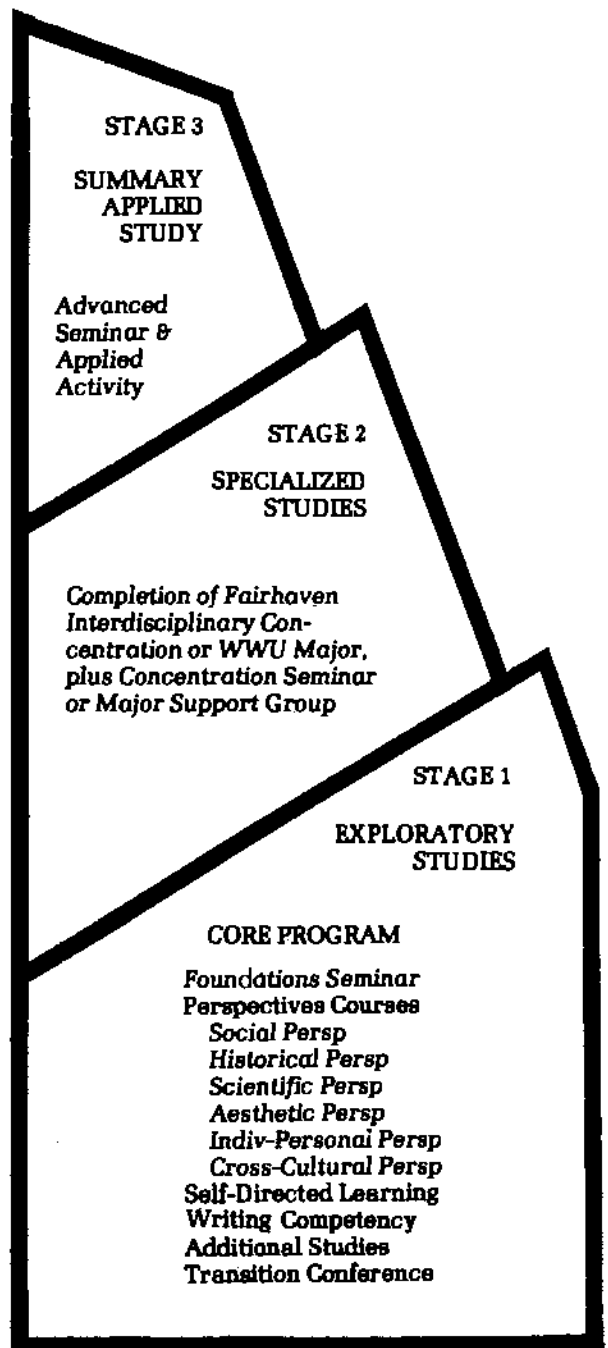
Stage III: Applied Study and Summary [15 credits]

- A. Advanced Seminar to be taken after or near completion of Concentration or Major (401; 5 credits)
- B. Applied Activity or Final Project

In any given quarter, students may plan and enroll for courses and studies at Fairhaven or other University divisions applicable to each of the three curricular stages. We also suggest that students periodically leave room for "electives" to widen personal interests and discover new capabilities.

ACADEMIC PLANNING

Western Washington University operates on a quarter system; average registration is 15



credits per term. Fairhaven College students may enroll for courses and studies offered by Fairhaven or any of the University divisions. In preparation for quarterly registration, students are expected to consult with their faculty advisers regarding curricular requirements and appropriate course content. Generally, lower-division students will complete all three stages of the program in order to graduate; upper-division students

Fairhaven College

may seek exemption from particular requirements following faculty advisement.

Fairhaven College schedules separate orientation activities for entering students at the beginning of each academic quarter. It is important to attend these sessions in order to meet the faculty, become acquainted with the curriculum, and prepare for initial registration.

Registration for Fairhaven College courses and studies takes place at the *University Registration Center* by individually scheduled appointments mailed in advance to students. Fairhaven College courses and studies are open to all students of Western Washington University. Courses are indicated with "S" (Satisfactory) or "U" (Unsatisfactory) upon the completion of written student-faculty evaluations.

COURSES AND STUDIES

The courses and studies listed in this catalog will be offered during the 1979-1981 academic years. Prior to registration, students should consult the *Fairhaven College Quarterly* (issued three times a year) and the *University Class Schedule* (issued annually.) Several program options are available each quarter.

Core Courses: (101; 102-107; 201; 301; 401; 402.)

For Fairhaven College students, these courses are applied toward meeting specific requirements appropriate to each of the three curricular stages. For students of other WWU colleges, these are "elective courses" which may be applied toward meeting University credit requirements for graduation.

Supportive/Elective Courses: (100, 200, 300, 400 Levels.)

For Fairhaven College students, these are "supportive courses" which may be applied, subsequent to faculty advisement, to each of the three curricular stages. For students of other WWU colleges, these are "elective courses" which may be applied toward meeting University credit requirements for graduation.

Independent Studies: (200; 300; 400.)

Open to all students: fall, winter, spring quarters. Register via signed *Fairhaven College Independent Study Permit card*.

Student-faculty *Independent Study Contracts* must be filed and approved at Fairhaven within the first two weeks of each quarter.

Special Topic Seminars: (290-299; 490-499.)

Open to all students. In addition to its core curriculum and supportive/elective courses, Fairhaven remains responsive to student needs, and encourages educational innovation by offering special studies. Full descriptions and credits will be announced in the *Fairhaven College Quarterly* prior to each registration period.

Experimental Courses: (297; 497.)

Open to all students. Full descriptions and credits will be announced in the *Fairhaven College Quarterly* prior to each registration period.

FAIRHAVEN COURSES

Core Courses

101 FOUNDATIONS SEMINAR (Stage I, 5 credits)

Required of all entering students. Provides an introduction to Fairhaven College, the faculty and the individualized learning process.

102-107 PERSPECTIVES PROGRAM (Stage I, 5 credits each)

These team-taught courses provide a variety of perspectives — approaches to knowledge — as a way of viewing modern society. (Need not be taken in numeric sequence.)

102 Social Perspectives: Viewing relationships and institutions that order and affect human lives in the public sector such as political, economic and social organization.

103 Historical Perspectives: Methods of investigation and interpretation as well as conceptual frameworks for understanding the interrelationships among historical phenomena.

104 Scientific Perspectives: Observation, experimentation, logical and mathematical formulations, and various modes of gathering and using data.

105 Aesthetic Perspectives: Questions of self-expression, the relation of form to content, and the relation of art and literature to society.

106 Individual/Personal Perspectives: Developing a familiarity and acceptance of one's own body/mind, and sampling the many ways the self may grow and be understood and defined through intellectual, spiritual and practical techniques.

107 CrossCultural Perspectives: Studies of family and sex roles, economic determinants, world views, and environmental conditions as these reflect and influence the varying ways human cultures respond to human needs.

201 SELF-DIRECTED LEARNING SEMINAR (Stage I, 5 credits)

Required of every student, with a prerequisite of at least three Perspectives courses. This course emphasizes research methods and their application to independent studies, work-study and internships.

301 CONCENTRATIONS SEMINAR (Stage II, 5 credits)

Introduction to the preparation and writing of a Fairhaven College Interdisciplinary Concentration.

401 ADVANCED SEMINAR (Stage III, 5 credits)

Taken after or near completion of Fairhaven College Interdisciplinary Concentration or WWU major. Students will be expected to demonstrate an understanding of their specialized study, to explore new areas of interest, and to consider the application of their learning to a vocation following the college years.

402 MAJOR SUPPORT GROUPS (Stage II, 5 credits)

Designed for students taking academic majors at other WWU colleges; organized in Sciences-Technology, Arts-Literature; Social Sciences-Education.

Supportive, Elective Courses

111 INTRODUCTION TO WOMEN'S STUDIES (4)

Introduction to the issues, questions, conceptual frameworks and methods basic to a study of human societies, their institutions and cultural artifacts, from a perspective that comprehends women's experience. (Also offered as Women's Studies III.)

112 UTOPIA (4)

Literary, historical and pragmatic approach to Utopian thought. Selections from Plato, More, Bellamy, Wells, Morris, Huxley, Skinner, Muir and Callenbach will be discussed, along with other blueprints for a better world.

115 MARK TWAIN'S AMERICA (4)

An exploration and analysis of the American experience, from the late 1830's to the turn of the century, through the eyes and works of Mark Twain. A multidisciplinary approach to the study of American cultural history.

118 THE NATURE OF CULTURE (5)

Culture is the way people order their lives: their social relationships, their values, their knowledge of themselves and their understanding of the world. An examination of different approaches to the study of culture, such as the origins of culture, cultural diversity, cultural adaptation, and the individual and culture.

120 AWARENESS THROUGH THE BODY (4)

The course emphasizes the body and its movements. There is attention paid to both theories and experiences of the body and its immediate environment.

121 INTRODUCTION TO PERSONAL PHILOSOPHY (4)

Through readings, class experiences, and discussions, a course to elicit from students their own philosophical questions. This is an opportunity for people to be philosophers rather than study them. The material tends to come from outside traditional philosophy and the course is largely experimental.

122 PLATO AND JAMES (4)

A reading of selected texts from these two very different philosophers. In the process, the two ways of looking at the world advanced by these thinkers will be studied.

123 THE ART OF MAKING SENSE (4)

Introduction to the analysis of arguments. Writing and speaking more clearly and logically.

124 WHAT IS MATHEMATICS? (4)

The development of mathematical structures from common intuitions about number, form and occurrence.

125 THE EARTH AND BEYOND (4)

Introduction to the theories about the formation of solar systems, evolution of stars, galactic structures and cosmology.

129 ORIENTAL ART AND RELIGION (4)

An introduction to oriental art and aspects of oriental religions that are related to art. The painting of the Tang and Sung period of China; the "I Ching" and the "Tao Te Ching." The temple sculpture in India which drew its inspiration from the Tantric religion; the religious sculpture of Tantra, Hinduism and Buddhism.

132 UNDERSTANDING HUMAN DEVELOPMENT (5)

Basic study of major theories of human development in the western world; psychoanalysis, learning theory, structuralism, existential psychology, and historical materialism.

133 INTRODUCTION TO POLITICAL ECONOMY (5)

An examination of the American economic system from orthodox (Keynesian/neo-Keynesian) and critical (Marxian) perspectives; application of both theoretical frameworks to problems in modern American society.

134 DREAMS, IMAGINATION, AND CREATIVITY (4)

The course will focus upon the experiences of the participants and seek ways to enhance the intuitive side of personality. Expression of creativity will be encouraged.

135 PORTRAIT DRAWING (2)

Pencil, pen and ink wash study of the head, working from the model. Instruction and practice in layout, details, expression, likeness, and viewpoint.

136 THE LIFE OF THE DRAMA (4)

Eric Bentley's *The Life of the Drama* will provide a theoretical framework for discussion of plot, character, dialogue, thought and enactment in representative and pivotal works of melodrama, farce, tragedy, comedy and tragic-comedy. Plays in each of these genres will be read, viewed and discussed.

137 MEXICAN SOCIETY AND CULTURE (4)

Readings and discussion in Mexican cultural history, from pre-Columbian times to the present. Historical, art-historical, anthropological, sociological and literary tools will be used in an effort to come to an understanding of the Mexican experience as an interrelated whole.

138 TROPICAL ECOLOGY (3)

Lectures on tropical environments in South America, Africa, and Pacific Islands, making use of slides for illustration. Rain forest conservation, human ecology, and ecosystem structure will be the focal for discussion. A reading list will supplement the lectures.

139 WRITING BEFORE THE FACT (4)

An investigation of the notebook as it exists in a variety of forms, both cooked and raw, fiction and non-fiction. Critical emphasis is on processes by which the imaginative transformation of experience is achieved in this form. Intended to be representative, rather than exhaustive in scope, plausible texts may include Leonardo Da Vinci, Dostoevsky, Virginia Woolf, William James, "Malte Laurids Brigge" (Rilke), Wittgenstein, F. Scott Fitzgerald, Camus, Paul Klee, Theodore Roethke, John Cage, Daria Lessing, Andrej Sinyavski.

140 HOW LIKELY IS IT? (4)

Problems in counting and measuring. Definitions of a priori and fortiori probability and applications. Binomial and multinomial generating functions and their distributions; normal, Student's, and Chi Square distributions. Sampling, problems in descriptive statistics. The development will rest heavily upon intuitions and will emphasize the steps to formalization of concepts. Use of a statistics calculator.

141 DEVELOPMENT/UNDERDEVELOPMENT AND THE MULTI-NATIONAL CORPORATION (3)

An introductory look at the relationship between the so-called developed and developing worlds and the role of the multi-national corporations in each. Emphasis will be on general theoretical approaches and case studies of countries and corporations.

150 MUSIC LISTENING: AN AURAL APPROACH (3)

The principle of repetition and contrast as a basis for musical composition from the Baroque period through the present. Emphasis on the development of aural skills and aural recognition of musical styles of the periods studied.

151 CHORAL SINGING (2)

Open to all women and men who wish to participate in a mixed choral ensemble. A broad range of choral literature will be rehearsed and performed.

- 211 **STYLE IN ART (4)**
 Styles in art history — such as art nouveau, baroque, pop, neo-classic, romantic, gothic — as these reflect the personal style in which an artist expresses individuality.
- 215 **NORTHWEST POETS (3)**
 A survey of the work of major poets of the Northwest that will include, among others, the work of William Stafford, David Wagoner, Richard Hugo, Carolyn Kizer and Kenneth Hansen.
- 216 **COLLEGE WRITING (3)**
 A course directed toward the student who wishes to improve expository writing skills. Theory, practice and criticism of student work.
- 217 **DRAMATIC LITERATURE (4)**
 A survey of various periods of dramatic literature that will include Greek drama, the Elizabethan period, the Restoration period. The influence and development of tragic and comic theory will be studied.
- 218 **IMAGINATIVE WRITING (3)**
 Class will meet one evening per week in workshop session to critique and discuss student manuscripts.
- 220 **THE LEGAL ORDERING OF SOCIETY (4)**
 Introduction to American legal system with special emphasis on how it affects structures, relationships and values in the society.
- 222 **ARCTIC ECOLOGY (3)**
 Selected geological, climatic, biological and human interactions in high latitude regions of both north and south.
- 223 **SEXUAL MINORITIES (3)**
 Historical, sociological, political, psychological and cultural aspects of people who prefer other than the heterosexual mode of sexual expression.
- 224 **MUSICAL PRODUCTION (1-5)**
 Prereq: Conference Course Permit required from instructor. Rehearse, stage and produce a musical theatre performance.
- 229 **THE USES OF AUTOBIOGRAPHY I: READING (4)**
 An introduction to autobiography as a literary form, with emphasis on the special ways in which it gives order, meaning and symbolic value to human experience.
- 231 **INTRODUCTION TO GERONTOLOGY (5)**
 A survey of psychological, sociological and biological perspectives of the process of human aging.
- 232 **HUMAN SEXUALITY (5)**
 Study of research in human sexuality; current sex education; problems of oppression, violence and discrimination related to sexuality; and personal growth through sexual expression.
- 235 **DEATH AND DYING (5)**
 Introduction to the implications of one's death for philosophy, culture, art, literature, aging, economics, psychology, medicine, and living. In addition to extensive reading, including the *New Testament*, Plato, Marcus Aurelius and Tolstoy, field trips and a journal are required. The course involves emotional demands and personal engagement.
- 236 **KARL MARX ON HISTORY AND SOCIETY (4)**
 Readings and discussions of Marx' works dealing with historical materialism, politics, history and social relations. Each reading will be placed within the general historical and specific polemical milieu from which it arose.
- 237, 238, 239 **U.S. CULTURAL HISTORY (5 credits each)**
 Prereq: Historical Perspectives (Fairhaven 103) or American history. Three separate classes will develop a cultural history of America from 1950-1990. Each will explore the interaction of cultural life with economic, political and social factors through case studies emphasizing the internal dynamics of historical processes.
- 237 **The Fifties: McCarthyism to Sit-Ins (5)**
 From the Cold War to Eisenhower through pop culture to the beginnings of the Civil Rights movement.
- 238 **The Sixties: Kennedy to Nixon (5)**
 From Jack Kennedy through the Civil Rights movement to the anti-war movement.
- 239 **The Seventies: Activism to Apathy (5)**
 From Nixon and Watergate through Carter to new political stirrings; from rock to disco.
- 240 **HISTORIAN AS DETECTIVE (5)**
 Introduction to historical method, philosophy, and the challenges of investigation. Assignments to develop specific research skills and an understanding of the nature of evidence. Barzun and Graff's *The Modern Researcher* is supplemented with several novels, essays on the problems of historical knowledge, and reading in classical historians: Herodotus, Thucydides, Tacitus, Gibbon.
- 242 **THE EMPEROR'S NEW CLOTHES: FAIRY TALES, FANTASY AND DREAM LITERATURE (4)**
 An approach to such mythopoeic writers as E.T.A. Hoffmann, George MacDonald, Lewis Carroll, Kenneth Grahame, Mervyn Peake, August Strindberg, Franz Kafka, and Ursula LeGuin. How to read imaginative literature in general, this kind of literature in particular will be emphasized, and with special attention paid to the fictive uses of myth, symbol and metaphor.
- 243 **THE ORACLE & THE SATYR'S DANCE: AN INTRODUCTION TO MYTH AND MYTH-MAKING (4)**
 In general, an introduction to the nature & function of myth; in particular, an attempt to learn something more about our separate selves — female, male & mutually human — as well as about our collective cultural history. Both purposes will be carried on by exploring the two powerful, curiously complementary, endlessly live myths of Apollo & Dionysus.
- 311 **AMERICAN WOMEN'S STUDIES I (5)**
 Prereq: History 103 or 104 or English 216 or 217 or another Women's Studies course. Women's role in American society from Colonial times to the mid-nineteenth century. Emphasis on changing sex roles for both women and men as a result of changes in the structure of the family, immigration, urbanization, expansion of the frontier, education, religion, development of the nation, and industrialization, including a focus on the relationships among sex, race and class. (Also offered as Women's Studies 311.)
- 312 **HUMAN USE OF LANGUAGE (5)**
 A comparison of the perspectives of philosophy, linguistics, psycholinguistics, sociolinguistics and literary and rhetorical criticism. Topics to be examined include meaning, language structure, speech, language acquisition and language use.
- 313 **AMERICAN WOMEN'S STUDIES II (5)**
 Prereq: History 103 or 104 or English 216 or 217 or another Women's Studies course. Factors influencing the female gender role as it changed in the last century and a half from the Cult of True Womanhood to the Liberated Woman. Emphasis on the impact of changing modes of American capitalism, women's efforts for equal rights and social reform, changing patterns of fertility and family structure, women's increased participation in the work force, and changes in conceptions of both women's and men's roles in the domestic sphere. (Also offered as Women's Studies 313.)
- 314 **CULTURE AND COGNITION (5)**
 Prereq: Fairhaven 118 or Anth 201. This course begins with the view that culture is a system of knowledge. An exploration of how cultural knowledge is related to perception, language, styles of thinking, social relationships and the classification of nature.

- 317 **SYMBOLIC LOGIC (4)**
Prereq: Fairhaven 123. A first course in the formal study of concepts and their extensions; elementary propositional forms; logical relations; and the algebra of classes.
- 318 **ART HISTORY: THE ARTISTS (4)**
An examination of paintings from different periods in the history of art, with an emphasis on works that reveal the creative methods and personal visions of the artist. Study of diaries and journals of artists, biographies and related literature.
- 321 **NEUROSIS AND CIVILIZATION (5)**
Prereq: prior study in one or more social sciences. The study of personal suffering and alienation as dimensions of modern consumer society. The work of contemporary Freudian, Marxist and other social theorists will be examined with attention to the issues of individualism, social welfare and mass society.
- 329 **WOMEN IN MODERN ECONOMIC LIFE (4)**
Prereq: Econ 201 or equivalent. A look at the ways in which modern capitalism affects women in their personal and public lives (e.g., education, marriage, divorce, fertility, labor force participation, etc.), and how capitalism utilizes the various capacities and functions of women as a distinct group. (Also offered as Women's Studies 329.)
- 330 **CHINA TODAY (5)**
Prereq: Social Perspectives (Fairhaven 102) or Historical Perspectives (Fairhaven 103) or equivalent. Life in the People's Republic: the family, the educational system, health care and work. An historical overview of the political and economic systems of China, including analyses of contemporary life.
- 331 **INDIVIDUALISM AND CONFORMITY IN THE AMERICAN CHARACTER (4)**
Prereq: at least one course in American history. An analysis of selected historical, analytical and literary documents; aimed at increased understanding of past and present cultural forces which push the national character toward individualism and/or conformity.
- 332 **WORK (4)**
An interdisciplinary study in which we examine the meaning, necessity and value of our basic activity. Readings will be drawn from philosophy, psychology, sociology, political science and literature, and will include Hannah Arendt, *The Human Condition*; Studs Terkel, *Working*; Barbara Garsen, *All the Live Long Day*; *On the Job* (short fiction about work by contemporary American writers).
- 333 **LIFE OF MEN (5)**
Prereq: prior study of human development. Study of the male life cycle. Interaction of historical context and personal growth throughout the male life span; including family life, sex-role, adaptation to stress, work, creativity, aging and community activity. Small group exercises, written work and autobiographical study.
- 334 **THE THIRD WORLD ON THE MOVE (5)**
Prereq: Social Perspectives (Fairhaven 102), Historical Perspectives (Fairhaven 103) or history/political science background. The dynamics of contemporary political movements of national liberation in Africa, Asia and Latin America. A case study approach to the movements will be undertaken.
- 335 **MAO'S MARXISM (5)**
Prereq: Social Perspectives (Fairhaven 102), Historical Perspectives (Fairhaven 103) or related courses. How Marxism-Leninism was re-interpreted by Mao Tse-tung to fit the conditions of China and how Mao's thought shaped the Chinese Revolutionary experience.
- 336 **SEARCH FOR A METHOD: ADVANCED SOCIAL THEORY (4)**
Prereq: Social Perspectives (Fairhaven 102) or equivalent. An attempt to understand individual social theorists and their theories from the past 300 years, through an examination of the assumptions underlying their views of societies and the people in them, and the implications of their theories both as analytical methods and as descriptions of the world.
- 337 **PAINTING TECHNIQUES (5)**
The fundamental grammar of painting: studies in water color, tempera, pastel, gouache, oil, acrylic, mixed media, and collage. How to stretch canvas, prepare panels, and size paper. Exploration of the nature of pigments, their relative permanence — how to grind and mix them. Examples of the techniques of such painters as Rubens, Van Dyke, Da Vinci, Degas, Renoir, Rothko.
- 350 **FORM AND STYLE IN MUSIC (3)**
A study of musical forms and stylistic characteristics within the context of an historical perspective including the effects of society, technology and functional usage on the evolution of music as an art.
- 351 **NEZ PERCE PEOPLE I (5)**
Prereq: at least one college course in history, anthropology, historical perspectives, or cross-cultural perspectives. The first quarter of this course surveys the history and ethnography of the Nez Perce to 1877. Joseph's *Nez Perce Indians and the Opening of the Northwest* will be the primary text.
- 352 **NEZ PERCE PEOPLE II (5)**
Prereq: Nez Perce People I (Fairhaven 351). The second quarter of this course reviews tribal history since 1877, requires an extensive research paper, and concludes with a ten-day retracing of the Nez Perce retreat through Montana, Idaho, Oregon, Washington. Field trip involves camping.
- 353 **COMPARATIVE SOCIAL STRUCTURE (4)**
Prereq: Nature of Culture (Fairhaven 118) or Anth 201 equivalent. Human society comes in many diverse shapes and sizes. This course will compare functional and structural regularities which underly different cultural patterns.
- 354 **RUSSIAN LITERATURE I: BEFORE THE REVOLUTION (4)**
An introduction to the great imaginative writing of the 19th and 20th centuries to 1918. Selected work by the following will be considered: Pushkin, Gogol, Lermontov, Goncharov, Turgenev, Dostoevsky, Karolina Pavlova, Tolstoy, Chekhov, Gorky.
- 355 **RUSSIAN LITERATURE II: AFTER THE REVOLUTION (4)**
Readings in chiefly prose works that dramatize continuity and change in the post-revolutionary period. Plausible texts: Biely, Gladkov, Pilnyak, Babel, Zamiatin, Pilnyak, Bulgakov, Solzhenitsyn.
- 411 **THE CONSTITUTION AND AMERICAN SOCIETY I (6)**
Study of constitutional law and the way in which the Supreme Court construes the constitution in addressing major social and political questions. Critical reading and analysis of court opinions. Questions of power distribution and conflict among the three branches of the federal government and between the states and federal government.
- 412 **THE CONSTITUTION AND AMERICAN SOCIETY II (6)**
Recommended preparation: Fairhaven 411. Study of constitutional law and the way in which the Supreme Court construes the constitution in addressing major social and political questions. Critical reading and analysis of court opinion. Individual rights in conflict with government regulation.

413 RED MAN'S LAND, WHITE MAN'S LAW (5)

Study of the legal history of the status of American Indians with emphasis on questions of Indian sovereignty and control of land and natural resources. Using Supreme Court decisions and other resources, consideration of the historical development of these issues and the current controversy which surrounds them today.

414 ENVIRONMENTAL LAW (5)

Survey study of major areas of environmental law with emphasis on legal and policy conflicts which have gone to court for resolution.

421 THE OLDER WOMAN IN AMERICA (4)

A study of life styles and problems of women, late middle age through older adulthood, in American society.

422 CONCEPTS OF AGING IN THE HUMANITIES (5)

An attempt to understand the process of human aging through the perspectives of film, literature, philosophy and religion.

424 AMERICAN INDIAN RELIGION AND NATURE (5)

Prereq: one course in anthropology or ethnic studies plus one course in environmental studies or American history. Three tribes are selected for study of their religion and how their beliefs influenced attitudes and practices toward the earth. The object is to better understand white culture rather than to appropriate a native American world-view. Indian practices are studied and compared with white myths about ecological Indians living "in harmony with Nature." Modern environmental problems and conflicts are assessed.

425 THE AMERICAN SHORT STORY (3)

Discussion and analysis of the American short story from its beginnings to the present. Selected works by Nathaniel Hawthorne, James Thurber, Norman Mailer, Katherine Ann Porter and others.

417 RHETORIC OF FEMINISM (4)

Prereq: background in rhetorical theory of women's studies. An examination of models of rhetorical criticism from the perspectives of their usefulness for studies of female orators and feminist rhetoric. Will include a historical survey of feminist ideas and modes of persuasion and the specific study of selected individuals, e.g., Mary Wollstonecraft, Elizabeth Cady Stanton, Charlotte Perkins Gilman, and contemporary feminists. May also be taken as Speech 492.

418 EDUCATION IN AMERICA, CHINA AND CUBA (5)

Prereq: Perspective Courses (Fairhaven 102-107) and/or education courses. A critical examination of how the dynamics of capitalism and communism have shaped the various educational systems, and how the systems affect the participants.

430 SEMINAR IN ALFRED N. WHITEHEAD (4)

Prereq: prior work in philosophy. A close reading and discussion of selected philosophical writings of Whitehead. Some work with *Process and Reality*.

431 BLACK LEADERS AND THE QUEST FOR JUSTICE IN AMERICA (5)

Prereq: Fairhaven Social Perspectives (Fairhaven 102) or Historical Perspectives (Fairhaven 103) or Cross-Cultural Perspectives (Fairhaven 107) or two classes in U.S. history. U.S. history survey attempting to view the nation and its institutions from a black viewpoint by reading biographies and autobiographies of leaders: Malcolm X, Paul Robeson, Booker T. Washington, Frederick Douglass, Angela Davis, W.E.B. DuBois, Marcus Garvey, Harriet Tubman, Sojourner Truth, Martin Luther King, Nat Turner. Attention is given to the uses and limits of biography as history.

432 MICROBIOGEOCHEMISTRY (3)

A specialization or major in biology, geology, chemistry, geography and related sciences. Focus on small scale interactions between living organisms and their geochemical environment. Students will be expected to prepare several case studies for presentation to the class. Relations to human affairs, pollution, mineral resources, etc., will also be stressed.

433 FREUD AND PSYCHOANALYSIS (4)

Prereq: basic psychology or human development course. The writings of Freud and his major followers and critics. Attention to the historical context of the writings and the relationships of psychoanalysis to critical social theory.

Independent Study (Variable Credit)

200
300
400

By arrangement. Open to all students: fall, winter and spring quarters. Registration by Fairhaven College Independent Study Permit card. Student-faculty independent study contracts must be filed and approved at Fairhaven within the first two weeks of each quarter.

Special Topic Seminars

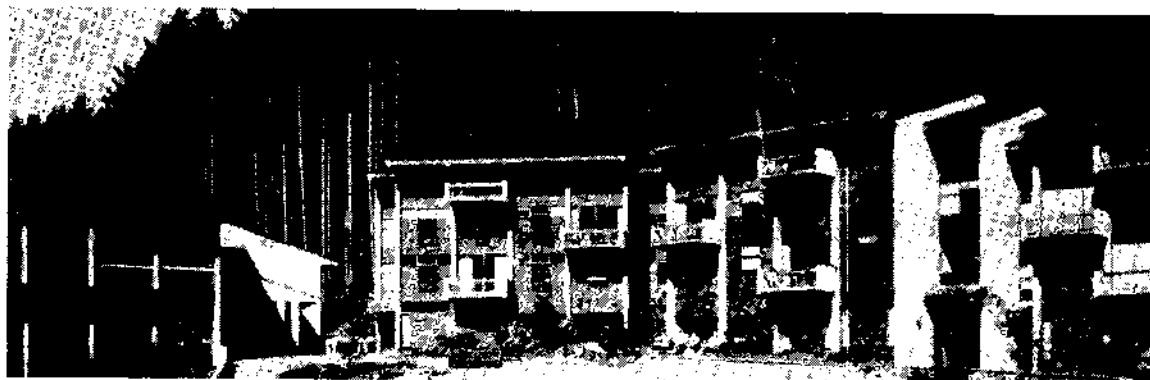
Open to all students. Full descriptions and credits will be announced prior to registration in the Fairhaven College Quarterly. SPECIAL TOPIC AREAS ARE:

290/490 Current Issues
291/491 Scientific Inquiry
292/492 Social Critique
293/493 Individual Development
294/494 Creative Process
295/495 Cultural Understanding
298/498 Authors/Artists and Their Work
299/499 Learning and Learning Theory

Experimental Courses

297
497

Open to all students. Full descriptions and credits will be announced prior to registration in the Fairhaven College Quarterly.





FOREIGN LANGUAGES & LITERATURES

College of Arts and Sciences

YOUR CAREER

In these days of closer relationships among the countries of the world, foreign language training is invaluable. The ability to speak and understand foreign languages makes possible direct contact with the people, culture and literature of other lands, contributing to international understanding as well as personal development. Given the increased mobility of today's youth and the low transportation fees, it is not at all unlikely that sooner or later you will find yourself in some foreign land.

There are various vocational opportunities for people trained in foreign languages, often in combination with other fields, since the schedules for a foreign language major provide for 35 to 45 per cent elective work. Traditionally, Western's foreign language department has placed a great deal of

emphasis on the preparation of foreign language teachers. In addition to our continuing concern in the area of teacher preparation, we also encourage students to plan for careers in other areas in which the command of a foreign language is not only an asset but sometimes essential: library work, journalism, communications, business, secretarial work in connection with foreign commerce, music, motion pictures, the theater, and various phases of government work, including the diplomatic service. There is also an increasing demand for translators and interpreters. Language students are encouraged to combine their interest in foreign languages with other academic areas by electing a program of supporting courses in another field or a second major or minor, depending upon their own particular vocational objectives. Because of the policy of awarding credit for proficiency, it is often possible for advanced language students to

Foreign Languages/Literatures

complete more than one major without having to spend additional time in college.

DEGREE PROGRAMS

The Department of Foreign Languages and Literatures offers a well-balanced curriculum of language, literature and civilization courses on both the undergraduate and graduate level. A student in the department may earn a Bachelor of Arts degree in French, German, Greek, Latin, Russian and Spanish. Elementary and intermediate courses in Chinese and Japanese have recently been added to the department's offerings. Other languages are available on a programmed, self-instructional basis. In our courses all linguistic skills are stressed: understanding, speaking, reading and writing. Special reading courses are also offered for students wishing to increase their reading skill rapidly. In the civilization and literature courses, active use of the target language remains a primary objective. Western's modern electronic language laboratories and other audio-visual facilities are available to students for individual use as well as for class use.

ADVANCED PLACEMENT CREDIT

If you have begun your foreign language study in high school, you may be granted extra university credit upon completion of foreign language courses at Western. Application for advanced placement credit is to be made to the departmental office, Humanities 231.

FOREIGN STUDY

Foreign language students are encouraged to increase their language proficiency through foreign travel, residency and study. For information on foreign study programs, apply to the director of the Foreign Study Office, Old Main 400.

GRADUATE DEGREES

Students who wish to pursue their language studies on the graduate level may, upon satisfactory completion of 48 credit hours, earn a Master of Education degree in French, German or Spanish. Graduate courses are given each summer so that the M.Ed. candidate may earn his or her degree after having been enrolled on campus for at least three summers. An informal atmosphere and a small student/faculty ratio make Western Washington University a particularly attractive place for scholarly endeavor and the maximum development of individual potential and interests. For further details

concerning our graduate program, please refer to WWU's *Graduate Bulletin*.

FOREIGN LANGUAGES AND LITERATURES FACULTY

- WALTER L. ROBINSON (1960) Chairman. Professor of German. BA, MA, PhD, University of Texas.
- DARREL W. AMUNDSEN (1969) Professor of Classics. BA, Western Washington State College; MA, University of Washington.
- HERBERT LE ROY BARRD, JR. (1967) Associate Professor of Spanish. AA, Santa Ana Junior College; AB, Pomona College; AM, PhD, University of Chicago.
- ROBERT S. BALAS (1969) Associate Professor of French. BA, Upsala College; MA, University of Nebraska; PhD, University of Wisconsin.
- GUADALUPE GARCIA BARRAGAN (1965) Associate Professor of Spanish. BA, Colegio Aquiles Serdan; BEd, Instituto America; MA, Normal Superior Nueva Galicia; PhD, Université de Paris III.
- HENRICH BROCKHAUS (1965) Associate Professor of German. BA, MA, University of British Columbia; PhD, University of Washington.
- *WILLIAM H. BRYANT (1970) Associate Professor of French. BA, University of Hawaii; PhD, University of Missouri.
- WILLIAM E. ELMENDORF (1958) Assistant Professor of Russian and Spanish. BS, University of Puget Sound; MA, University of Washington.
- EUNICE D. FABER (1959) Associate Professor of Spanish. AB, Howard University; MA, PhD, Catholic University.
- ARTHUR S. KIMMEL (1969) Associate Professor of French. AB, MA, University of Miami; PhD, University of California, Berkeley.
- VLADIMIR MILICIC (1962) Assistant Professor of Russian and Linguistics. Certificate of Baccalaureate, Gymnasium for Boys, Belgrade; MA, University of Chicago.
- KURT W. MOERSCHNER (1964) Associate Professor of German. BComm, BA, Sir George Williams University, Canada; MA (Psychology), MA (German), PhD, University of Colorado.
- CHARLES PARAM (1969) Professor of Spanish. BA, Oklahoma State University; MA, PhD, University of Arizona.
- DANIEL RANGEL-GUERRERO (1969) Associate Professor of Spanish. AA, Sierra College; BA, Stanford University; MA, PhD, University of Oregon.
- NICOLE B. RAPOZA (1968) Associate Professor of French. AA, Long Beach City College; BA, Long Beach State College; MA, PhD, University of California, Berkeley.
- *RUDOLF WEISS (1970) Professor of German. BA, BA in Ed, Western Washington State College; MA, PhD, University of Colorado.

Students majoring in one foreign language may elect a minor in a second language. At least nine upper-division credits in any concentration must be taken in residence.

*On Sabbatical Leave Winter 1980

BACHELOR OF ARTS IN EDUCATION*Teaching Competence*

Recommendation for teaching competence normally requires completion of the B.A. in Education foreign language major with a grade of 2.5 or better. Teaching competence recommendations are not normally issued to persons who have completed only the minimal requirements for a foreign language minor; however, those who have achieved a level of proficiency beyond the minor may be granted qualified statements of competency to teach a foreign language on the beginning level pending additional course work during the fifth year.

Major — French

Elementary/Secondary: 52-55 credits in courses above 200.

- 10 credits in courses numbered 200 or above
- 20-25 credits in courses numbered 300 or above
- Foreign Language Education 420
- Foreign Language Linguistics 410 or French 411 a, b or c
- Remainder of courses to be taken under advisement of French section.

Major — German

Elementary/Secondary: 50 credits in courses above 200.

- Courses numbered 201, 202, 203, 301, 302, 305, 314, 340, 401, 402
- German 331 or 332
- One of the following: German 341, 342, 343
- German 442 or 450
- Foreign Language 410, 420

Major — Russian

Elementary/Secondary: 45-50 credits in courses above 200.

- Courses numbered 201, 202, 203, 301, 302, 330, 340, 341, 342
- 12 additional 300 and 400 level conference courses must be arranged through the department

Major — Spanish

Secondary: 45-50 credits in courses above 200.

- Courses numbered 201, 202, 203, 340
- Four courses from Spanish 301, 302, 314, 401, 402
- Foreign Language Education 420
- Foreign Language Linguistics 410
- Three additional courses numbered in the 300s and two courses in the 400s selected under advisement

Elementary: 45 credits.

- Courses numbered 201, 202, 203, 301, 302, 401, 402
- Foreign Language Education 420
- Foreign Language Linguistics 410
- Electives under departmental advisement

Major — Latin Secondary

- 45 credits selected under advisement

Minor — A Modern Language

- 19-25 credits in courses numbered 201 and above in one modern foreign language, including six credits in courses numbered 300 or above; elementary education minors expecting competency include 301, 302 and 314

Minor — Greek or Latin

- 12 credits beyond the first year in college Latin or Greek

Minor — Classical Studies

- Classics 350
- 15 credits from Classics 411, 421, 422, 431, 441
- 6 credits from History 411, 412, 413, 414; Phil 304

Minor — Linguistics

- Linguistics 201, 202, 301, 302, 303
- 6 credits selected under departmental advisement in a foreign language

BACHELOR OF ARTS**Major — Greek or Latin**

- 45 credits in courses selected under advisement

Major — French 70-75 credits

55 credits in French plus 15-20 credits in supporting courses by advisement.

- 10-15 credits in courses numbered 200 or above

Foreign Languages/Literatures

- 20-25 credits in courses numbered 300 or above
- 20 credits in courses numbered 400 or above
- Supporting courses: 15-20 credits of electives under departmental advisement

Major — German

66 credits including 21 credits in supporting courses.

- Courses numbered 201, 202, 203, 301, 302, 305, 314, 340, 401, 402
- German 331 or 332
- Two of the following: German 341, 342, 343
- German 442 or 450
- Supporting courses: a program of 21 credits in other languages, history, geography, philosophy, English, linguistics, political science, or speech or in any other areas under departmental advisement

Major — Russian

45 credits in Russian plus 21 credits in supporting courses by advisement.

- Courses 201, 202, 203, 301, 302, 330, 340, 341, 342
- Additional 300 and 400 level conference courses arranged through department
- Supporting courses: a program of 21 credits for above major in other languages, history, geography, philosophy, English, linguistics, or speech, and in other areas under departmental advisement

Major — Spanish 66 credits

- 45 credits in courses numbered 201 and above, plus supporting courses
- Spanish 340
- Three courses from Spanish 301, 302, 314, 401, 402; to include one 400-level course
- Three courses from Spanish 341, 342, 343, 344, 345, 346, 348, 353
- Two courses from Spanish 450
- Electives under departmental advisement
- Supporting courses: a program of 21 credits for above major in other languages, history, geography, philosophy, English, linguistics, or speech, and in other areas under departmental advisement

Minor — A Modern Foreign Language

- 19-25 credits in courses numbered 201 and above in one of the modern languages, including six credits in courses numbered 300 and above

Minor — Greek or Latin

- 12 credits beyond the first year in Latin or Greek

Minor — Classical Studies

- Classical Studies 350
- 15 credits from Classical Studies 411, 421, 422, 431, 441
- 6 credits from History 411, 412, 413, 414; Phil 304

Minor — Linguistics

- Linguistics 201, 202, 301, 302, 303
- 6 credits selected under departmental advisement in a foreign language

DEPARTMENTAL HONORS

In addition to the general requirements for all honors students, a foreign language major who wishes to graduate "with honors" must complete 20 credits in upper-division honors work in one foreign language for the Arts and Sciences major or 17 credits in upper-division honors work in one foreign language for the teacher education major.

GRADUATE STUDY

For a concentration in French, German, or Spanish leading to the Master of Education degree, see *Graduate Bulletin*.

COURSES IN FOREIGN LANGUAGES

GENERAL COURSES

210 LINGUISTICS FOR EVERYBODY (5)

Basic elements, principles, problems and applications of language and linguistics. Summers only.

237 FOREIGN STUDY (2-5)

(See 437.)

309 DIRECTED INSTRUCTION IN MODERN FOREIGN LANGUAGES (3)

Prereq: intermediate level experience in a formal college course in one or more modern foreign languages required. A maximum of nine credits may be earned in this sequence. Fundamentals of the language; pronunciation, aural comprehension, reading and grammar. Only those languages for which established curricula materials are available will be offered.

337 FOREIGN STUDY (2-5)

(See 437.)

367 FOREIGN LITERATURE IN TRANSLATION (3)

In-depth study of foreign literature in translation. When topics vary (i.e., poetry, short story, etc.), course may be repeated. See also foreign literature in translation courses under French, German, Russian, and Spanish, and under East Asian Studies.

379 STRUCTURALISM (3)

Study in various aspects of structuralism as it relates to analysis of literature (and language). Reading and discussing of actual examples of applied method. Actual application to result in writing of one or more papers.

410 INTRODUCTION TO APPLIED LINGUISTICS FOR FOREIGN LANGUAGE MAJORS (4)

Prereq: six credits in one modern foreign language beyond the second year. Comparison of structures (phonological, morphological and syntactic) of English and other languages.

420 METHODS AND MATERIALS FOR TEACHING MODERN FOREIGN LANGUAGES (4)

Prereq: six credits in one modern foreign language beyond the second year. Must be taken prior to student teaching in a foreign language. An introduction to topics of concern to the secondary or elementary teacher of foreign language and the literature of foreign language education. Opportunity for practicing various teaching activities: tape preparation, lesson organization, text adaptation, and presentations in a micro-teaching framework. Observation of language instruction in local schools.

437, 337, 237 FOREIGN STUDY (2-5 ea)

These courses are offered only through the WWU Study Abroad program. Contact Foreign Study Office, Old Main 400, for information.

For courses taught in translation, see *Classical Studies* (list below); *Foreign Lang 367*; *French 367*; *German 367, 375*; *Russian 367*; *Spanish 367*; and *East Asian 367*.

CHINESE**101, 102, 103 ELEMENTARY CHINESE (5 ea)**

Each course prerequisite to the next. Fundamentals of the language; pronunciation, grammar, aural comprehension, reading and speaking. Use is made of a combination of formal instruction, small tutorials led by native speakers of Chinese, and self-instruction using cassette recorders and other materials.

201, 202, 203 INTERMEDIATE CHINESE (5 ea)

Prereq: Chinese 103 or equivalent. Review of the fundamentals of the language; emphasis on acquisition of oral and written vocabulary; intensive reading and discussion in Chinese of graded materials in modern Chinese.

300 DIRECTED INDEPENDENT STUDY (1-6)

Prereq: 35 credits (or equivalent) in Chinese on the 200 level. Individual study of a topic not normally covered in format courses.

CLASSICAL STUDIES

[The following courses require no knowledge of Latin or Greek as prerequisites.]

101 LATIN AND GREEK IN CURRENT USE (2)

A workbook course applying the principles of word derivation from Latin and Greek to the practical enlargement of the student's English vocabulary.

350 GREEK AND ROMAN MYTHOLOGY (3)

Important classical myths seen in the context of classical literature; influence on Western literature.

411 GREEK AND ROMAN EPIC (3)

Prereq: Lib St 121 or Eng 131 or Classical Studies 350. Origins, development, nature of classical epic; readings from Homer, Apollonius of Rhodes, Virgil, Lucan.

421 GREEK AND ROMAN TRAGEDY (3)

Prereq: Lib St 121 or Eng 131 or Classical Studies 350. Origins and development of earliest European drama, thematic and structural principles of major dramatists; influence on later Western literature.

422 GREEK AND ROMAN COMEDY (3)

Prereq: Lib St 121 or Eng 131 or Classical Studies 350. Nature of classical comedy; readings from Aristophanes, Menander, Plautus, Terence.

431 THE CLASSICAL NOVEL (3)

Prereq: Lib St 121 or Eng 131 or Classical Studies 350. Readings from the Greek romances, Petronius' "Satyricon," Apuleius' "The Golden Ass," earliest extant novels in Western literature.

441 ROMAN SATIRE (3)

Prereq: Lib St 121 or Eng 131 or Classical Studies 350. Roman satire as a distinct genre in Latin literature; influence on later satiric tradition; readings from Juvenal, Horace, Seneca, Persius, Lucian.

DUTCH**101, 102, 103 ELEMENTARY DUTCH FOR COMPREHENSION AND CONVERSATION (3 ea)**

Each course prerequisite to the next. A beginning course in Dutch which emphasizes development of listening comprehension and speaking competence. Offered only through Continuing Education.

FOREIGN LITERATURES IN TRANSLATION

See *Foreign Lang 367*; *French 367*; *German 367, 375*; *Russian 367*; *Spanish 367*; *East Asian 367*.

These courses are based on readings in foreign literature in English and no knowledge of foreign language is required for participation.

FRENCH**101, 102, 103 ELEMENTARY FRENCH (5 ea)**

To be taken in sequence. Fundamentals of speaking, reading, writing and understanding French.

103F FRENCH GRAMMAR REVIEW OF THE FIRST YEAR (3)

Recommended for students with two years of high school French or more if they do not qualify for 201. A rapid review of basic skills needed for intermediate French. To be offered fall quarter only.

105 INTENSIVE FIRST-YEAR FRENCH (15)

This intensive course is intended for those who have had no experience or very little contact with French. It covers one full academic year of French, accentuating speaking and comprehending, and is based upon a special series of French films.

201, 202 INTERMEDIATE FRENCH (5 ea)

Prereq: French 103 or two years of high school French; to be taken in sequence. Continuation of skill development begun in Elementary French, with additional work in vocabulary acquisition and grammar. Intensive reading and discussion in French of short passages from modern French texts.

Foreign Languages/Literatures

- 205 INTERMEDIA TECONVERSATION (2)**
Prereq: French 103. Conversational practice involving situations of daily life.
- 237 FOREIGN STUDY (2-5)**
(See French 437.)
- 280 FRENCH FOR A READING KNOWLEDGE (4)**
For students needing a reading knowledge of the language. Fulfills graduate reading requirement when completed successfully; graduate students are advised to take the course P/NP.
- 300 DIRECTED INDEPENDENT STUDY (1-6)**
Prereq: 10 credits (or equivalent) of French on the 200 level. Individual study of a topic not normally covered in formal courses.
- 301 GRAMMAR REVIEW AND WRITTEN EXPOSITION (5)**
Prereq: French 202 or equivalent. Course designed to give the advanced student practice in French written expression and to review French grammar. Regular written assignments, study of grammar, and vocabulary building.
- 305 ORAL EXPOSITION (5)**
Prereq: French 202 or equivalent; may be taken concurrently with French 311. The advanced student practices expressing himself orally in French. Students give expository talks and discuss articles taken from current French periodicals. Vocabulary building.
- 311 INTRODUCTION TO LINGUISTIC STUDIES (5)**
Prereq: French 202 or equivalent. Linguistics, phonetics, stylistics.
- 330 FRENCH CIVILIZATION (3)**
Prereq: French 301. Topics in contemporary French life.
- 337 FOREIGN STUDY (2-5)**
(See French 437.)
- 340 INTRODUCTION TO FRENCH LITERATURE STUDIES I (5)**
Prereq: French 301. An introduction to literary analysis, *explication de texte* involving poetry, prose and drama from the works of major authors before 1800.
- 341 INTRODUCTION TO FRENCH LITERATURE STUDIES II (5)**
Prereq: French 301 (340 recommended). An introduction to literary analysis, *explication de texte* involving poetry, prose and drama from works of major authors after 1800.
- 367 FRENCH LITERATURE IN TRANSLATION (3-5)**
Selected major works in French literature read and discussed in English. May be applied to a B.A. major in French only as a supporting course. When topics vary, the course may be repeated.
- 396a,b,c HONORS TUTORIAL (2-5 ea)**
- 400 DIRECTED INDEPENDENT STUDY (1-6)**
Prereq: 9 credits (or equivalent) in upper-division French. Individual study of a topic not normally covered in formal courses.
- 401 ADVANCED COMPOSITION AND GRAMMAR (5)**
Prereq: French 301 or 305. Advanced written and oral expression, identification and correction of phonological and grammatical problems.
- 411a,b,c STUDIES IN FRENCH LANGUAGE AND LINGUISTICS (5 ea)**
Prereq: 5 credit hours at 300 level. This course deals in depth with specific problems in language and linguistics, such as: comparison of structures (phonological, morphological, syntactic) of English and French; development of phonology, morphology and syntax from Latin to modern French; advanced problems in phonetics and stylistics. Topics — (a) History of the French Language; (b) Applied Linguistics; (c) Phonetics and Stylistics.
- 425 TEACHING-LEARNING PROCESSES IN ELEMENTARY FRENCH (2)**
Prereq: permission of department and six credits upper-division French. Practicum in course preparation, classroom and language laboratory procedures, materials, evaluation and counseling. May be repeated. S/U grading only.
- 437, 337, 237 FOREIGN STUDY (2-5)**
Prereq: for French 237, French 103 or equivalent; for French 337, French 202 or equivalent; for French 437, nine credits in upper-division French. These courses are offered only through the WWU Study Abroad program. Contact Foreign Study Office, Old Main 400, for information.
- 450 SEMINAR IN FRENCH LITERATURE (3-5)**
Prereq: 9 credits in upper-division French and permission of department. Major authors and movements. Since topics vary, the course may be repeated.
- 451a,b,c LITERARY GENRE STUDIES (5 ea)**
Prereq: 5 credits in 340-341. Topics: (a) theory of prose and its development through the novel; (b) theory of drama and its development; (c) theory of poetry and its development.
- 452a,b,c LITERARY PERIOD STUDIES (5 ea)**
Prereq: 5 credits in 340-341. Topics: (a) Medieval and Renaissance: French literature and civilization from 1100-1630; (b) 17th and 18th Centuries: French literature and civilization from 1630-1802; (c) 19th and 20th Centuries: French literature and civilization from 1802-present.
- 496a,b,c HONORS TUTORIAL (2-5 ea)**
- ### GRADUATE COURSES
- The following courses are offered for graduate credit for persons enrolled in the department's graduate program. For course descriptions and other information about the graduate program, see the current Graduate Catalog.
- [Graduate courses are offered summers on alternating basis.]
- 300 SPECIAL PROJECTS (1-6)**
Individual conference.
- 501, 502 FRENCH PHONOLOGY, MORPHOLOGY AND SYNTAX (4 ea)**
- 504 HISTORY OF THE FRENCH LANGUAGE (4)**
- 505 APPLIED FRENCH LINGUISTICS (4)**
- 510 STUDIES IN THE FRENCH NOVEL (4)**
- 511 STUDIES IN DRAMA (4)**
- 512 STUDIES IN FRENCH POETRY (4)**
- 530 CIVILIZATION AND CULTURE OF THE FRENCH-SPEAKING WORLD (4)**
- 532 THE TEACHING OF FRENCH (4)**
- 550 GRADUATE SEMINAR (4 ea)**
- 555 WORKSHOP IN THE TEACHING OF FRENCH (4 ea)**
- ### GERMAN
- 101, 102, 103 ELEMENTARY GERMAN (5 ea)**
Each course prerequisite to the next. Fundamentals of the language; pronunciation, grammar, aural comprehension, reading and speaking.

- 104 REFRESHER COURSE IN ELEMENTARY GERMAN (5)**
 Recommended for students with two years of high school German, or more if they do not qualify for German 201. A rapid review of basic skills needed for intermediate German.
- 180 GERMAN FOR A READING KNOWLEDGE I (3)**
 Not open to students with more than one year of college German. Introductory course for students needing a reading knowledge of the language. See also German 280.
- 201, 202, 203 INTERMEDIATE GERMAN (5,5,3)**
 Prereq: German 103 or two years high school German or equivalent; German 201 prerequisite to 202; German 202 prerequisite to 203. Review of the fundamentals, reading and conversation.
- 230 GERMAN CULTURE AND CIVILIZATION STUDY TOUR (8)**
 A culture study tour of Germany which includes a stay in East Germany, Berlin and different parts of West Germany. Sites are carefully chosen to provide a means of contrasting differences in culture and life styles between Americans and Germans as well as between West and East Germans. Intended for beginning students of German. S/U grading. Summers only. Next offered summer 1981.
- 237 FOREIGN STUDY (2-5)**
 (See German 437.)
- 280 GERMAN FOR A READING KNOWLEDGE II (3)**
 Prereq: German 180 or one year of college German or equivalent. For fulfillment of master's degree reading requirement.
- 300 DIRECTED INDEPENDENT STUDY (1-6)**
 Prereq: 13 credits (or equivalent) of German on the 200 level. Individual study of a topic not normally covered in formal courses.
- 301, 302 THIRD YEAR COMPOSITION (3 ea)**
 Prereq: German 203 or equivalent; German 301 prerequisite to 302. Written and oral composition and grammar, and vocabulary building.
- 305 GERMAN CONVERSATION (3)**
 Prereq: German 301. Conversation practice involving situations of daily life; topics of contemporary Germany. Vocabulary building.
- 314 PHONETICS (3)**
 Prereq: German 203. A course designed to improve the student's pronunciation and intonation, to familiarize him with phonetic transcription, and to develop an awareness of problems involved in teaching sounds of German.
- 330 GERMAN CULTURE AND CIVILIZATION STUDY TOUR (8)**
 Prereq: German 302 or equivalent. A culture study tour of Germany which includes a stay in East Germany, Berlin and different parts of West Germany. Sites are carefully chosen to provide a means of contrasting differences in culture and life styles between Americans and Germans as well as between West and East Germans. Intended for intermediate/advanced students. An opportunity will also be provided for the improvement of language skills. S/U grading. Summers only. Next offered summer '81.
- 331 CIVILIZATION OF GERMANY THROUGH THE NINETEENTH CENTURY (3)**
 Prereq: German 201, 202, 202 or equivalent. Significant elements of German civilization presented through German texts.
- 332 GERMAN CIVILIZATION TODAY (3)**
 Prereq: German 201, 202, 203 or equivalent. Significant elements of German civilization.
- 337 FOREIGN STUDY (2-5)**
 (See German 437.)
- 340 INTRODUCTION TO GERMAN LITERATURE (3)**
 Prereq: 10 credits of second-year German or equivalent. Selected works of major German authors, with emphasis on reading improvement and methods of textual interpretation.
- 341 NINETEENTH CENTURY GERMAN LITERATURE I (3)**
 Prereq: German 340. Emphasis on the Romantic Movement.
- 342 NINETEENTH CENTURY GERMAN LITERATURE II (3)**
 Prereq: German 340. Emphasis on realism.
- 343 EIGHTEENTH CENTURY GERMAN LITERATURE (3)**
 Prereq: German 340. Classical period of German literature as reflected in a major work of Lessing, Goethe and Schiller.
- 367 GERMAN LITERATURE IN TRANSLATION (3)**
 Selections from eminent German authors read and discussed in English. May be applied to a B.A. major in German only as a supporting course. When topics vary, the course may be repeated.
- 375 MAIN CURRENTS IN MODERN FOREIGN LITERATURE — GERMAN (5)**
 A survey of German literature and civilization — readings and discussions in English. Intellectual, philosophical and social ideas as reflected in the literature of Germany as part of our Western heritage.
- 380 GERMAN FOR READING KNOWLEDGE AND RESEARCH (3)**
 Basic German for readings in chosen field of specialization for graduate students and others requiring access to German materials for research.
- 385a,b,c GERMAN CULTURE AND CONVERSATION (1 ea)**
 Prereq: German 201; may be repeated for credit. German culture through film, talks and song. General discussions of Germany and its culture, especially in contrast to our own. S/U grading only.
- 396a,b,c HONORS TUTORIAL (2-5 ea)**
- 400 DIRECTED INDEPENDENT STUDY (1-6)**
 Prereq: 9 credits (or equivalent) in upper-division German. Individual study of a topic not normally covered in formal courses.
- 401, 402 ADVANCED COMPOSITION AND GRAMMAR (3 ea)**
 Prereq: German 302.
- 425 TEACHING-LEARNING PROCESS IN ELEMENTARY GERMAN (2)**
 Prereq: permission of department and six credits upper-division German. Practicum in course preparation, classroom and language laboratory procedures, materials, evaluation and counseling. May be repeated. S/U grading only.
- 437, 337, 237 FOREIGN STUDY (2-5 ea)**
 Prereq: for 237, German 103 or equivalent; for 337, German 202 or equivalent; for 437, nine credits in upper-division German. These courses are offered only through the WWU Study Abroad program. Contact Foreign Study Office, Old Main 400, for information.
- 442 GERMAN LITERATURE IN THE TWENTIETH CENTURY (3)**
 Prereq: 9 credits in upper-division German. Selections reflecting development of recent German literature.

Foreign Languages/Literatures

450 STUDIES IN GERMAN LITERATURE (3)

Prereq: 9 credits in upper-division German or equivalent, and permission of department. Major authors and movements. Since topics vary, the course may be repeated.

456a,b,c HONORS TUTORIAL (2-5 ea)

GRADUATE COURSES

The following courses are offered for graduate credit for persons enrolled in the department's graduate program. For course descriptions and other information about the graduate program, see the current Graduate Catalog.

(Graduate courses are offered summers on alternating basis. Summer 1980: 502, 510a, 532. Summer 1981: 503, 510c, 504a [in Germany].)

500 SPECIAL PROJECTS (1-6)

Individual conference.

501 CULTURE AND CONVERSATION (4)

502 CULTURE AND CONVERSATION (4)

503 CULTURE AND CONVERSATION (4)

504 APPLIED GERMAN LINGUISTICS (4 ea)

510 SEMINAR IN LITERATURE (4 ea)

532 THE TEACHING OF GERMAN (4)

GREEK

101, 102, 103 ELEMENTARY GREEK (5 ea)

Each course prerequisite to the next. Fundamentals of grammar designed primarily to provide an elementary reading knowledge; selected readings from Plato's simpler dialogues.

111, 112, 113 NEW TESTAMENT GREEK (3 ea)

Greek 111 prerequisite to 112, 112 prerequisite to 113. Study of the basic grammar and vocabulary of the Koine dialect, to include New Testament and Patristic sources, with emphasis placed on the acquiring of a reading knowledge. Offered only through Continuing Education.

201, 202, 203 INTERMEDIATE GREEK (3 ea)

Prereq: Greek 103 or equivalent; to be taken in sequence. Review of fundamentals; readings from Plato's dialogues, the orators, the *Iliad* or *Odyssey*. Introduction to Greek civilization.

300 DIRECTED INDEPENDENT STUDY (1-6)

Prereq: 9 credits (or equivalent) of Greek on the 200 level. Individual study of a topic not normally covered in formal courses.

340 GREEK LYRIC POETRY (3)

Prereq: Greek 203 or equivalent. Historical survey of origins and development of the Greek lyric with readings from major writers.

341 GREEK TRAGEDY (3)

Prereq: Greek 203 or equivalent. Selected plays by Aeschylus, Sophocles and Euripides; history of Greek theatre and state production.

342 GREEK HISTORIANS (3)

Prereq: Greek 203 or equivalent. Selections from Herodotus and Thucydides; development of historical writing in Greece.

400 DIRECTED INDEPENDENT STUDY (1-6)

Prereq: 9 credits (or equivalent) in upper-division Greek. Individual study of a topic not normally covered in formal courses.

JAPANESE

101, 102, 103 ELEMENTARY JAPANESE (5 ea)

Each course prerequisite to the next. Fundamentals of the language; pronunciation, grammar, aural comprehension, reading and speaking. Use is made of a combination of formal instruction, small tutorials led by native speakers of Japanese, and self-instruction using cassette recorders and other materials.

201, 202, 203 INTERMEDIATE JAPANESE (5 ea)

Prereq: Japanese 103 or equivalent. Review of the fundamentals of the language; emphasis on acquisition of oral and written vocabulary; intensive reading and discussion in Japanese of graded materials in modern Japanese.

300 DIRECTED INDEPENDENT STUDY (1-6)

Prereq: 15 credits (or equivalent) in Japanese on the 200 level. Individual study of a topic not normally covered in formal courses.

KOREAN

101, 102, 103 ELEMENTARY KOREAN (5 ea)

Each course prerequisite to the next. Fundamentals of the language; pronunciation, grammar, aural comprehension, reading and speaking.

LATIN

101, 102, 103 ELEMENTARY LATIN (5 ea)

Each course prerequisite to the next. Fundamentals of grammar to provide a reading knowledge; selected readings from various Roman writers.

201, 202, 203 INTERMEDIATE LATIN (3 ea)

Prereq: Latin 103 or two years high school Latin; each course prerequisite to the next. Review of fundamentals; selected readings from various Roman writers; introduction to Latin civilization.

300 DIRECTED INDEPENDENT STUDY (1-6)

Prereq: 9 credits (or equivalent) in Latin on the 200 level. Individual study of a topic not normally covered in formal courses.

304 POST-CLASSICAL LATIN (3)

Prereq: Latin 203 or equivalent. Selected prose and poetry from the post-classical period.

340 LATIN LYRIC POETRY (3)

Prereq: Latin 203 or equivalent. Historical survey of origins and development of the Latin lyric, with special attention to the poems of Horace, Catullus and Ovid.

341 ROMAN DRAMA (3)

Selected plays of Plautus, Terence and Seneca; history and techniques of the Roman theatre.

342 ROMAN PHILOSOPHY (3)

Prereq: Latin 203 or equivalent. Selected readings with emphasis on the Stoics and Epicureans.

343 SILVER LATIN LITERATURE (3)

Prereq: Latin 203 or equivalent. Studies in literary traditions of the Early Roman Empire, including selections from Seneca, Pliny and Martial.

344 ROMAN HISTORY AND ORATORY (3)

Prereq: Latin 203 or equivalent. Readings from Sallust, Livy, Tacitus and Cicero's orations.

396a,b,c HONORS TUTORIAL (2-5 ea)

400 DIRECTED INDEPENDENT STUDY (1-6)

Prereq: 9 credits (or equivalent) of upper-division Latin. Individual study of a topic not normally covered in formal courses.

RUSSIAN

- 101, 102, 103 ELEMENTARY RUSSIAN (5 ea)
Each course prerequisite to the next. Fundamentals of the language; pronunciation, grammar, aural comprehension, reading and speaking.
- 201, 202, 203 INTERMEDIATE RUSSIAN (5 ea)
Prereq: Russian 103 or equivalent; to be taken in sequence. Review of fundamentals; speaking, reading, writing and understanding.
- 280 RUSSIAN FOR READING KNOWLEDGE AND RESEARCH (3)
A one-quarter course intended primarily to give the student of science and/or mathematics a reading knowledge of scientific Russian. Can be adapted to serve liberal arts students as well. Not applicable to a major or a minor except as a supporting course.
- 300 DIRECTED INDEPENDENT STUDY (1-6)
Prereq: 15 credits (or equivalent) of Russian on the 200 level. Individual study of a topic not normally covered in formal courses.
- 301, 302 THIRD YEAR COMPOSITION (3 ea)
Prereq: Russian 203 or equivalent; Russian 301 prerequisite to 302. Written and oral composition and grammar, and vocabulary building.
- 330 CIVILIZATION OF RUSSIA (3)
Prereq: Russian 201, 202, 203 or equivalent. Significant elements of Russian civilization presented through Russian texts.
- 340 INTRODUCTION TO RUSSIAN LITERATURE (3)
Prereq: 15 credits of second-year Russian or equivalent. Selected works of major Russian authors, with emphasis on reading improvement and textual interpretation.
- 341 NINETEENTH CENTURY LITERATURE I (3)
Prereq: Russian 340. Introduction to Pushkin, Lermontov, Gogol and Turgenev.
- 342 NINETEENTH CENTURY LITERATURE II (3)
Prereq: Russian 340. Introduction to Dostoevsky, Tolstoy, Chekov.
- 367 INTRODUCTION TO RUSSIAN LITERATURE IN ENGLISH (3)
Survey of history of Russian literature. May be applied to a B.A. major in Russian only as a supporting course.
- 396a,b,c HONORS TUTORIAL (2-5 ea)
- 400 DIRECTED INDEPENDENT STUDY (1-6)
Prereq: 9 credits (or equivalent) in upper-division Russian. Individual study of a topic not normally covered in formal courses.
- 496a,b,c HONORS TUTORIAL (2-5 ea)

SPANISH

- 101, 102, 103 ELEMENTARY SPANISH (5 ea)
To be taken in sequence. Fundamentals of speaking, reading, writing and understanding.
- 104 REFRESHER COURSE IN ELEMENTARY SPANISH (5)
Recommended for students with two years of high school Spanish, or more if they do not qualify for Spanish 201. A rapid review of basic skills needed for intermediate Spanish.
- 201, 202, 203 INTERMEDIATE SPANISH (5 ea)
Prereq: Spanish 103 or equivalent; to be taken in sequence. Review of fundamentals; speaking, reading, writing and understanding.
- 237 FOREIGN STUDY (2-5)
(See Spanish 437.)
- 300 DIRECTED INDEPENDENT STUDY (1-6)
Prereq: 15 credits (or equivalent) of Spanish on the 200 level. Individual study of a topic not normally covered in formal courses.
- 301, 302 COMPOSITION AND CONVERSATION (3 ea)
Prereq: Spanish 203 or equivalent; to be taken in sequence. Written and oral composition, grammar and vocabulary building.
- 305a,b,c THIRD YEAR CONVERSATION (2 ea)
Prereq: Spanish 203 or equivalent; may be taken concurrently with Spanish 301, 302, or 314. Conversational practice involving situations of daily life; vocabulary building. May be repeated for credit.
- 310 CHICANO LITERATURE IN SOCIO-CULTURAL PERSPECTIVE (4)
Prereq: Any introductory course of ethnic studies or Spanish. A study of the artistic and sociocultural aspects of Chicano literature. An emphasis on Chicano literature as a mirror of this group's ethnic history, social and cultural experience, and changing status in American society. Readings and discussions of Chicano poetry, drama, novels, folklore, short stories and essays. Applicable to B.A. major in Spanish as supporting course only.
- 314 INTRODUCTION TO SPANISH PHONOLOGY (3)
Prereq: Spanish 301 or equivalent. Intensive study of the Spanish sound system.
- 331 MEXICAN CULTURE AND CIVILIZATION (3)
Prereq: Spanish 201, 202, 203 or equivalent. Panoramic view of Mexican civilization and culture from pre-Columbian times to the present.
- 337 FOREIGN STUDY (2-5)
(See Spanish 437.)
- 340 INTRODUCTION TO HISPANIC LITERATURE (3)
Prereq: Spanish 203 or equivalent. Work of major Hispanic authors representing each literary genre; emphasis on reading improvement and methods of analysis.
- 341 SPANISH LITERATURE TO 1538 (3)
Prereq: Spanish 340. Literary development from beginnings to death of Garcilaso.
- 342 SIGLO DE ORO (3)
Prereq: Spanish 341. Literary development in various genres during the Golden Age; special study of major works and writers.
- 343 MODERN SPANISH LITERATURE (3)
Prereq: Spanish 342. Selected authors and works from 1600 to present.
- 344 SPANISH-AMERICAN LITERATURE: COLONIAL PERIOD TO END OF NINETEENTH CENTURY (3)
Prereq: Spanish 340. Selected authors and works.

Foreign Languages/Literatures

- 345 MODERN SPANISH-AMERICAN LITERATURE (3)
Prereq: Spanish 344. Modernism and other literary trends.
- 346 CONTEMPORARY SPANISH-AMERICAN LITERATURE (3)
Prereq: Spanish 345. Major authors and trends after modernism.
- 348 TWENTIETH CENTURY SPANISH-AMERICAN NOVEL (3)
Prereq: Spanish 346. Interpretation and discussion of selected readings.
- 350 STUDIES IN SPANISH AND SPANISH-AMERICAN LITERATURE (3)
Prereq: completion of Spanish 340 or equivalent. Different genres, schools and/or movements in Spanish and Spanish-American literature at the different periods of development in Peninsular and Spanish-American letters will be studied under this course. Specific topics to be listed in class schedule; may be repeated for credit.
- 351 CONTEMPORARY MEXICAN LITERATURE (3)
Reading and discussion of selected major documents from the twentieth century Mexican literary canon.
- 362 AZTEC SOCIETY AND CULTURE (4)
Prereq: any introductory course in Ethnic Studies or Spanish. A study of Aztec history and culture. An investigation of Aztec social structure, war, religion, philosophy and literatures. The Aztec view of the conquest. Applicable to B.A. major in Spanish as supporting course only.
- 367 SPANISH AND SPANISH-AMERICAN LITERATURE IN TRANSLATION (3)
Major works, with reference to their cultural and historical setting, literary merit, and subsequent influence; read and discussed in English. May be applied to a B.A. major in Spanish only as a supporting course. When topics vary, the course may be repeated.
- 385a,b,c HISPANIC CULTURE AND CONVERSATION (1 ea)
Prereq: Spanish 207. Hispanic culture through film, talks and song. General discussions of the Hispanic World and its culture, especially in contrast to our own. May be repeated for credit.

- 396a,b,c HONORS TUTORIAL (2-5 ea)
- 400 DIRECTED INDEPENDENT STUDY (1-6)
Prereq: 9 credits (or equivalent) of upper-division Spanish. Individual study of a topic not normally covered in formal courses.
- 401, 402 ADVANCED COMPOSITION AND GRAMMAR (3 ea)
Prereq: Spanish 302; Spanish 401 prerequisite to 402.
- 405a,b,c ADVANCED CONVERSATION (2 ea)
Prereq: Spanish 301, 302 or 305; may be taken concurrently with Spanish 401 or 402. Advanced conversational practice on topics reflecting current events in the Hispanic world; students give expository talks and discuss articles taken from periodicals; vocabulary building. May be repeated for credit.
- 412 CULTURE, RACE AND CLASS IN MEXICO AND THE U.S. (4)
Prereq: any introductory course of ethnic studies or Spanish. A historical and contemporary view of the Indian in the Mexican social structure with respect to the factors of ethnicity, race and class. An emphasis on modern Mexico. A comparison with ethnic-racial groups in American society. Applicable to the B.A. major in Spanish as supporting course only.
- 421 THE BILINGUAL/BICULTURAL CLASSROOM (3)
Prereq: FI Ed 420 or equivalent or permission of department. Course designed to solve problems of teaching language and culture to dominant speakers of both English and Spanish.
- 425 TEACHING-LEARNING PROCESSES IN ELEMENTARY SPANISH (2)
Prereq: permission of department and six credits of upper-division Spanish. Practicum in course preparation, classroom and language laboratory procedures, materials, evaluation and counseling. May be repeated. S/U grading only.
- 437, 337, 237 FOREIGN STUDY (2-5 ea)
Prereq: for Spanish 337, Spanish 103 or equivalent; for Spanish 337, Spanish 202 or equivalent; for Spanish 437, nine credits in upper-division Spanish. These courses are offered only through the WWU Study Abroad program. Contact Foreign Study Office, Old Main 400, for information.
- 450 STUDIES IN SPANISH LITERATURE (3)
Prereq: 9 credits in upper-division Spanish and permission of department. Major authors and movements. Since topics vary, the course may be repeated.

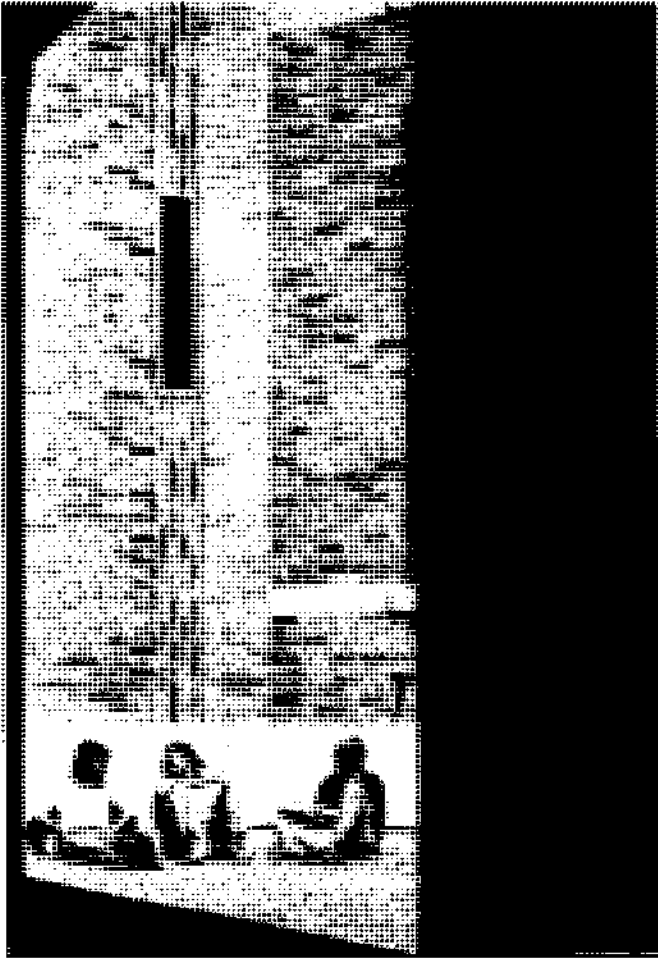
GRADUATE COURSES

The following courses are offered for graduate credit for persons enrolled in the department's graduate program. For course descriptions and other information about the graduate program, see the current Graduate Catalog.

Graduate courses are offered summers on alternating basis. Summer 1980: 501, 510a, 532. Summer 1981: 503, 505, 510c.

- 500 SPECIAL PROJECTS (1-6)
Individual conference.
- 501 CONVERSATION AND COMPOSITION (4)
- 502 CONVERSATION AND COMPOSITION (4)
- 503 CONVERSATION AND COMPOSITION (4)
- 504 APPLIED LINGUISTICS (4)
- 505 HISTORY OF THE SPANISH LANGUAGE (4)
- 510 SEMINAR IN LITERATURE (4 ea)
- 532 THE TEACHING OF SPANISH (4)





GEOGRAPHY & REGIONAL PLANNING

College of Arts and Sciences

THE SCIENCE OF GEOGRAPHY

Defined by some as a physical science, by others as a social science, geography is pre-eminently a science of spatial relationships. It focuses attention on many aspects of man and his use of the environment. Among these are population and settlement; land use and resources; and the physical environment itself, including the nature of patterns of landforms, climate, soils and vegetation.

THE DEPARTMENT

Faculty

The members of the department are scholars whose special interests and training span most of the sub-fields of the discipline. Most have had first-hand experience in foreign countries of Europe, Africa, South and East

Asia, Australasia and Latin America. Individual faculty members participate in such university programs as the Center for Pacific Northwest Studies, the Canadian and Canadian/American Studies Program, and the Urban and Regional Planning Program.

Course Offerings

The department provides more than 40 undergraduate courses and about a dozen graduate courses. These fall into three principal categories: (1) those which deal with particular regions of the world, such as the Middle East, Africa or the United States and Canada, (2) those treating major sub-fields of the discipline, such as biogeography, transportation or the conservation of natural resources; and (3) those which provide opportunities to develop specific skills in techniques of geographic research,

Geography/Regional Planning

such as cartography, air-photo interpretation and quantitative methods.

Facilities

A major facility of the department is its well-stocked map library, which contains more than 150,000 sheet maps of many sorts, together with aids to cartographic and photogrammetric research. The library is an official depository for maps issued by such agencies as the United States Geological Survey, the United States Defense Mapping Agency and the Canadian Department of Energy, Mines and Resources. A permanent staff map curator is in charge of the collection. A well-equipped cartographic laboratory, the services of a permanent staff cartographer, a wide variety of equipment for field research, and an extensive wall-map collection are further aids to teaching and research. In addition, more than 120 English language and foreign geographical journals are available in Wilson Library.

CAREERS IN GEOGRAPHY

Although many of Western's graduates in geography have become teachers either at the elementary or secondary level, opportunities in other fields have increased in recent years. Urban and regional planning, business and industry, government service, insurance and transportation have provided excellent openings for many recent graduates. For those graduates who demonstrate ability in such techniques of geographic research as statistical and cartographic analysis, the employment options are much increased. Particularly useful for the acquisition of such skills is the extended minor in cartography.

GEOGRAPHY FACULTY

- JAMES W. SCOTT (1966) Chairman. Associate Professor. BA, MA, Cambridge University; PhD, Indiana University.
- HOWARD J. CRITCHFIELD (1951) Professor. BA, MA, PhD, University of Washington.
- ROBERT L. MONAHAN (1955) Professor. BA, University of Washington; MA, University of Michigan; PhD, McGill University.
- DEBNATH MOOKHERJEE (1961) Professor. BS, MSc, University of Calcutta; PhD, University of Florida.
- FRANKLIN C. RANEY (1966) Associate Professor. BS, University of Chicago; MS, Washington State University; PhD, University of California, Davis.
- RICHARD G. SMITH (1970) Associate Professor. BS, University of Alaska; MS, PhD, University of Wisconsin.
- THOMAS A. TERICH (1973) Associate Professor. BA, MA, California State University, L.A.; PhD, Oregon State University.
- ROBERT W. TESHARA (1965) Associate Professor. BA, BA in Ed, Western Washington State College; PhD, University of Washington.

MANFRED C. VERNON (1964) Honorary Lecturer in Political Geography. LLB, University of Cologne; JD, University of Berlin; PhD, Stanford University.

BACHELOR OF ARTS

The program of the undergraduate major or minor in geography should include fundamental courses in both the natural sciences and the social sciences. The department will recommend supporting courses related to the student's career objectives. The student contemplating work toward a graduate degree is advised to acquire a reading knowledge of a foreign language and competence in statistics and/or computer science during his undergraduate years. Departmental advisers should be consulted at an early date for assistance in program planning.

Some courses will be offered only on an alternate year schedule. Students should note this in planning their programs and should consult their departmental adviser.

Major — Geography 73 credits

- Geog 201, 203, 207, 301, 311, 351, 454, 486
- One course from Geog 310, 312, 313, 314, 315, 316, 317, 318, 319, 321, 322
- One course from Geog 330, 331, 422, 423, 424, 426
- Two courses from Geog 341, 345, 346, 348, 370, 372, 373, 407, 409, 430, 440, 442, 444
- One course from Geog 352, 353, 451, 452, 453, 455
- Supporting course: Math 240
- Electives under departmental advisement

Minor — Geography 25 credits

- Geography 201
- Electives under departmental advisement

Extended Minor — Cartography 35 credits

- Geog 351, 352, 353, 451, 452
- Comp Sci 110 or 210, 211
- One course from Huxley 313, Tech 240
- Electives from Geog 251, Art 371, 372, Math 240, Tech 440

Major — Urban and Regional Planning

See Urban and Regional Planning section directly following the geography course listings.

BACHELOR OF ARTS IN EDUCATION

Some courses will be offered only on an alternate year schedule. Students should note this in planning their schedules and should consult their departmental adviser. For interdisciplinary combinations and certification requirements for secondary teaching in geography and the social sciences, see Interdepartmental Programs section.

Major — Elementary 45 credits

- Geog 201, 203, 251, 310, 311, 460
- Five credits from Geog 312, 313, 314, 315, 316, 317, 318, 319, 321, 322
- One course from Geog 330, 331, 351, 370, 422, 423, 424, 426, 453, 455
- One course from Geog 207, 215, 341, 345, 346, 348, 440, 442, 444
- Electives
- All selections to be made under departmental advisement

Major — Secondary 45 credits

- Geog 201, 203, 207, 251, 311, 460
- Five credits from Geog 310, 312, 313, 314, 315, 316, 317, 318, 319, 321, 322
- One course from Geog 330, 331, 370, 422, 423, 424, 426
- One course from Geog 215, 341, 345, 346, 348, 407, 409, 440, 442, 444, 486
- One course from Geog 301, 351, 352, 353, 453, 454, 455
- Electives
- All selections are to be made under departmental advisement

Minor — Geography 25 credits

- Geog 201, 203, 311
- Electives under departmental advisement

Extended Minor 35 credits

(Alternate minor for teaching competency recommendation.)

- Geog 201, 203 or 207, 251, 460
- 6 credits from Geog 310, 311, 312, 314, 315, 316, 318, 319, 320, 321, 322, 485
- 6 credits from Geog 330, 331, 407, 408, 409, 421, 422, 423, 424, 426, 435, 440, 442, 453, 470, 486
- Electives under departmental advisement

Teaching Competence

Recommendation for teaching competence requires completion of the major or extended

minor outlined above with a grade average of 2.5 or better.

GRADUATE STUDY

For concentrations in geography leading to Master of Education, Master of Arts or Master of Science degrees, see *Graduate Bulletin*.

COURSES IN GEOGRAPHY

- 101 THE NATURAL ENVIRONMENT (4)
Elements, processes, and interrelationships in the natural environment of man. (Geography majors may not take 101 in lieu of 203.)
- 201 HUMAN GEOGRAPHY (5)
Patterns of population and settlement; spatial analysis of economic, social and political organization.
- 203 PHYSICAL GEOGRAPHY (5)
Principles and techniques in analysis of areal distributions in the natural environment; land forms, water, climate, soils, vegetation.
- 207 ECONOMIC GEOGRAPHY (5)
Location analysis of economic activities; interrelationships of resources, industry, trade and transportation.
- 210 GEOGRAPHY AND WORLD AFFAIRS (2)
Geographical analysis of selected demographic, economic, political and social problems of the contemporary world.
- 215 INTRODUCTION TO PLANNING (5)
Basic elements of urban, regional and resource planning; planning tools and techniques; careers in professional planning.
- 251 MAP READING AND ANALYSIS (2)
Interpretation of map symbols and content at different scales; analysis of different types of maps and charts.
- 300 DIRECTED INDEPENDENT STUDY (1-6)
Conference Course Permit required from instructor before registering.
- 301 GEOGRAPHIC THOUGHT AND WRITING (5)
Prereq: Geog 201, 203, 207. Source materials and techniques of geographic writing; emphasis on the nature and development of geography.
- 310 THE PACIFIC NORTHWEST (3)
Prereq: Geog 201 or 203 or 207. Environments, settlement, resources, and economic development of the Pacific Northwest.
- 311 THE UNITED STATES (4)
Prereq: Geog 201. Environments, resources, settlement and economic activities of the United States and its regions.
- 312 ARCTIC ENVIRONMENT (3)
Prereq: Geog 201. Topical examination of physical environment, modern settlement and the development of resources in northern Canada and Alaska.
- 313 CANADA (3)
Prereq: Geog 201. Environments, resources, settlement and economic activities of Canada and its provinces.

Geography/Regional Planning

- 314 **LATIN AMERICA (5)**
Prereq: Geog 201. Peoples, resources, regions and economic and political development of South and Central America.
- 315 **EAST AND SOUTH ASIA (5)**
Prereq: Geog 201. Settlement, population, economic resources and activities of the countries and regions of East and South Asia.
- 316 **WESTERN EUROPE (3)**
Prereq: Geog 201. Peoples, resources, regions; the economic, social and political development of Western Europe. Normally offered alternate years.
- 317 **EASTERN EUROPE AND THE USSR (3)**
Prereq: Geog 201. Peoples, resources, regions; economic social and political development of Eastern Europe and the USSR. Normally offered alternate years.
- 318 **THE PACIFIC (3)**
Prereq: Geog 201. Environments, resources, and settlement of the Pacific Islands, Australia, and New Zealand. Normally offered alternate years.
- 319 **AFRICA (5)**
Prereq: Geog 201. Resources, peoples, regions; economic, social and political development of Africa.
- 321 **INDIA, PAKISTAN AND BANGLADESH (3)**
Prereq: Geog 201. Environments of India, Pakistan and Bangladesh; their resources, population and economic activities; emphasis on contemporary problems. Normally offered alternate years.
- 322 **THE MIDDLE EAST (3)**
Prereq: Geog 201. Environment, resources, culture and problems of Southwest Asia and North Africa. Normally offered alternate years.
- 330 **GEOGRAPHY OF LANDFORMS (5)**
Prereq: Geog 101 or Geog 203 or Geol 101. Topical and regional analysis of landforms; interrelationships of landforms and other physical and cultural phenomena.
- 331 **CLIMATOLOGY (5)**
Prereq: Geog 101 or 203 or Physics 101. Elements of climate, climatic regions, and climate as an environmental factor.
- 341 **URBAN GEOGRAPHY (5)**
Prereq: Geog 201. Geographic relations of the modern city with emphasis upon the development, functions and problems of American cities.
- 345 **HISTORICAL GEOGRAPHY OF THE UNITED STATES (3)**
Prereq: Geog 311 or course in American history. Past geographies of the United States since 1776, and analysis of geographical change through time of selected regions of the country. Normally offered alternate years.
- 346 **HISTORICAL GEOGRAPHY OF CANADA (3)**
Prereq: Geog 311 or course in Canadian history. Analysis of Canada's changing geographical patterns in the 19th and 20th centuries. Normally offered alternate years.
- 348 **POLITICAL GEOGRAPHY (3)**
Prereq: Geog 201. Spatial analysis of political phenomena; problems of territorial organization, boundaries, resource management; current problem regions. Normally offered alternate years.
- 351 **CARTOGRAPHY (5)**
Map and chart design, construction and reproduction; computer mapping.
- 352 **COMPUTER MAPPING (3)**
Prereq: Geog 351 or CS 110 or 210. Conceptual exploration of existing mapping programs; interactive work with electronic digitizers and cathode ray tube displays; exploration of the capabilities and limitations of various computer-driven graphic display systems.
- 353 **AERIAL PHOTO AND MAP INTERPRETATION (3)**
Prereq: 4 credits in geography. Geographic interpretation of aerial photographs and maps; remote sensing techniques and analyses.
- 370 **NATURAL RESOURCES MANAGEMENT (5)**
Prereq: Geog 201 or 203 or 207. Conservation as an operational philosophy and as an instrument of policy; legal and institutional options for conservation of mass and energy in the ecosystem.
- 372 **RECREATION RESOURCE MANAGEMENT (4)**
Concepts, methods and application of outdoor recreation planning.
- 373 **LAND TENURE AND ANALYSIS (3)**
Prereq: Geog 201 or 207 or 215. Principles of land tenure and analysis, including processes of land exchange and recording.
- 400 **DIRECTED INDEPENDENT STUDY (1-6)**
Conference Course Permit required from instructor before registering.
- 407 **AGRICULTURAL GEOGRAPHY (3)**
Prereq: Geog 201 or 207. Agricultural types, production, and commodities, land use and land tenure.
- 409 **TRANSPORTATION SYSTEMS AND PLANNING (3)**
Prereq: Geog 201 or 207. Locational and network analysis of local, regional and national systems; transportation and planning.
- 422 **GEOGRAPHY OF WATER RESOURCES (5)**
Prereq: Geog 101 or Geog 203 or Geol 101. Water sources, sinks, shunts and loops of continents and basins; quality, quantity, allocation and legal aspects of water use.
- 423 **GEOGRAPHY OF SOILS (3)**
Prereq: Geog 101 or Geog 203 or Geol 101. Soil formation, characteristics, classification, mapping and management for agriculture and engineering; field trips and laboratory study.
- 424 **BIOGEOGRAPHY (3)**
Prereq: Geog 101 or Geog 203 or Biol 101. Distribution and environmental relationships of world biomes and their subdivisions; origin and dispersal of agricultural plants, animals, insects and diseases.
- 426 **THE URBAN ENVIRONMENT (3)**
Prereq: Geog 203. Urban influences on the natural environment; applied physical geography of cities; environmental factors in urban planning.
- 430 **URBAN AND REGIONAL PLANNING (5)**
Prereq: Geog 341 or concurrent. Synthesis and application of the principles, problems and techniques of urban, suburban and rural land use planning.
- 432 **PLANNING PRACTICUM (6-12)**
Prereq: completion of two-thirds of major requirements and permission of instructor. Participation in aspects of community development and planning under professional and academic supervision.

- 440 POPULATION AND RESOURCES (3)
Prereq: Geog 201 or Soc 321. World distribution of population; patterns of population composition, fertility and mortality, inter- and intra-regional migrations; resources and population growth.
- 442 RURAL SETTLEMENT AND LAND USE (3)
Prereq: Geog 201. Geographical analysis of rural settlement and land use; origins, diffusion and patterns in selected regions.
- 444 THE DEVELOPMENT WORLD: SPATIAL PROBLEMS, STRATEGIES AND SOLUTIONS (3)
Prereq: Geog 201 or 207. Analysis of selected geographical problems of major countries and regions of Africa, Asia and Latin America; population pressure; agricultural productivity; resource appraisal and utilization; urban-industrial growth; urban and regional planning.
- 451 MAP REPRODUCTION AND GRAPHICS (3)
Prereq: Geog 351. Fundamentals of map reproduction and graphics through photographic and non-photographic processes.
- 452 ADVANCED CARTOGRAPHY (3)
Prereq: Geog 351. Development and maintenance of data files for use with computer mapping systems; interactive program development; special projects involving computer mapping systems and/or other mapping techniques.
- 453 FIELD METHODS IN GEOGRAPHY (3)
Prereq: Geog 351. Recording, mapping, and analysis of physical and cultural features.
- 454 ANALYSIS OF AREAL DATA (4)
Prereq: Math 240. Statistical and cartographic techniques in solving geographic problems.
- 455 FIELD CAMP (3)
Prereq: permission of instructor. Methods of geographical field investigation.
- 460 THE TEACHING OF GEOGRAPHY (3)
Prereq: Geog 201 and six additional credits in geography. Source materials and methods of geographic instruction.
- 466 SEMINAR IN SYSTEMATIC GEOGRAPHY (5)
Prereq: permission of instructor. Selected topics in cultural, economic or physical geography. May be repeated for credit.

GRADUATE COURSES

The following courses are offered for graduate credit for persons enrolled in the department's graduate program. For course descriptions and other information about the graduate program, see the current Graduate Catalog.

- 500 SPECIAL PROJECTS (1-6)
Individual conference.
- 501 SEMINAR IN HISTORY AND PHILOSOPHY OF GEOGRAPHY (4)
- 510 TECHNIQUES IN GEOGRAPHIC RESEARCH (5)
- 521 SEMINAR IN GENERAL PHYSICAL GEOGRAPHY (5)
- 522 SEMINAR IN GENERAL HUMAN GEOGRAPHY (5)
- 531 ADVANCED SEMINAR IN PHYSICAL GEOGRAPHY (5)
- 532 ADVANCED SEMINAR IN HUMAN GEOGRAPHY (5)
- 573 ENVIRONMENTAL PROBLEMS IN URBAN AND REGIONAL DEVELOPMENT AND PLANNING (5)
- 590 GRADUATE COLLOQUIUM (2)

- 600 DIRECTED RESEARCH (3)
- 690 THESIS (6)

URBAN AND REGIONAL PLANNING

As the American experience increasingly reflects urbanization and growing pressures on space, resources and environmental quality, we face corresponding challenges in understanding the forces that determine urban patterns and in charting the course of society. Our ability to meet new threats to human welfare will determine our success in achieving current goals, but we must also anticipate changing goals for future generations. Urban and regional planners have unique opportunities to participate actively in this fundamental exercise of mankind's ingenuity.

Urban and Regional Planning at Western Washington University

The core of the present urban and regional planning curriculum existed in the form of separate departmental courses at Western for several years prior to organization of a systematic program in 1964. Since then enrollment in the program has increased rapidly, indicating a growing awareness of and concern over our environmental problems.

An interdisciplinary approach, based on the strengths of 10 departments in the College of Arts and Sciences and Huxley College of Environmental Studies characterizes the program. The Department of Geography administers the program with support from other departments, particularly economics, political science and sociology. This multi-disciplinary character of the program, drawing upon specialized resources of the various departments, offers unique opportunities for the students to view the interrelationships of various components of the environmental problems and to analyze, identify and evaluate them. The academic program has been primarily designed to prepare students for employment in planning agencies as well as to provide a foundation for graduate study.

In addition to the requirements for the major concentration, candidates for the Bachelor of Arts degree in urban and regional planning must complete the general education requirements of the College of Arts and Sciences. These are listed in the College of Arts and Sciences section of this catalog.

Employment Opportunities

Planning is primarily a function of government; consequently, employment opportunities in the field of urban and regional planning occur mainly in a wide range of federal, state and local government agencies. Private consulting agencies and industrial firms also require the services of trained planners in such projects as real estate development or the location of commercial and industrial enterprises. Rising concern for the natural environment has greatly increased the demand for qualified planners. Inquiries should be made to the Career Planning and Placement Center of the university regarding employment opportunities.

Graduate Study

Although holders of the bachelor's degree find challenging positions in the field of planning, graduate study and completion of the master's degree are becoming common requirements for professional advancement. Students in the undergraduate urban and regional planning program are urged to consider the possibility of graduate training no later than the beginning of their senior year.

Admission to the Program

Admission policies of the urban and regional planning program are governed by the standards of the College of Arts and Sciences. Normally graduates of accredited high schools in Washington and other states are admitted if their high school records indicate promise of success. Prospective students are advised to contact the WWU Admissions Office for guidance.

The Admissions Office also approves applications for transfer of students from community colleges and four-year colleges. Students who are in good standing in their last institution normally are admitted with a minimum of difficulty.

Transfer of Credit from Other Institutions

Students who are currently enrolled in other institutions but who intend to transfer to Western to complete the urban and regional planning program should review carefully both the general education requirements of the College of Arts and Sciences and the requirements of the planning program. Those who transfer to Western at the end of their sophomore year or later may encounter difficulties in completing all requirements within a normal four-year total period.

Ordinarily a portion of the lower division requirements may be completed at other institutions and transferred to Western. The acceptability of such courses is subject to determination by the Admissions Office. Their relevance to the planning program will be ascertained by a faculty adviser.

For Additional Information

Questions concerning general university requirements should be directed to the Admissions Office and/or the Registrar. Specific questions about the urban and regional planning program may be addressed to: Director of Urban and Regional Planning Program, Department of Geography, WWU Bellingham, Washington 98225. Telephone (206) 676-3277.

BACHELOR OF ARTS

Major Concentration 105 credits

This undergraduate major in the arts and sciences curriculum is intended to prepare students for pre-professional service in planning agencies as well as to provide a foundation for graduate study in this field. It meets the requirements for both the major and minor concentrations. Early consultation with Dr. Debnath Mookherjee, Director of the Urban and Regional Planning Program, is essential.

Specified Requirements —

Planning Core Areas

- Econ 202, 482
- Geog 201, 215, 341, 351, 430, 454
- Huxley 436
- Math 240 or equivalent
- Pol Sci 250, 353, 421 or 455
- Soc 202, 340
- Comp Sci 110

Electives — From the alternate requirements above or from the following to complete 105 credits.

- Bus Admin 408
- Econ 410, 415
- English 354
- Geog 207, 215, 310, 311, 331, 352, 370, 372, 407, 409, 422, 426, 432, 440, 442, 452, 453
- Health Ed 447
- History 466
- Home Econ 175, 370
- Huxley 411, 412, 413, 480, 482
- Math 220

- Pol Sci 320, 450

- Recreation & Park Management 321, 322, 372, 451
- Soc 310, 321, 365, 415
- Anth 431
- Tech 210, 240, 313

It is recommended that the student concentrate his electives in either anthropology, economics, geography, political science or sociology.

Students who have satisfactorily completed two-thirds of the major requirements and who can satisfy the advisory committee that they are capable of benefiting from the experience, may receive up to 12 hours of electives by taking employment or offering as a volunteer in any established public planning agency.

For environmental programs, see Huxley College.





GEOLOGY

College of Arts and Sciences

The natural setting of Western Washington University adjacent to the Cascade Mountains and Puget Sound provides an ideal situation for study of a wide variety of geologic problems.

FACULTY

At the present time the department consists of 12 faculty members who have a broad range of backgrounds covering the entire field of geology. There are about 120 geology undergraduate majors and approximately 30 graduate students in the department.

FACILITIES AND EQUIPMENT

Geology is a science which embraces investigation of the natural environment both in the field and in the laboratory. The Department of Geology occupies modern laboratories, classrooms and offices con-

structed in 1976 in the Environmental Studies Center. Geology laboratory facilities and equipment are available for x-ray diffraction, x-ray fluorescence, atomic absorption, sedimentation, air photo interpretation, flume and wave tank studies, paleomagnetic analysis, geochemistry, petrography, seismology and electron microscopy. The Sundquist Marine Laboratory at Shannon Point near Anacortes provides facilities for studies in marine geology.

PROGRAMS

Objectives of the department are varied, including preparation of undergraduate and graduate students for careers as professional geologists and also preparation of earth science teachers at the primary and secondary levels. A wide variety of geologic phenomena are to be found in the adjacent

Cascade Range and the marine environment of Puget Sound, providing a broad spectrum of geological features available for study.

A number of concentrations are offered within the geology program.

These include:

Petrology
 Geochemistry
 Clay Mineralogy
 Paleomagnetism
 Geophysics
 Environmental Geology
 Geomorphology
 Glacial Geology
 Paleontology
 Biostratigraphy
 Coastal Geology
 Sedimentation
 Hydrology
 Economic Geology

SOME EXAMPLES OF STUDENT INVOLVEMENT IN RESEARCH

The paleomagnetism group within the Geology Department is engaged in research projects ranging geographically from the high Cascades to central Montana to the Pensacola Mountains of Antarctica. Funding for these projects has been provided by the National Science Foundation, the U.S. Geological Survey, and Rockwell Corporation. At least a dozen graduate and undergraduate students have been or will be involved in this research. Current funding extends into 1981.

A two-year \$28,000 grant for studying the geology of the Cascade Range of Washington, Oregon, and California will fund geologic investigation of areas of national significance for potential inclusion in the National Natural Landmark Registry.

GEOLOGY FACULTY

- CHARLES A. ROSS (1964) Chairman.
 Professor. BA, University of Colorado; MS, PhD, Yale University.
- *RANDALL S. BABCOCK (1967) Associate Professor, AB, Dartmouth College; MS, PhD, University of Washington.
- **MYRL E. BECK, JR. (1969) Professor. BA, MS, Stanford University; PhD, University of California at Riverside.
- ***EDWIN H. BROWN (1966) Professor. AB, Dartmouth College; MSC, University of Otago; PhD, University of California, Berkeley.

*On Sabbatical Leave Fall 1979 & Winter 1980

**On Sabbatical Leave Spring 1980

***On Sabbatical Leave 1980-81

- ROBERT A. CHRISTMAN (1960) Associate Professor. BS, MS, University of Michigan; PhD, Princeton University.
- DON J. EASTERBROOK (1959) Professor. BS, MS, PhD, University of Washington.
- ROSS C. ELLIS (1962) Professor. BA, Occidental College; PhD, University of Washington.
- DAVID R. PEVEAR (1967) Associate Professor. BS, Allegheny College; PhD, University of Montana.
- MAURICE L. SCHWARTZ (1968) Professor of Geology and Education. BS, MA, PhD, Columbia University.
- CHRISTOPHER A. SUCZEK (1977) Assistant Professor. AB, University of California, Berkeley; PhD, Stanford University.
- JAMES L. TALBOT (1976) Vice President of Academic Affairs and Professor of Geology. BA, University of Cambridge; MA, University of California, Berkeley; PhD, University of Adelaide.
- ANTONI WODZICKI (1977) Assistant Professor. BE, University of Otago; MS, University of Minnesota; PhD, Stanford University.

RESEARCH ASSOCIATES

- Russell F. Burmester (1978)
 BS, Stanford University; MA, University of Texas; Austin; PhD, Princeton University.
- Frank Danes (1973)
 BS, PhD, Charles' University, Prague, Czechoslovakia.
- Jimmy Diehl (1977)
 BA, MS, Western Washington State College; PhD, University of Wyoming.
- Suzanne Beske Diehl (1977)
 BA, University of Minnesota; MS, Western Washington State College; PhD, University of Wyoming.

BACHELOR OF ARTS IN EDUCATION

The Geology Department recommends for teaching competency those students who have satisfactorily completed requirements for the bachelor's degree in education with an earth science major or a geology minor combined with a major in one of the other physical or biological sciences.

Major — Earth Science Elementary 45 credits

- Geol 211, 212, 310, 304, 306, and 407
- Geog 203, 331, Physics 131; Astronomy 103
- Electives under departmental advisement from Geol 214, 314, 316, 317, 340, 352, 390, 399, 400, 410, 412, 414, 416, 430, 440; Geog 353; one from Geog 421, 422 or 423; Physics 315, 316, 317, 321; Biol 406

Major — Earth Science Secondary 45 credits

- Geol 211, 212, 304 or 305, 306, 310, 390, 407
- Geog 331; Physics 131; Astronomy 315
- Electives from Geol 214, 314, 316, 317, 340, 352, 399, 400, 410, 412, 414, 416, 418, 420, 430, 440, 460; Geog 203, 353, one from 421, 422 or 423; Physics 315, 316, 317, 321

Geology

This major must be accompanied by a minor in physical science, chemistry, physics or biology; exceptions must be approved by the major department.

Combined Major — Earth Science/ Physical Science

Secondary 71-74 credits

- Geol 211, 212, 304 or 305, 306, 310, 390, 407
- Geog 331
- Chem 121, 122, 123
- Physics 131, 132, 133 or 231 or 331 or 332, and Astronomy 315
- Phys Sci 492
- 3-5 additional credits in physics or chemistry or history of science under advisement

Minor — Geology 25 credits

- Geology 211, 212
- Electives under departmental advisement

BACHELOR OF SCIENCE DEGREE

Major Concentration 110 credits

This program is recommended for students who are preparing to become professional geologists and intend to enroll in a graduate program or enter industry upon completion of degree.

- Geol 211, 212, 305, 306, 310, 316, 317, 352, 399, 410, 416, 418, 420
- 6 credits under advisement from Geol 214, 300, 314, 340, 360, 400, 414, 423, 424, 425, 430, 431, 432, 433, 434, 440, 444, 446, 453, 454, 455, 460, 461
- Supporting courses: Chem 121, 122, 123; Physics 131, 132, 133 (or 231, 331, 332); Math 124, 125, 126 (or 124, 125, Comp Sci 110, and Math 240 or Huxley 363).
- Credits under advisement from chemistry, physics, math, computer science or biology to total 110 credits.

Students concentrating in biostratigraphy or paleontology may be allowed substitutions in biology under advisement.

Students preparing for graduate work are advised to complete one year of a foreign language.

Environmental Geology Major Concentration 110 credits

Core Program (Required Courses)

- Geol 211, 212, 214, 304 or 305, 306, 407 or 418 and 420, 310, 316, 317, 352, 410, 400
- Chem 121, 122, 123
- Physics 131, 132, 133; or 231, 331, 332
- Math 124, 125, and one of the following: Comp Sci 110, Math 240 or Huxley 363; or Math 124, 125, 126
- Huxley 301
- Credits under advisement from geology, biology, chemistry, physics, geography and Huxley College to total 110; care should be taken to avoid duplication of courses among different disciplines

Geophysics Major Concentration 110 credits

- Geol 211, 212, 304 or 305, 306, 317, 352, 399, 407, 410, 454
- Math 124, 125, 126, 224, 301, 331, 430; Comp Sci 210
- Physics 231, 331, 332, 381, 382
- Chem 121, 122
- Geophysics majors also are strongly urged to take as many as possible of the following: Chem 123; Geol 360, 431, 432, 434, 453; Math 332, 431; Physics 383, 431

For advisement in this concentration, consult the department of geology or physics.

Physical Geochemistry Major Concentration 110 credits

- Geol 211, 212, 305, 306, 317, 410, 418, 420, 444, 460, 461; one of 423, 424, 425
- Chem 121, 122, 123, 333, 411, 412, 413
- Math 124, 125, 126
- Physics 231, 331, 332
- Additional credits under advisement from geology, chemistry, physics, mathematics and computer science to total 110

Geophysics Extended Minor 40 credits

Suitable only for majors in a physical science or others with a strong background in mathematics and physics. NOTE: A number of these courses have prerequisites:

- Geol 211, 212, 304 or 305, 306, 317, 352, 407, 453, 454
- A minimum of five credits from the following: Geol 214, 316, 360, 410, 416, 431, 432, 434, 455, 460

Combined Major — Geology/Mathematics

Major Concentration 110 credits

- Geol 211, 212, 304 or 305, 306, 317, 352, 407, 410
- Math 124, 125, 126, 201, 202, 224, 331, 335, 341, 342, 375, 435; Comp Sci 110, 210 or Huxley 363
- Chem 121
- Physics 231, 331, 332
- Additional credits under advisement from geology and mathematics to total 110

BACHELOR OF ARTS DEGREE

Major 50 credits plus Supporting Courses

An accompanying minor in one of the sciences or in mathematics is recommended.

- Geol 211, 212, 304 or 305, 306, 310, 316, 317, 407
- Electives under advisement from Geol 214, 300, 314, 340, 352, 360, 400, 410, 412, 414, 416, 423, 424, 425, 430, 431, 432, 433, 434, 440, 444, 446, 453, 454, 455, 460, 461
- Supporting courses: Chem 121, 122; Physics 131 or 231; Math 124; 16 additional credits under advisement in physics, biology, chemistry or mathematics

Minor 25 credits

- Geol 211, 212
- Electives under departmental advisement

DEPARTMENTAL HONORS

In addition to the general requirements for all honors students, a geology major who wishes to graduate "with honors" must include Geology 399.

GRADUATE STUDY

For concentrations leading to the Master of Education or the Master of Science degrees, see *Graduate Bulletin*.

COURSES IN GEOLOGY

101 GENERAL GEOLOGY (4)

Introduction to geology for non-science majors; practical applications of geology; processes that have produced the earth and its landforms. Geology majors and those having had geology in high school should take Geology 211.

102 GENERAL EARTH HISTORY (4)

Prereq: Geol 101 or equivalent. The history of the earth and its animals and plants for the non-science major with emphasis on the development and changes in the distribution of continents and oceans and their inhabitants in the past.

211 PHYSICAL GEOLOGY (5)

Prereq: high school or college chemistry; open to students with credit in Geol 101 only with permission of department. Origin, composition, and structure of earth. Identification of common rocks and minerals; the evolution of the surface features of continents, and interpretation of landforms from maps.

212 HISTORICAL GEOLOGY (4)

Prereq: Geol 211. History of the earth as interpreted from the rocks and the story of the development of its inhabitants; geologic history of North America and the Pacific Northwest.

214 ENVIRONMENTAL GEOLOGY (3)

Prereq: Geol 101 or 211. Role of geological processes in the natural environment. Effects of man's alteration of the earth's surface and consumption of natural resources.

237/337/437 FOREIGN STUDY (2-5)

A study of geological topics particularly appropriate to the location of the course offering. Presently offered only in Guadalajara. These courses are offered only through the WWU Study Abroad program. Contact Foreign Study Office, OM 400, for information. Application of credits toward geology degree subject to approval by the department.

300 DIRECTED INDEPENDENT STUDY (1-6)

Conference Course Permit required from instructor before registering.

304 CRYSTALLOGRAPHY (1)

Prereq: Geol 211 and high school or college chemistry. Introduction to crystallography with emphasis on crystal study fundamental to mineral identification. Not open to those with credit in Geol 305. Can be taken concurrently with Geol 306.

305 CRYSTALLOGRAPHY AND CRYSTAL CHEMISTRY (3)

Prereq: Geol 211 and Chem 121 or equivalent. Introduction to crystallography, crystal chemistry and chemical principles fundamental to study of minerals.

306 MINERALOGY (5)

Prereq: Geol 304 or 305. Origin, occurrence, and classification of common minerals; physical and chemical properties of minerals used in identification.

310 GEOMORPHOLOGY (5)

Prereq: Geol 211. Origin and evolution of topographic features by surface processes; analysis of glaciers, streams, wind, waves, ground water, and other agents in development of landforms.

314 GEOMORPHOLOGY OF WESTERN UNITED STATES (3)

Prereq: Geol 101 or 211. Geological forces and processes that have shaped the landscape of the West; origin of scenic geological features in the national parks.

316 PRINCIPLES OF PALEONTOLOGY (5)

Prereq: Geol 212. Life on the earth as revealed by its inhabitants, past and present.

317 STRUCTURAL GEOLOGY (4)

Prereq: Geol 211, 212; Math 105 and Physics 131 recommended. Description, classification, and interpretation of earth structures; laboratory solution of structural problems by use of geologic maps.

Geology

- 340 **GEOLOGICAL OCEANOGRAPHY (3)**
Prereq: Geol 211, Chem 101 or 121 or equivalent. Nature and origin of major structural features within the ocean basins and distribution of recent marine sediments.
- 352 **INTRODUCTION TO GEOPHYSICS (4)**
Prereq: Geol 211; Physics 231 or 131 and Math 124 or 220. Basic elements of geomagnetism, seismology, gravity, and heat flow with reference to the internal structure of the earth.
- 360 **GEOLOGY OF FOSSIL FUELS (4)**
Prereq: Geol 212. Origin and accumulation of fossil fuels; methods of locating fossil fuels resources.
- 384 **EARTH SCIENCE FOR THE ELEMENTARY SCHOOL (3)**
Prereq: Geol 101, Sci Ed 380. Concepts, experiences, and materials from the earth sciences adaptable to the elementary school with emphasis on intermediate grades. (Also listed as Sci Ed 384.)
- 390 **EARTH SCIENCE FOR THE SECONDARY SCHOOL (3)**
Prereq: Geol 211, 212, 306 or 311. Development of methods and materials for teaching earth science, including use of ESCP materials, adaptable to the secondary school.
- 396a,b,c **HONORS TUTORIAL (2-5)**
- 399 **SEMINAR IN GEOLOGICAL LITERATURE (1)**
Prereq: 14 credits in geology. Geological reports, papers and discussion.
- 400 **DIRECTED INDEPENDENT STUDY (1-6)**
Conference Course Permit required from Instructor before registering.
- 407 **PETROLOGY (4)**
Prereq: Geol 306. Origin, occurrence and classification of igneous, sedimentary and metamorphic rocks; hand specimen identification of rocks. Not open to those with credit in Geol 420.
- 410 **FIELD GEOLOGY (3-5)**
Prereq: 13 credits in geology and permission of department, Geol 317 or concurrent enrollment. Methods of geological field investigations; use of field instruments, and making of geologic maps; supervised geologic investigation of a local area. Offered August-September and spring quarter, off-campus.
- 412 **FIELD GEOLOGY FOR TEACHERS (2-5)**
Prereq: Geol 211. The geology of Northwest Washington as observed in the field. Summer only.
- 414 **GEOLOGY OF WASHINGTON (3-5)**
Prereq: Geol 101 or 211. The significant geologic features of Washington State; field studies.
- 416 **STRATIGRAPHY AND SEDIMENTATION (4)**
Prereq: Geol 212. Analysis of transportation, deposition and consolidation of sediments; physical and biological characteristics of stratified rock sequences; principles of correlation, determination of geologic age and facies relationships.
- 418 **OPTICAL MINERALOGY (4)**
Prereq: Geol 306. Optical phenomena as related to mineralogy and identification of minerals from optical properties with the use of the polarizing microscope.
- 420 **PETROGRAPHY AND PETROLOGY (5)**
Prereq: Geol 352 and 418. Origin, occurrence and classification of igneous, sedimentary and metamorphic rocks; hand specimen and thin section identification of minerals.
- 421 **IGNEOUS PETROGRAPHY AND PETROLOGY (5)**
Prereq: Geol 420. Origin, occurrence and classification of igneous rocks and minerals and use of thin sections in identifying igneous minerals.
- 424 **SEDIMENTARY PETROGRAPHY AND PETROLOGY (5)**
Prereq: Geol 420. Origin, occurrence and classification of sedimentary rocks and minerals, and use of thin sections in identifying sedimentary minerals. Offered in alternate years.
- 425 **METAMORPHIC PETROGRAPHY AND PETROLOGY (5)**
Prereq: Geol 420. Origin, occurrence and classification of metamorphic rocks and minerals and use of thin sections in identifying metamorphic minerals.
- 430 **MAP AND AERIAL PHOTOGRAPH INTERPRETATION (3)**
Prereq: Geol 310. Identification, interpretation of geologic features using topographic maps and aerial photos. Offered in alternate years.
- 431 **ECONOMIC GEOLOGY-NONMETALLIC DEPOSITS (3)**
Prereq: Geol 306. Industrial rocks, nonmetallic minerals and ore deposits; their occurrence, genesis and economics.
- 432 **ECONOMIC GEOLOGY - METALLIC MINERAL DEPOSITS (3)**
Prereq: Geol 306. Metallic minerals and ore deposits; their occurrence, genesis and economics.
- 433 **ECONOMIC GEOLOGY — ORE MICROSCOPY LAB (2)**
Prereq: Geol 420. Hand specimen and microscopic study of ore minerals and hydrothermally altered rocks. Concurrent enrollment with Geol 432 suggested.
- 434 **ECONOMIC GEOLOGY — MINERAL EXPLORATION (3)**
Prereq: Geol 432. Geological and geochemical techniques used in finding ore deposits; prospect evaluation, sampling, mine mapping.
- 440 **GLACIAL GEOLOGY (4)**
Prereq: Geol 310. Processes and phenomena of modern and ancient glaciers; effects of Pleistocene glaciations.
- 444 **X-RAY DIFFRACTION (2)**
Prereq: Geol 306, Chem 122, and permission of department. Basic analytical techniques with x-ray equipment.
- 446 **CLAY MINERALOGY (4)**
Prereq: Geol 444. Classification, identification, structure and genesis of clay minerals.
- 453 **GEOTECTONICS (4)**
Prereq: Geol 352. Crust-mantle interactions, isostasy, continental drift, sea floor spreading, theories of mountain building.
- 454 **APPLIED GEOPHYSICS (4)**
Prereq: Geol 352. Field and laboratory exercise in seismic refraction and reflection, electrical resistivity, gravity and magnetic.
- 455 **PALEOMAGNETISM AND ROCK MAGNETISM (5)**
Prereq: Geol 352. Origin and interpretation of natural magnetism of rocks; origin of geomagnetic field; application to problems in petrology, structural geology and geodynamics.
- 460 **GEOLOGIC PHASE EQUILIBRIA (3)**
Prereq: Math 124 or 220, Chem 122, 123, Geol 306. Application of classical thermodynamics to interpretation of geologic phase equilibria.
- 461 **ANALYTICAL GEOCHEMISTRY (2 ea)**
Prereq: Geol 306, Chem 122, 123. Techniques of chemical analysis of geologic materials.
461a Atomic Absorption Spectrophotometry
461b X-ray Fluorescence Spectrophotometry
461c Gravimetric, Volumetric and Colorimetric Methods
Students may take a, b, and c.



Portion of Wilson Library with 'Alphabeta Cube' sculpture on right.

472 HYDROLOGY (4)

Prereq: Math 105, calculus desirable. Study of the elements of the hydrologic cycle, with emphasis on surface water. Topics covered are: precipitation, evapotranspiration, infiltration, elementary groundwater flow, runoff generation, flood frequency, hydrograph analysis, and flow routing. Practical techniques for analysis and estimation will be covered.

473 GROUNDWATER HYDROLOGY (4)

Prereq: Geol 472, calculus. Occurrence, movement and characteristics of groundwater; basic principles of flow in porous media; hydraulics of wells and earth dams; groundwater exploration, development, quality and management. Emphasis will be practical application of geology and basic principles of groundwater hydraulics to water resource problems.

GRADUATE COURSES

The following courses are offered for graduate credit for persons enrolled in the department's graduate program. For course descriptions and other information about the graduate program, see the current Graduate Catalog.

500 SPECIAL PROJECTS (1-6)

Individual conference.

507 COASTAL GEOLOGY (4)

510 FIELD PROBLEM (2-5)

511 ADVANCED STUDIES IN PHYSICAL GEOLOGY (3)

512 ADVANCED STUDIES IN HISTORICAL GEOLOGY (3)

514 FLUVIAL GEOMORPHOLOGY (3)

516 ADVANCED STUDIES IN BIOSTRATIGRAPHY AND PALEONTOLOGY (3)

517 SEDIMENTATION AND TECTONICS (3)

519 GENESIS OF ORE DEPOSITS (4)

523 IGNEOUS AND METAMORPHIC PETROLOGY AND GEOCHEMISTRY (3)

524a SPECIAL PROBLEMS IN SEDIMENTARY PETROLOGY — SEDIMENTARY GEOCHEMISTRY (3)

524b SPECIAL PROBLEMS IN SEDIMENTARY PETROLOGY — CARBONATE PETROLOGY (3)

531 SPECIAL TOPICS IN GEOLOGY (2-5)

546 GEOLOGY OF CLAYS (3)

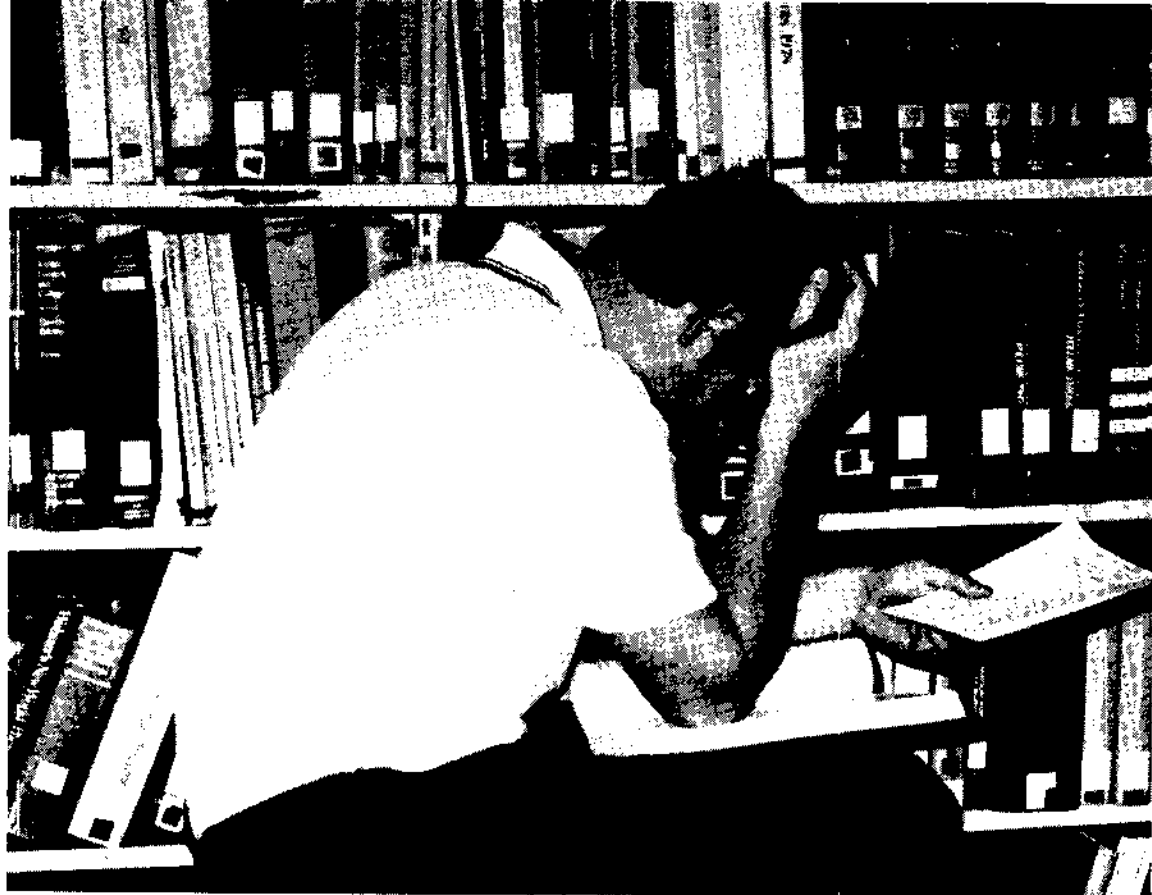
552a,b ADVANCED STUDIES IN GEOPHYSICS (4)

536 PALEOECOLOGY (4)

610 ADVANCED METHODS IN FIELD GEOLOGY (2)

690 THESIS (May be registered for in units of 3)

595 SEMINAR IN CONTEMPORARY GEOLOGIC PROBLEMS (1)



HISTORY

College of Arts and Sciences

Without a knowledge of the past, we are, as one writer has phrased it, "like victims of collective amnesia groping in the dark for our identity." History as a discipline is rooted in that fundamental human urge, curiosity. It confronts and weighs the relative significance of chance, inevitability and choice in the passage of time. History is humanistic in its emphasis on the influence of ideas and values, its capacity to both instruct and entertain, and as interpretive literature.

In its investigation of social processes, groups and institutions, and the examination of human motivation, it is a social science. It acts as a bridge among disciplines, borrowing from all and contributing a sense of context and sequence to the perception of actions and individuals. The American historian, Carl Becker, wrote: "The value of history is, indeed, not scientific but moral: by liberalizing the mind, by deepening the sympathies,

by fortifying the will, it enables us to control, not society, but ourselves — a much more important thing; it prepares us to live more humanely in the present and to meet rather than to foretell the future."

HISTORY FACULTY

ROLAND L. DE LORME (1966) Chairman.

Professor. AB, University of Puget Sound; MA, University of Pennsylvania; PhD, University of Colorado.

BERNARD L. BOYLAN (1956) Professor. BA, MA, University of Washington; PhD, University of Missouri.

WILLIAM A. BULTMANN (1965) Professor. AB, PhD, University of California, Los Angeles.

DONALD D. EKLUND (1968) Associate Professor. BA, University of New Mexico; MA, Colorado State College; PhD, University of Colorado.

*LEONARD M. HELFGOTT (1970) Assistant Professor. BA, MA, PhD, University of Maryland.

**On Sabbatical Leave 1980-81*

- HARLEY A. HILLER (1957) Professor. BA, Westmar College; MA, PhD, University of Minnesota.
- JAMES H. HITCHMAN (1966) Professor. BA, Willamette University; MA, PhD, University of California, Berkeley.
- THOMAS C. R. HORN (1964) Assistant Professor. BA, University of Pittsburgh; MA, PhD, University of California, Berkeley.
- HARRY D. JACKSON (1967) Associate Professor. BEd, Wisconsin State University, Whitewater; MA, PhD, The University of Iowa.
- EDWARD H. KAPLAN (1968) Associate Professor. BS, Georgetown University; MA, PhD, The University of Iowa.
- PAULA. KOHL (1974) Adjunct Professor. BA, St. Meinrad College.
- GEORGE ERIC MARIZ (1970) Assistant Professor. BA, MA, PhD, University of Missouri.
- AUGUST RADKE (1953) Professor. BA, MA, PhD, University of Washington.
- HARRY R. RITTER (1969) Associate Professor. BA, University of Arizona; MA, PhD, University of Virginia.
- PAUL L. ROLEY (1967) Associate Professor. BA, Illinois College; MA, Northwestern University; PhD, University of Illinois.
- CARL U. SCHULAR (1959) Associate Professor. BS, MA, PhD, University of Wisconsin.
- HENRY G. SCHWARZ (1969) Professor of Political Science and History. BA, MA, PhD, University of Wisconsin.
- LESLIE J. THOMAS (1962) Associate Professor. BA, St. Olaf College; MS, PhD, University of Wisconsin.
- LOUIS W. TRUSCHEL (1970) Associate Professor. Pacific Lutheran University; MA, PhD, Northwestern University.

BACHELOR OF ARTS IN EDUCATION

The following statements refer to the junior and senior high school major and the junior and senior high school concentrations:

The department recommends that students take its offerings in the General University Requirements program, up to 12 credits of which may be applied toward a major or minor in history. (See General University Requirements in the College of Arts and Sciences section.)

At least one-half the total credits taken in fulfillment of the following programs must be in upper-division courses.

A minimum grade point average in history of 2.5 is required for graduation and certification for teaching competence.

Major Junior and Senior High School
60 credits

History credits should be distributed under advisement as follows:

- | | | |
|--------------------------|-----------------------------------|-----------|
| <input type="checkbox"/> | United States History | 3 courses |
| <input type="checkbox"/> | European History | 2 courses |
| <input type="checkbox"/> | East and South Asia | 2 courses |
| <input type="checkbox"/> | Africa and Middle East | |
| <input type="checkbox"/> | Western Hemisphere (outside U.S.) | |
| <input type="checkbox"/> | History 391, 499 | 3 courses |

- Social Studies Education 426
- Electives under advisement

Teaching competency will be certified in history.

History/Social Studies Concentration

See Interdepartmental Programs for description of the history/social studies concentration as an alternative teacher preparation major.

Major Elementary 45 credits

- History 103, 104
- Two courses from History 425 through History 449
- One course from History 410 through History 420
- Electives under advisement

A minimum grade point average in history of 2.5 is required for graduation and certification of teaching competence. Competence will be certified in history.

Minor 25 credits

- History 103, 104
- Electives, including one upper division course, under advisement

Area Studies Minor

Minor programs are available in the following fields:

- Canadian and Canadian-American Studies
- East Asian Studies
- Latin American Studies

Courses taken for credit in these programs may not be counted toward the major. See Interdepartmental Programs for details.

Extended Minor 35 credits

(Alternate minor for teaching competence recommendation)

Credits should be distributed under advisement as follows:

- | | | |
|--------------------------|----------------------------|-----------|
| <input type="checkbox"/> | United States History | 3 courses |
| <input type="checkbox"/> | European History | 2 courses |
| <input type="checkbox"/> | History 391 | |
| <input type="checkbox"/> | Electives under advisement | |

A minimum grade point average in history of 2.5 is required for graduation and certification of teaching competence.

History

Extended Minor 33-35 credits

For English majors desiring a combined recommendation appropriate for junior high or middle school.

- History 103, 104
- One modern European course from History 425 through History 449
- One course from History 271, 280, 385
- One upper-division U.S. history course
- 10 credits in electives under departmental advisement

A minimum grade point average in history of 2.5 is required for graduation and certification of teaching competence in history.

BACHELOR OF ARTS

Major 60 credits

For this program history courses are grouped into the following fields:

- United States
- Europe
- East and South Asia
- Africa and Middle East
- Western Hemisphere (outside U.S.)

Credits to be distributed as follows:

- Four courses in one of the above fields
- Three courses in a second field
- Two courses in a third field
- History 499 (3 credits)
- Electives under advisement

The department recommends that majors take the maximum permissible number of history courses in the General University Requirements program. Up to 12 credits of these may be applied toward a major or minor in history. (See General University Requirements in the College of Arts and Sciences section.)

At least one-half the total credits taken in fulfillment of the following programs must be in upper-division courses.

It is strongly recommended that majors who elect a four-course history concentration in a field where languages other than English predominate take enough language study to become proficient in an appropriate foreign language. Students planning on graduate study in history are cautioned that many graduate schools require foreign language proficiency for admission. Possession of such proficiency is a requirement for departmental honors at graduation for those who elect a

four-course history concentration in a field where English is not predominant.

A minimum grade point average in history of 2.5 is required for graduation.

Minor 25 credits

For purposes of this program history courses are grouped into the following fields:

- United States
- Europe
- East and South Asia
- Africa and Middle East
- Western Hemisphere (outside U.S.)

Credits should be distributed as follows:

- Three courses in one of the above fields
- Two courses in a second field
- Electives under advisement

A minimum grade point average in history of 2.5 is required for graduation.

Minor in Foreign Cultures 25 credits

This History Department offers a minor in foreign cultures for foreign language majors and other interested students. Credits to be distributed as follows:

- Two background courses in modern European history (425, 426, 427, 428, 429)
- Two courses in one of the following areas: France and the French-speaking world (277, 386, 440, 441); Germany (430, 431); Latin America (271, 273, 473); Russia (432, 433, 434)
- Electives under advisement

Area Studies Minor

Minor programs are available in the following fields:

- Canadian and Canadian-American Studies
- East Asian Studies
- Latin American Studies

Courses taken for credit in these programs may not be counted toward the major. See Interdepartmental Programs for details.

DEPARTMENTAL HONORS

A history major may petition for entrance into the History Department Honors Program after completion of 25 credits in history with a GPA of 3.5 or above, and must thereafter maintain at least a 3.5 GPA in history courses to remain a member in good standing of the program.

In addition to fulfilling successfully all regular requirements in either the Bachelor of Arts or Bachelor of Arts in Education programs (including History 499), an honors student must (a) complete one of the following courses as part of his or her major: History 493, 494, or 495; and (b) complete a departmental honors essay through registration in History 402 by the winter quarter of his or her senior year. This honors essay may also count as the senior honors thesis for those doing general university honors. It should be treated as an extension and deepening of the essay written in History 499 and should be written under the direction of the history faculty member who supervised the student's History 499 essay. Each essay must be approved by a committee of four faculty members, one of whom must be the departmental honors adviser and another of whom must be the student's 402-499 supervisor. The non-mandated members of the committee are to be nominated by the student, and one of them may be from another department than history.

GRADUATE STUDY

For concentrations in history leading to the Master of Education or Master of Arts degree and for information concerning the archival training program, see *Graduate Bulletin*.

COURSES IN HISTORY

103, 104 INTRODUCTION TO AMERICAN CIVILIZATION (5 ea)

- 103 American History to 1865
From the European background to the end of the Civil War.
104 American History Since 1865
From the end of the Civil War to the present.

110 HISTORY OF TECHNOLOGY AND SCIENCE (5)

A study of the influence of innovations and ideas in technology and science upon Western society. An overview of the successive paradigms established by technological and scientific developments and how changing ideas in these fields affected intellectual, social, religious and economic life.

111, 112, 113, 114 INTRODUCTION TO WESTERN CIVILIZATION (5 ea)

Not open to those who have completed or intend to take Lib St 121, 122, 123. Need not be taken in sequence. Human development in the Western world; emphasis upon ideas, institutions, forces and movements shaping contemporary life.

- 111 Prehistory to 476. Survey of the political, social and cultural history of occidental civilization from prehistory to the collapse of the Roman empire.
112 476-1300. Survey of the cultural, political, social and economic history of Europe from the early Middle Ages to the opening of the Renaissance.
113 1300-1789. Survey of the religious, political, social, economic, intellectual and diplomatic history from the late Middle Ages to the period of the Great French Revolution.
114 1789-Present. Survey of the political, social, economic and diplomatic history of Europe from the period of the Great French Revolution to the present.

216 INTRODUCTION TO THE MIDDLE AGES (5)

Prereq: History 112 or Lib St 122. An overview of the history, art, literature and thought of the medieval world which became the basis of European civilization. Topics will include a discussion of feudalism, manorialism, the growth of the nation state and of cities, vernacular literature, Romanesque and Gothic art, how medieval people thought and how such changes can be seen in the daily activities of medieval men and women.

239 SURVEY OF MODERN RUSSIAN HISTORY AND CULTURE (5)

Elements of Russian history and culture from the time of Peter the Great (1689) to the present, with particular emphasis on the autocratic and revolutionary traditions in Russian history.

261 BLACK HISTORY IN THE AMERICAS (5)

The cultures and achievements of blacks in the Americas.

267 CHRISTIANITY IN HISTORY (5)

A survey of Christian institutions and doctrines from their inception to the present, including a study of the intellectual, social and economic forces which have influenced their development.

271 INTRODUCTION TO LATIN AMERICAN CIVILIZATION (5)

A survey of various themes such as Hispanidad, indianism, the Church, the peasant, urbanism, the army, which together make up the Latin American experience.

273 LATIN AMERICA (5)

From the period of early Spanish and Portuguese colonization to the present.

277 CANADA (5)

Canadian history from the period of French colonization to the present.

280 INTRODUCTION TO EAST ASIAN CIVILIZATION (5)

The origins and evolution of civilization in East Asia to the present.

285 INTRODUCTION TO AFRICAN CIVILIZATIONS (5)

An introduction to the history of Africa, with emphasis on the development of African societies and civilizations from antiquity to modern times.

287 INTRODUCTION TO ISLAMIC CIVILIZATION (5)

This course will aim at introducing the student to the religious and cultural aspects of Middle Eastern society, and will also aim at introducing some of the major conceptual problems in dealing with a non-western society. The course will survey the development of Islam as a body of religious thought and practice and will also examine the major cultural movements in the Middle East. The course will be thematic in approach and will be chronological only when necessary.

300 DIRECTED INDEPENDENT STUDY (1-6)

Conference Course Permit required from instructor before registering.

- 316 SOCIETY AND ECONOMY IN PRE-INDUSTRIAL EUROPE (5)**
Prereq: History 113 or Lib St 122. An analysis of the economic and social changes in Europe between 800 and 1750. Topics include a discussion of feudalism, manorialism, the growth of cities and commerce, the rise of the nuclear family, marriage patterns, the role of women and children, and the growth of literacy.
- 317 SOCIETY AND ECONOMY IN INDUSTRIAL EUROPE, 1750 TO THE PRESENT (5)**
Prereq: History 114 or Lib St 123. A survey of demographic, social and economic changes in Europe since the mid-eighteenth century. Topics will include discussions of population increases and shifts, changes in family structure, urbanization, the rise and evolution of modern industry, capital formation, the development of modern banking, and social-intellectual changes associated with these phenomena.
- 321 THE SAMURAI: WARRIOR GOVERNMENT, SOCIETY AND CULTURE (4)**
Prereq: Junior Status. (Also offered as East Asian Studies 321.)
- 327 SELECTED STUDIES IN THE HISTORY OF CHRISTIANITY (5)**
Prereq: History 267. Topics include the formation of the early church, its structure, church-state relationships, the rise of heresy and dissent, the monastic movement, changes in spirituality, social ideas and philosophy of the ministry.
- 336 COMPARATIVE IMPERIALISMS: SELECT CASE STUDIES (5)**
An examination of several imperial powers, their controls and methods, their attitudes to race questions, their influence on the colonial peoples and economies.
- 337 BRITISH IMPERIALISM: FROM TUDOR TIMES TO INDIAN INDEPENDENCE (5)**
The growth of British interests overseas: Britain and the American Revolution; convicts, traders and settlers; abolition of the slave trade; race relations in the 19th century empire; free trade and "anti-imperialism"; the Boer War, the emergence of the modern Commonwealth; the liquidation of the British Empire.
- 346 TECHNOLOGY AND SOCIETY IN EARLY EUROPEAN HISTORY (5)**
Man's efforts to control his environment; the impact of technological change from the fall of Rome to the Industrial Revolution.
- 347 EUROPEAN INTELLECTUAL HISTORY (5)**
A study of the evolution of Western thought from its Greek and Hebrew origins to modern times. Special emphasis on the development of the European mind since the seventeenth century.
- 360 AMERICAN ECONOMIC HISTORY (5)**
American economic development from colonial times to the present, with particular emphasis upon later periods.
- 361 BLACK HISTORY IN THE AMERICAS: THE SLAVERY ERA (5)**
Prereq: an introductory level course to African, American or Latin American history. Africans in bondage in the Americas; African heritage of blacks in the Americas, slavery in Africa and the Americas, with emphasis on the United States, the Caribbean and Brazil.
- 365 GREAT PERSONALITIES IN AMERICAN HISTORY (5)**
Biographical approach based on evaluation of careers of typical leaders in public affairs, the arts and ideas.
- 366 AMERICAN SOCIETY AND THOUGHT: ORIGINS 1620-1800 (5)**
Social and intellectual development during the colonial and early national periods.
- 367 AMERICAN SOCIETY AND THOUGHT: 1800-1900 (5)**
Transcendentalism, Romanticism, Slavery, the Utopias; intellectual impact of the Civil War, Social Darwinism as trends in American history.
- 368 AMERICAN SOCIETY AND THOUGHT: THE TWENTIETH CENTURY (5)**
Intellectual developments in twentieth century America.
- 371 HISTORY OF AMERICAN TECHNOLOGY (5)**
Major technological and scientific developments in America; influence upon rise of the United States as a world power.
- 375 THE INDIAN IN AMERICAN HISTORY (5)**
Events and persons critical to history of North American Indians; review of interpretations of Indian cultures and history.
- 385 AFRICA TO 1885 (5)**
Development of African societies and states up to the European partition.
- 386 AFRICA SINCE 1885 (5)**
History of Africa during and after colonial rule. Emphasis is on African reactions to European rule, nationalist movements and the problems of independence.
- 387 HISTORY OF THE JEWS (5)**
Prereq: one of the following — History 111, 112, 113, 114, 287, or Lib St 121, 122, 123, or any upper-division European or Middle Eastern history course. An analysis of Jewish history and culture in medieval and modern Europe and in the classical and modern Middle East culminating in the development of the Jewish state in the Middle East.
- 390 TOPICS IN HISTORY (3-5)**
Prereq: junior status. Specialized topics dealing with history as a social science discipline. The subject of each individual course and its prerequisite will be announced in the class schedule. Repeatable to 10 credits.
- 391 HISTORY AND GOVERNMENT OF WASHINGTON (3)**
General history of the Pacific Northwest, state development, samples of local history, and state and local government. Required for certification of elementary teachers and secondary school social studies teachers.
- 394 GENEALOGY AND FAMILY HISTORY (3)**
Prereq: upper-division standing. A discussion of the methods and research aids in composing a genealogy and family history. Also discussed will be the importance of this research to prosopographical and historical studies in general.
- 400 DIRECTED INDEPENDENT STUDY (1-6)**
Conference Course Permit required from instructor before registering.
- 402 HISTORY DEPARTMENTAL HONORS ESSAY (3)**
Prereq: open to history honors students only.
- 405 PROBLEMS IN MODERN EUROPEAN HISTORY, 1815 TO THE PRESENT (5)**
Prereq: senior standing. Designed to give seniors a coherent overview of the course of European history since 1815 through an examination of a number of key problems.
- 407 HISTORY OF THE FIRST WORLD WAR (3)**
Prereq: upper-division standing. Analysis of the First World War with emphasis on the strategic and tactical considerations that governed its course.
- 408 HISTORY OF THE SECOND WORLD WAR (3)**
Analysis of the Second World War with emphasis on the strategic and tactical considerations that governed its course.

- 410 ANCIENT NEAR EAST (5)
Prereq: History 111 or Lib St 121. Genesis of Western civilization; our cultural debt to the ancient Mesopotamians, Egyptians, Hittites, Phoenicians, Aramaeans, Hebrews, Assyrians, and Persians.
- 411 GREECE TO 404 B.C. (5)
Prereq: History 111 or Lib St 121; open to sophomores with permission of instructor. The Greek world from Minoan-Mycenaean period to end of Peloponnesian War.
- 412 GREECE: 404 to 220 B.C. (3)
Prereq: History 111 or Lib St 121; open to sophomores with permission of instructor. Greece from the end of the Peloponnesian War to the intervention of Rome.
- 413 THE ROMAN REPUBLIC (5)
Prereq: History 111 or Lib St 121; open to sophomores with permission of instructor. From the foundation of Rome (753 B.C.) to the end of the Republic.
- 414 THE ROMAN EMPIRE (3)
Prereq: History 111 or Lib St 121; open to sophomores with permission of instructor. From the foundation of the Roman Empire to the death of Theodosius (395 A.D.) and the division of the Empire.
- 415 THE BYZANTINE EMPIRE (5)
Prereq: History 111 or 112 or Lib St 121; open to sophomores with permission of instructor. From the dedication of Constantinople to its fall (330-1453).
- 416a,b,c EUROPE IN THE MIDDLE AGES (5 ea)
Political, social, religious and intellectual changes in medieval civilization.
416a The Patristic Age, 284-768
Impact of Christianity and the barbarian invasions upon European society.
416b Central Middle Ages, 768-1200
Change from the feudal world to the nation-state.
416c Transformation of Europe, 1200-1450
Elements of the High Middle Ages and discussion of its collapse.
- 418 MEDIEVAL ENGLAND (5)
Political, social and constitutional history of England from the Roman conquest to War of the Roses.
- 419 CONSTITUTIONAL, LEGAL AND ADMINISTRATIVE HISTORY OF ENGLAND (3)
A study of the institutions, social and political forces, and ideas which contributed to the development of the British Constitution, especially during the formative period before the Glorious Revolution.
- 420 THE RENAISSANCE AND THE REFORMATION (5)
Prereq: History 113 or Lib St 121; open to sophomores with permission of instructor. Transition from the Medieval to the Modern: Western Europe from the eve of the Hundred Years War to the Treaty of Westphalia (1337-1648).
- 425 MODERN EUROPE, 1648-1789 (5)
Development of the modern state system and the conflict between monarchs and the growing middle class.
- 426 MODERN EUROPE, 1789-1850 (5)
Political, economic, social, and diplomatic developments between the French Revolution and mid-19th century.
- 427 MODERN EUROPE, 1850-1914 (5)
From the age of "Realpolitik" to First World War.
- 428 MODERN EUROPE, 1914-1945 (5)
Results of World War I, attempts at world organization, the Succession States of Central Europe, World War II.
- 429 EUROPE SINCE 1945 (5)
Major political, economic, and social developments; origin and operation of the cold war and attempts of Europe to adjust to the changing status of the continent.
- 430 GERMANY BEFORE 1815 (5)
German development from the late Middle Ages to the Napoleonic era.
- 431 GERMANY SINCE 1815 (5)
Since the Congress of Vienna; national unification, the German state system; role in international affairs.
- 432 RUSSIA, ORIGINS AND DEVELOPMENT TO 1917 (5)
An introduction to the history of Russia from its beginnings until the fall of the Russian monarchy in 1917 with the major emphasis upon social and intellectual trends and upon the revolutionary movement in the 19th century. Not open to students who have already taken History 433.
- 433 ROOTS OF REVOLUTION: RUSSIA, 1801-1917. (3)
A history of Russia in the 19th century with particular emphasis upon social and intellectual trends and upon the rise of the revolutionary movement. Not open to students who have taken History 432.
- 434 THE RUSSIAN REVOLUTIONS AND THE SOVIET REGIME (5)
An examination of the Bolshevik experience, with particular emphasis upon ideology and party history. Course addresses itself particularly to the question of why the revolution went wrong.
- 435 THE HABSBURG MONARCHY, 1815-1918 (5)
Prereq: Hist 114 or junior standing. A political and sociological analysis of the decline and collapse of a great empire. Offered in alternate years.
- 436 ENGLAND, 1485-1688 (5)
Political, social, economic, and constitutional history of England from the end of the Wars of the Roses to the Glorious Revolution.
- 437 ENGLAND, 1688-1832 (5)
Political, social, economic and diplomatic history of England from the Glorious Revolution to the Reform Bill of 1832; constitutional developments of the period.
- 438 ENGLAND, 1832 TO THE PRESENT (5)
Political, social, economic and diplomatic history of England from the Reform Bill of 1832 to today; development of parliamentary institutions; impact of the World Wars of the twentieth century on British politics, economics and society.
- 440 FRANCE, 1643-1815 (5)
Political, social, and economic development from Louis XIV through Napoleon.
- 441 FRANCE SINCE 1815 (5)
Prereq: History 114 or equivalent. Political, social and economic development of France since Napoleon.
- 445a CURRENT TRENDS IN THE TEACHING OF HISTORY (3)
Strategies and materials for teaching senior and junior high school history. The course emphasizes "new" strategies and support materials designed to maximize learning and student involvement in the teaching-learning processes.
- 448 EAST CENTRAL EUROPE TO 1919 (5)
The political, social and intellectual history of Poland, the Danube Basin and the Balkan Peninsula to the end of World War I.

- 449 TWENTIETH CENTURY EASTERN EUROPE (5)
Prereq: History 114 or junior standing. The place of the East European nations in European and world politics in our time; the role of East European issues in the outbreak of World Wars I and II; the rise of fascism and authoritarian regimes in the 1930s; the establishment of communism since 1945. Countries surveyed include Poland, Czechoslovakia, Hungary, Yugoslavia, Romania, Bulgaria, Albania. Offered in alternate years.
- 450 AMERICAN COLONIAL HISTORY TO 1776 (5)
The founding of the English colonies in North America and the development of their political, economic, religious and social institutions to the middle of the eighteenth century; problems of imperial administration and colonial reaction to imperial policies in the context of internal partisan controversies during the era of the revolutionary movement to the Declaration of Independence.
- 451 THE ERA OF THE AMERICAN REVOLUTION AND THE CONFEDERATION PERIOD (5)
Colonial reaction to British Imperial policies (1763-1776) in the context of internal partisan controversies over political, economic, sectional and religious issues; the military and diplomatic aspects of the Revolutionary War; the political and economic problems during the Articles of Confederation period that led to the demand for constitutional reform in the Convention of 1787.
- 452 THE EARLY NATIONAL PERIOD: FEDERALISTS AND JEFFERSONIANS (5)
The problems of the Confederation period, the major debates and compromises in the Constitutional Convention of 1787, and the partisan-political conflicts over constitutional interpretations, economic issues, and foreign policy leading to the origin of the first party system, from the establishment of the federal government to the War of 1812.
- 453 THE AGE OF JACKSON (5)
The struggle between republican and democratic forces in a milieu of social, technological, economic, international and religious flux, 1812-1848.
- 454 THE CIVIL WAR AND RECONSTRUCTION (5)
Development of rival nationalisms; problems of war in North and South; efforts toward reunion; new problems in 1877.
- 455 THE UNITED STATES, 1877-1916 (5)
Social, economic, and political development of the American nation after Reconstruction.
- 456 THE UNITED STATES: 1917-1941 (5)
Political, social and economic trends from the beginning of World War I to World II.
- 459 THE UNITED STATES SINCE 1941 (5)
Internal and international consequences of the rise of the United States as a world power since World War II.
- 461 DIPLOMATIC HISTORY OF THE UNITED STATES TO 1945 (5)
Relationship of the United States to world politics from colonial times to 1945.
- 462 DIPLOMATIC HISTORY OF THE U.S. SINCE 1945 (3)
A historical analysis of the United States in its relations to other powers in the post World War II world.
- 463 AMERICAN CONSTITUTIONAL HISTORY (5)
Prereq: History 103 or equivalent. The constitutional development of the United States from the colonial period to the present, with emphasis upon the major debates and compromises in the Constitutional Convention of 1787, and the historical role of the Supreme Court in shaping social policies via the power of judicial review in the context of partisan political controversy over crucial social issues.
- 465 THE AMERICAN WEST (5)
Westward movement from the Allegheny Mountains to the Pacific Ocean, with special emphasis upon the Far West.
- 466 THE RISE OF THE AMERICAN CITY (5)
The impact of urbanization on American political, social, and economic history from the late 19th century to the present.
- 467 REFORM AND RADICALISM IN TWENTIETH CENTURY AMERICA (5)
Origin, leadership, objectives, and impact of major reform and radical movements of the period.
- 468 U.S. AND REGIONAL MARITIME HISTORY (3)
Naval and maritime development of the nation and Pacific Northwest.
- 473 SELECTED MAJOR LATIN AMERICAN STATES IN THE 20th CENTURY (5)
A contemporary history of major states of current interest.
- 477 MODERN CANADA SINCE 1867 (3)
A survey of Canadian political, social and economic history since Confederation. The problems confronting federalism and Quebec; the emergence of Canada in world affairs.
- 480 CHINA FROM ANTIQUITY TO EARLY T'ANG (5)
Chinese civilization's foundations and the early stages of the Imperial system's evolution.
- 481 IMPERIAL CHINA FROM EARLY T'ANG TO MID CH'ING (5)
Political, socio-economic and intellectual trends during the eras of highest development of the Imperial system.
- 482 CHINA FROM LATE CH'ING TO THE PRESENT (5)
Dissolution of the Imperial system and experimentation with new political ideas and institutions; social and intellectual developments to the present.
- 483 ANCIENT JAPAN (5)
Development of Japanese civilization to the Meiji Restoration of 1868.
- 484 EARLY MODERN JAPAN (5)
Japan from the Meiji Restoration to the present.
- 485 MODERN JAPAN (5)
487a,b THE MIDDLE EAST (5 ea)
487a The Traditional Middle East
From the 6th Century to 1800
487b Middle East, 1800 to the Present
- 488 EAST AFRICA (3)
A regional history of East Africa, the former British territories and the Horn. Major concentration on political, economic and social change since 1850.
- 489 SOUTHERN AFRICA (5)
Political and social developments south of the Zambesi River in recent centuries: pre-colonial states, European settlements, conflicts of the 20th century.
- 491 SURVEY OF COMMUNITY HISTORY (2)
Prereq: History 391 or equivalent. A survey of local history, with emphasis upon the interrelated local, regional, and national factors involved in the development of selected communities of the Pacific Northwest.

493 HISTORY OF EUROPEAN HISTORIOGRAPHY (4)

Prereq: open only to upperclassmen or fifth-year students who are majors or minors in history, with permission of the instructor. A survey of the work of the major historians of the ancient west and modern Europe, their varying styles of writing and differing patterns of interpretation, reflecting changing climates of opinion.

494 HISTORY OF AMERICAN HISTORIOGRAPHY (4)

Prereq: open only to upperclassmen or fifth-year students who are majors or minors in history, with permission of the instructor. A survey of the major historians of the American past and their varying styles of writing and differing patterns of interpretation, reflecting changing climates of opinion.

495 PHILOSOPHICAL PROBLEMS OF HISTORY (5)

Prereq: open only to juniors and seniors. Selected readings in European philosophies of history and their contributions to the development of the modern historical consciousness as reflected in modern historical writings and analyses.

498 WORKSHOP IN RECORDS MANAGEMENT (2)

General principles of records management and archival programs as applicable to government and business organizations, with emphasis upon such topics as records inventorying, scheduling and retention.

499 HISTORICAL RESEARCH (3)

Prereq: one upper-division course in field of 499 topic. Research and writing of a formal paper on a topic developed by the student. The student will normally work under an instructor within the field of his choice.

GRADUATE COURSES

The following courses are offered for graduate credit for persons enrolled in the department's graduate program. For course descriptions and other information about the graduate program, see the current Graduate Catalog.

Admission to graduate status and to graduate courses requires completion of an undergraduate major in history or the permission of the department.

500 SPECIAL PROJECTS (1-6)

Individual conference.

501 HISTORIOGRAPHY I (4)

502 HISTORIOGRAPHY II (4)

511-588 GRADUATE SEMINARS (4 ea)

- 511 Ancient Greece
- 512 Roman History
- 515 Medieval History
- 520 Renaissance and Reformation
- 533 Russian History
- 536 English History
- 537 British Empire and Commonwealth
- 540 Modern European History
- 550 Colonial American History
- 554 Civil War and Reconstruction
- 558 Twentieth Century American History
- 560 American Economic and Business History
- 561 American Diplomatic History
- 563 American Constitutional History
- 566 American Society and Thought
- 571 Canada
- 573 Latin America
- 581 Imperial China
- 582 Republican and Communist China
- 583 Traditional Japan
- 584 Modern Japan
- 587 Middle Eastern History
- 588 Africa

591a,b SEMINAR IN THE PACIFIC NORTHWEST (4)

594 SEMINAR ON THE TEACHING OF HISTORY (2)

595a,b,c PRACTICUM IN COLLEGE TEACHING (2)

596a,b,c PRACTICUM IN COLLEGE TEACHING (4)

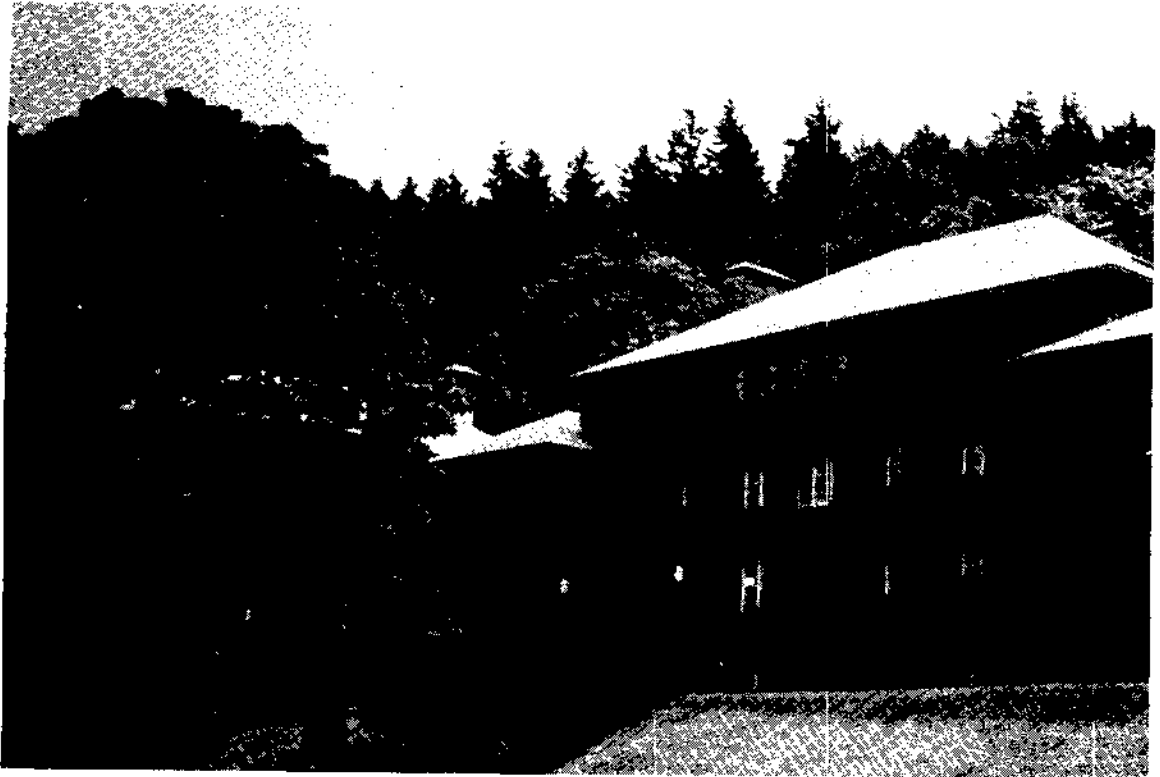
598a,b,c GRADUATE PROGRAM IN ARCHIVAL AND RECORDS MANAGEMENT TRAINING (8, 10, 10)

690 RESEARCH AND WRITING SEMINAR: THESIS (4)

691 RESEARCH AND WRITING SEMINAR: THESIS (4)

692 RESEARCH AND WRITING SEMINAR: THESIS (4)





Old Main.



HOME ECONOMICS

College of Arts and Sciences

Home Economics — A Definition

“Home economics in its most comprehensive sense is the study of laws, conditions, principles, and ideals which are concerned on the one hand with man’s immediate physical environment, and on the other hand with his nature as a social being, and is the study especially of the relations between these two factors. It is a philosophical subject — something to connect and bind together into a whole the pieces of knowledge, at present unrelated.”

—*Fourth Lake Placid
Conference on Home
Economics — 1902*

Home economics in the 1980s, as it did in the early 1900s, looks at the relationships

between people and environments. Home economics studies the decisions the family organization makes to create harmonious adaptations so that the optimum development of people is assured. Home economics pulls together, into an integrated whole, all knowledge and information known about the family and the environments surrounding the family.

HOME ECONOMICS FACULTY

- ALICE MILLS MORROW** (1978) Chairman.
Associate Professor. BS, University of Massachusetts; MA, Michigan State University; JD, University of Louisville, School of Law.
- EDITH B. LARRABÉE** (1957) Assistant Professor. BA, East Texas State University; MA, Colorado State College.
- JANICE R. PEACH** (1964) Assistant Professor. BS, South Dakota State University; MS, Oklahoma State University.

DOROTHY E. A. RAMSLAND (1949) Professor. BS, University of Wisconsin; MS, PhD, Michigan State University.

JANE E. ROBERTS (1966) Associate Professor. BS, MS, PhD, University of Wisconsin.

BACHELOR OF ARTS IN EDUCATION

Teacher Education Major

A teaching career in home economics offers the opportunity to work in a variety of subject areas including consumer education, family living, child development, foods and nutrition, home management, housing and home furnishings, textiles and clothing. The home economics teacher is prepared to work with learners at the middle school, secondary and adult levels and can select to teach at the level she or he enjoys the most. The home economics teacher assumes a dynamic role in planning field experiences, visiting homes, guiding extended home learnings, sponsoring youth groups, and working with individuals and groups in the community.

Early in the program, the prospective teacher becomes involved in field experiences to observe learners and participate in actual classrooms. The teacher education program includes experiences in micro-teaching, video taping, exploring and utilizing multimedia resources, leading discussions, and developing planning and evaluation skills for units and curriculum. The concepts and experiences are current and relevant. The teacher education preparation is culminated by a student-teaching experience with responsibility for planning and teaching in a secondary vocational home economics program.

Graduates of this comprehensive program discover a wide variety of employment options in addition to teaching at the secondary level. Such options include adult education, extension, consumer programs, as well as being home economists for business, industry and government.

Major Concentration:

*Child Development & Family Relationships
(in combination with elementary education
minor)*

The major emphasis of this program is the study of the child as he or she interacts with the total environment (family, school,

community agencies, etc.). The program involves the concepts of how children grow and learn, how to design and manage environments that will promote a child's maximal growth and development, and how to work with children as individuals and in groups — important facets of the learning process. In addition to regular classroom learning, the students have an opportunity to participate in a variety of community programs involving children (day care centers, Head Start, nursery schools, etc.). Student teaching experience is done at the elementary level.

This major combines home economics courses with the major concentration of child development/family relationships, elective home economics classes, and a variety of courses with the elementary education minor or major. This major offers flexibility in the selection of elective or alternative choices to meet particular needs of the student.

Graduates of this curriculum may work in such occupations, as teachers in nursery school, day care, Head Start, kindergarten and primary grades; family life educator; curriculum specialist; case worker for welfare and other social service agencies; parenting. Job opportunities continue to expand as social and economic changes create new needs and new employment demands.

BACHELOR OF ARTS

Major Concentration:

Family and Community Services

The family and community services concentration integrates concepts from natural and social sciences as they apply to problems of family and community. The student focuses on the family as a primary socializing and stabilizing agent within a rapidly-changing society. A knowledge of the structure and function of community agencies is an important concept for the student. The student will work with an advisory faculty committee in planning a program and selecting courses. Choices are available in all the areas of home economics.

This program is flexible and the student has the opportunity to design a program to fit his or her personal and professional goals.

Graduates may find employment in a variety of areas such as community agencies, family

Home Economics

counseling programs, day-care programs, youth programs, welfare and rehabilitation programs, volunteer aid supervisor, inter-agency coordinator.

Major Concentration:

Interior Design and Merchandising

This concentration is designed for the student desiring a broadly-based education in home economics which has its focus on bettering the physical and aesthetic environment of the family. The program is concerned with housing for different life stages and economic levels, equipment and home furnishings for the household, the arrangement of space and furniture, storage areas, lighting for comfortable and efficient living and all the aspects of the design.

Spatial, visual and functional problem-solving is encouraged through simulated and actual problems in interior design and housing. Students work with displays, home furnishings problems, meet professionals in the field, take field trips to homes and families as laboratory experiences and case studies, plus field trips to retail and wholesale home furnishings businesses. The current market in housing, single-family and multi-dwelling, and the interior design field are integral facets of study.

Opportunities for campus/community service are available through the Western Design Center. The student has the opportunity to apply design concepts to problem-solving situations that exist with the community or University. Students have worked with the selection and planning of a Forestry Service Information Center, planning storage units for a home economics laboratory, design of logos and brochures, etc. Work experience in local design studios and retail home furnishings stores are an elective part of the program. Supporting courses outside home economics may be individually planned to meet the student's career objectives.

Some interior design careers available to the student in this program are home lighting consultant, home planning consultant, kitchen planning consultant, interior designer, public housing consultant, architectural assistant, utility company home economist, consumer consultant, extension agent, and positions in retailing and merchandising.

Major Concentration:

General Home Economics

The student seeking a Bachelor of Arts degree in general home economics has the greatest flexibility in program planning. A student designs her or his own program with advisement by a faculty committee. Study is required in each of the following five areas of home economics: (1) child development and family relations; (2) home management and family economics; (3) housing, equipment and furnishings; (4) foods and nutrition; and (5) clothing and textiles. Individuals have a choice of concentrating electives in one or two areas to meet a specific goal or selecting courses which develop a general background for a flexible career objective.

In addition to the wide scope of courses in home economics, a student selects supporting courses from other disciplines. These supporting courses may concentrate in one or two areas or be chosen from a broad spectrum of areas. It is the "generalist" who will be prepared to adjust to a rapidly-changing world. This broad scope of home economics education will allow a student to be prepared for new career opportunities.

Job opportunities for graduates with a degree in general home economics are found in government, business and industry. Positions in consumer relations, mass media, and social, health and family services find a general background desirable.

BACHELOR OF ARTS IN EDUCATION

Major: Secondary Vocational Home Economics 70 credits

- General requirements:* Home Econ 100, 250, 310, 410
- Concentration requirements:* Home Econ 101, 120, 164, 166, 175, 224, 230, 253, 260, 272, 334, 338, 353, 361, 370, 375, 422, 424, 432, 441, 448, 450 or 452
- Elective requirements:* 1 credit in Home Economics
- Supporting course:* Econ 201; Chem 115 is strongly recommended.

The vocational certificate is granted upon completing the requirements for the Bachelor of Arts in Education including the above major concentration and supervised teaching in home economics.

All students being certified for vocational certification in home economics must comply with Washington State Administrative Code No. 390-28-010(6) which states: "By September 1, 1973, the preparation for vocational teaching for all persons shall include instruction in safety and industrial hygiene practices."

Minor 25 credits

Courses selected with faculty advisement; prior consultation is essential before undertaking a minor. This minor will not prepare an education major for teaching vocational home economics.

Major: Child Development and Family Relationships 45 credits

This major must be combined with elementary teaching minor. See Education Department listing for details of basic core requirements and options in general classroom, early childhood, or special education.

- Concentration requirements:* 27-30 credits from the following courses with approval of departmental adviser: Home Econ 120, 224, 250, 320, 327 or 427, 417b, 417d, 417f, 420, 421, 422, 423, 424, 426.
- Elective requirements:* 15-18 credits in home economics courses selected under faculty advisement.

Minor: Child Development and Family Relationships 25 credits

This minor to be combined with professional concentration in elementary education or special education major.

- Concentration requirements:* 25 credits in home economics courses selected under faculty advisement. Preliminary consultation is essential before undertaking a minor.

Teaching Competence

A minimum grade point average of 2.5 in home economics is required for graduation and certification for teaching competence.

BACHELOR OF ARTS

Major Concentrations 110 credits

70 credits in home economics plus supporting courses from other disciplines.

A minimum grade point average of 2.5 in home economics is required for graduation.

General Home Economics Concentration

- General requirements:* Home Econ 100, 250, 310, 410 (7 credits)
- Concentration requirements:* Selected credits from each home economics area listed below with faculty advisement (9 credits minimum from each area):
 - child development and family relationships
 - foods and nutrition
 - home management and family economics
 - housing, furnishings, equipment, design
 - textiles and clothing
- Elective requirements:* 18 credits in home economics
- Supporting courses:* Econ 201 plus 35 credits from disciplines other than home economics

Family & Community Services Concentration

- General requirements:* Home Econ 100, 250, 310, 410 (7 credits)
- Concentration requirements:* Home Econ 101, 120, 166 or 461, 175, 224, 230, 275, 334, 410; plus 42-44 credits in home economics classes to be planned with faculty advisement to meet student's proposed personal or career objectives
- Supporting courses:* Econ 201; Psych 201 and 351; Soc 202 and 340; plus 17 credits selected with advisement from disciplines other than home economics

Interior Design & Merchandising Concentration

- General requirements:* Home Econ 100, 230, 250, 310, 334 or 338, plus 2 courses selected from the following human development courses: Home Econ 120, 224, 320, 330, 417d, 421, 424, 425 (16-17 credits)

Home Economics

- **Concentration requirements:** Home Econ 101, 164, 175, 201, 364, 367, 370, 371, 372, 375, 376, 377, 470, 475, 477, 478 (47 credits)
- **Elective requirements:** 6 credits in home economics courses (Courses relating to interior design preferred.)
- **Supporting courses:** Econ 201; Tech 210, 311 and 313; plus 23 credits selected with faculty advisement from disciplines other than home economics, e.g., art history, art, business administration, philosophy, technology, speech or other appropriate disciplines

Minor 25 credits

Any non-home economics major may minor in home economics. Preliminary consultation with the Department of Home Economics is essential before undertaking a minor.

Pre-Professional Programs

A one- or two-year program is available for students who may wish to transfer. Pre-professional programs may be planned in dietetics, food management, nutrition, fashion merchandising, clothing design, textile science, or other home economics programs unavailable at WWU.

(See "Pre-Professional Programs.")

COURSES IN HOME ECONOMICS

- 100 FOCUS OF HOME ECONOMICS (1)
Home Economics as a discipline and a profession. S/U grading.
- 101 DESIGN ORIENTATION (3)
Not open to students with credit in Art 270. Fundamental design principles, design concepts and techniques as studio experiences.
- 120 THE PRE-SCHOOL CHILD IN THE FAMILY (3)
Intellectual, physical, social and emotional development of the child from conception through age five, with emphasis on ages three to five and relationship of the child in the family.
- 164 TEXTILES FOR THE CONSUMER (3)
Comparative properties of textile fibers and fabrics. Emphasis on use, care and economics of natural and synthetic textiles.
- 164 CLOTHING DESIGN AND SELECTION (2)
Prereq: Home Econ 101 or Art 270 with Home Econ 164 recommended; not open to home economics majors with five credits in Home Econ 260. Selection of clothing from aesthetic and consumer aspects.
- 175 PERSONAL ENVIRONMENTAL DESIGN (2)
Design aspects of the individual's environment; aesthetic, cultural and ecological.
- 201 DESIGN CRITERIA FOR INTERIORS (3)
Prereq: Home Econ 101 or equivalent; Home Econ 175. Studio experience in design relating to interiors and architectural problems.
- 224 MARRIAGE AND FAMILY LIVING (2)
Prereq: Lib St 105 or equivalent. Interpersonal relationships in pre-marital and marital interaction.
- 230 DECISION-MAKING IN THE FAMILY (2)
Basic concepts of management and decision-making viewed within the framework of the family as an ecosystem.
- 250 HUMAN NUTRITION (3)
Prereq: general university requirement in chemistry and Biol 101 or equivalent. Basic nutrition principles and applications; food habits and nutritive needs of people.
- 253 FOODS (3)
Prereq: Home Econ 250; Home Econ 272 recommended. Basic principles of food preparation and selection; laboratory experience and demonstration.
- 260 CLOTHING CONSTRUCTION (3)
Prereq: Home Econ 164, 166, Home Econ 101 or Art 270, and permission of department. Basic construction techniques; emphasis on management of resources.
- 272 HOUSEHOLD EQUIPMENT I (3)
Evaluation of household equipment; application to the family's management.
- 273 HOUSEHOLD EQUIPMENT II (2)
Prereq: Home Econ 272. Analysis of electrical and non-electrical equipment; energy conservation; laboratory experience, demonstration.
- 275 HOUSING AND INTERIORS (3)
Offered for non-majors and home economics majors except those in interior design and merchandising concentration. Alternatives in housing; choices for the family from an historical, cultural and aesthetic viewpoint; home furnishings, designs for interiors.
- 300 DIRECTED INDEPENDENT STUDY (1-6)
Conference Course Permit required from instructor before registering.
- 310 CONCEPTS AND RESEARCH IN HOME ECONOMICS (2)
Prereq: Home Econ 100. Concepts, analysis of research purposes and methods in the five areas of home economics. S/U grading.
- 320 THE SCHOOL-AGE CHILD IN THE FAMILY (3)
Prereq: Home Econ 120, Lib St 105 or equivalents. Intellectual, physical, social and emotional development of the child (6-18) with emphasis upon relationships of the child in the family.
- 327 FIELD EXPERIENCES IN HOME ECONOMICS (2-5)
Prereq: home economics upper-division major; completion of 45 credits in major except child development/family relationships 30 credits in major. Placement must be approved quarter before registration. Opportunity to work with community, business and government organizations and agencies utilizing home economics skills. (S/U grading only.)
- 330 LEGAL ENVIRONMENT OF THE FAMILY (3)
Prereq: Home Econ 230 or equivalent. The legal environment of the family and its effect on family decision-making.
- 331 LEGAL AND FINANCIAL ISSUES OF THE ELDERLY (3)
Prereq: Econ 201 or Soc 202 or Soc 251. Legal and financial implications of aging and public policy related to these issues.
- 334 CONSUMER ISSUES (3)
Current consumer issues in the economic world; responsibilities and protections.

- 338 FAMILY FINANCE (3)**
Prereq: Lib St 105, Econ 201 or Lib St 200. Management of family income and expenditures in the changing family cycle.
- 350 MATERNAL AND CHILD NUTRITION (3)**
Prereq: Home Econ 290. Nutritional needs for pregnancy and lactation; application of nutrition principles to growth and development of children; indices of nutritional status.
- 353 FAMILY MEAL MANAGEMENT (3)**
Prereq: Home Econ 290, 293 and permission of department. Concepts of management applied to meal service for the family.
- 361 CLOTHING ANALYSIS (2)**
Prereq: Home Econ 260 or equivalent. Limited to home economics education majors. New techniques applied to methods of teaching clothing; special fabrics; principles of fitting.
- 362 FAMILY CLOTHING (2)**
Prereq: Home Econ 164 or 166 recommended. Selection of family clothing to meet changing life cycle needs. (Normally offered alternate years or summer.)
- 364 TEXTILES FOR INTERIORS (3)**
Prereq: Home Econ 164 and 175 or 375. Decorative and functional textiles for the home.
- 365 ADVANCED TEXTILES (3)**
Prereq: Home Econ 164 or equivalent. Emphasis on special fabrics and finishes, fiber modifications and textile legislation. (Normally offered alternate years or summer.)
- 367 WEAVING DESIGN (3)**
Prereq: Home Econ 101, 164, and permission of department. Basic fabric construction; emphasis on color, texture and design.
- 370 HOUSING (3)**
Prereq: Home Econ 101 or equivalent, Home Econ 175, and permission of department. Housing alternatives for the family: historical, aesthetic and cultural implications.
- 371 SPACE PLANNING FOR LIVING ENVIRONMENTS (3)**
Prereq: Home Econ 201, 370; Tech 313. Analyzing human needs; planning interior spaces.
- 372 HOUSEHOLD SYSTEMS (3)**
Prereq: Home Econ 370; Tech 313 recommended. Factors affecting home environment systems and energy utilization.
- 375 HOME FURNISHINGS (3)**
Prereq: Home Econ 101 or equivalent; Home Econ 164 and 175; permission of department. Home Econ 364 recommended. Laboratory experiences with selection, arrangement, design of home furnishings.
- 376 HISTORY OF FURNITURE AND DECORATIVE ARTS (3)**
Prereq: Home Econ 375. Development of furniture and decorative arts from ancient to contemporary times.
- 377 PROFESSIONAL WORKROOM EXPERIENCE IN INTERIOR DESIGN (3)**
Prereq: Home Econ 364, 375; 60 credits in prescribed interior design and merchandising concentration. Supervised experience in professional interior design workrooms. S/U grading only.
- 400 DIRECTED INDEPENDENT STUDY (1-6)**
Conference Course Permit required from instructor before registering.
- 410 PROFESSIONAL TRENDS IN HOME ECONOMICS (1)**
Prereq: Home Econ 310. Current issues, trends, career education. S/U grading.
- 417a INDIVIDUALIZING HOME ECONOMICS (3)**
For home economics teachers who wish to add any or all of the following components into their learning systems: (1) personalized or individualized program, (2) self-instructional, (3) non-graded, (4) ungraded, (5) student directed and/or managed. Students will design a system under which their students operate in any or all of the above components. The system will be designed for their particular program and facility. (Normally offered alternate years or summer.)
- 417b HOME ECONOMICS FOR ELEMENTARY SCHOOLS (3)**
Prereq: student teaching or teaching experience. The development of home economics concepts and skills for the elementary school curriculum. (Normally offered alternate years or summer.)
- 417c IN-SERVICE HOME ECONOMICS SUPERVISORY TRAINING FOR SUPERVISION OF STUDENT TEACHERS (3)**
Prereq: vocational certification in home economics under State of Washington certification regulations; master teacher with a minimum of two or more years of teaching experience in the State of Washington who has worked as a cooperating teacher with student teachers prior to taking this course. In-service training of master, vocationally certified home economics teachers to prepare them for assuming certain supervisory tasks (in lieu of college supervision) when working with student teachers in home economics.
- 417d CONTEMPORARY ISSUES IN FAMILY RELATIONSHIPS (3)**
Prereq: Home Econ 424 or equivalent. Exploration of contemporary issues in family relationships. (Normally offered alternate years or summer.)
- 417e CONSUMER EDUCATION FOR HOME ECONOMICS TEACHERS (1-3)**
Prereq: student teaching or home economics teaching experience. Comprehensive overview of current consumer issues; exploration of new media and resources; description and evaluation of consumer education courses and/or programs for home economics at the secondary level. (Normally offered alternate years or summer.)
- 417f ADMINISTRATION OF PROGRAMS FOR YOUNG CHILDREN (3)**
Prereq: Home Econ 420 and 422 or equivalent. Staffing, scheduling, financing, and leadership of day care, nursery school, and specialized programs for children aged 0-5. (Normally offered alternate years or summer.)
- 418 DESIGN CENTER RESEARCH PROJECT (3-5)**
Prereq: Home Econ 201, 375; Tech 311 and 313. Directed research in design under the auspices of the Western Design Center.
- 420 PRE-SCHOOL EDUCATION (3)**
Prereq: Home Econ 120. Curriculum materials for pre-school age children; behavior management techniques, classroom organization, teaching strategies. (Also offered as Ed 432.)
- 421 DEVELOPMENTAL ASPECTS OF ADULTHOOD AND AGING (3)**
Prereq: Lib St 105 or equivalent; permission of department. Physical, economic, psychological and social changes in the middle and later years. Emphasis on changes in family relationships, finances, living environment and employment. Personal, social and community resources explored. (Normally offered alternate years or summer.)

Home Economics

422 LABORATORY EXPERIENCE WITH THE PRE-SCHOOL CHILD (3)

Prereq: Home Econ 120 and 420 and permission of department; a tuberculosis test required in compliance with state law. Home Econ 420 excepted for home economics secondary education majors. Observation and participation in pre-school laboratory. S/U grading.

423 SEMINAR IN ADVANCED CHILD DEVELOPMENT (3)

Prereq: 5 credits in upper-division child development courses and permission of department. Critical analysis of aspects of child development, recent development of theories; supervised individual projects.

424 FAMILY RELATIONSHIPS (3)

Prereq: Home Econ 224 or equivalent. Concepts of the family; current issues, family life education.

425 INFANT DEVELOPMENT (3)

Prereq: upper-division standing; permission of department. In-depth study of infant development including prenatal development, temperament and culture, physical growth and motor development, cognition and perception, and social and emotional development of the infant.

426 PARENT—CHILD INTERACTION (3)

Prereq: Home Econ 320 and 424 or equivalent. Emphasizes child-rearing practices, parent effectiveness and training.

427 FIELD EXPERIENCES IN HOME ECONOMICS (2-5)

Prereq: home economics upper-division major; completion of 45 credits in major except child development/family relationships 30 credits in major. Placement must be approved quarter before registration. Opportunity to work with community, business and government organizations and agencies utilizing home economics skills. (S/U grading only.)



Ridgeway Residence Halls animal sculptures.

432 HOMEMANAGEMENT LABORATORY (3)

Prereq: Lib St 105, Home Econ 353, 200, and permission of department. Application of concepts and principles of home management to group and home living.

441 HOME ECONOMICS VOCATIONAL EDUCATION (5)

Prereq: Psych 371, Ed 420; and 36 credits in required home economics; to be taken immediately preceding student teaching. Competency-based program designed for entry level of all aspects of secondary vocational home economics teaching; lesson, unit, course planning and department management.

442 CURRICULUM IN HOME ECONOMICS EDUCATION (3)

Prereq: student teaching and/or teaching experience. Functional home economics programs for middle school, senior high and adults. Analysis and synthesis of current concepts emphasizing the planning of courses of study and scope and sequence of programs. (Normally offered in the summer.)

443 ADULT EDUCATION IN HOME ECONOMICS (3)

Prereq: permission of department. Principles of education for adult learners, development of home economics programs for adult education; philosophies, issues and objectives.

445 CURRENT ISSUES AND TEACHING TECHNIQUES (2)

Prereq: home economics teaching experience or student teaching experience. Current issues, concepts, teaching techniques for implementation for home economics subject areas in middle school, junior and senior high schools.

445c CONSUMER EDUCATION INTERDISCIPLINARY WORKSHOP (3)

Prereq: current teaching in public schools, K-12. A special workshop designed to increase background knowledge in consumer education and develop an interdisciplinary curriculum in preparation for team teaching of consumer education in the public schools (K-12) during the following school year. (Summer.)

445d METRICS FOR THE CONSUMER (2)

Consumerism and the effective use of metric units. (Normally offered summers.)

446 RESOURCES FOR TEACHING HOME ECONOMICS (2)

Prereq: home economics teaching experience or student teaching experience. Current resources for teaching home economics programs in middle school, junior and senior high schools. Repeatable for credit.

446a Clothing and Textiles

446b Consumer Education

446c Family Life Education

446d Foods and Nutrition

446e Housing/Furnishings/Management

446f General Home Economics

448 EVALUATION IN HOME ECONOMICS (2)

Prereq: Psych 371, home economics major or minor. Application of current concepts in evaluation; techniques and non-test devices appropriate to each subject area of home economics.

450 ADVANCED NUTRITION (5)

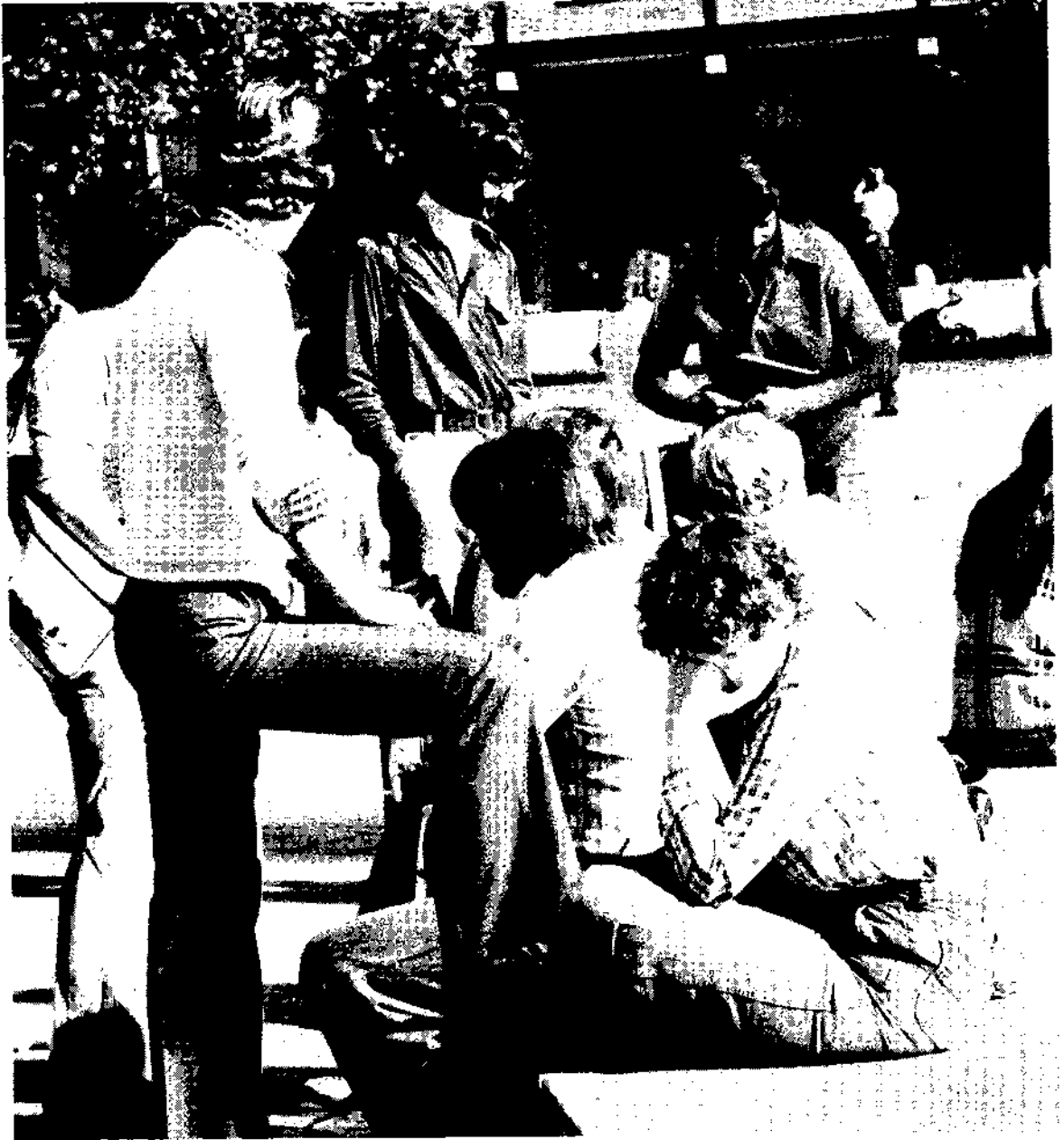
Prereq: Home Econ 250. Nutritional needs throughout the life cycle; survey and application of research studies; current issues and trends in nutrition.

451 FIELD STUDIES IN NUTRITION (2-5)

Prereq: Home Econ 450 and permission of department. Supervised field work in human nutrition. S/U grading.

452 SEMINAR IN NUTRITION AND FOODS (3)

Prereq: Home Econ 350 or 450. Current issues and problems in foods and nutrition. Survey and application of research studies. (Normally offered in alternate years or summer.)



453 SOCIAL AND CULTURAL ASPECTS OF FOOD (3)

Prereq: Home Econ 353; Anth 201. Social and cultural development of people as related to the acceptance and use of food.

455 RESEARCH PROBLEMS IN NUTRITION AND FOODS (2-5)

Prereq: Home Econ 350, 353, 450 and 310 or equivalent. Significant current research in human nutrition and foods, research techniques and applications to selected problems.

461 CLOTHING AND HUMAN BEHAVIOR (3)

Implications and significance of clothing in Western society, with special emphasis on clothing symbolism, social stratification, development of self-concept and fashion. (Normally offered alternate years or summers.)

470 HOUSING AND SOCIETY (3)

Prereq: Psych 201 and Soc 202; Soc 340 recommended. The personal environment and its relation to the community; current housing issues.

475 CONTEMPORARY DESIGN FOR INTERIORS (3)

Prereq: Home Econ 175 or 375 or equivalent; Home Econ 364 recommended. American and international influences on contemporary design.

477 FIELD EXPERIENCE IN INTERIOR DESIGN AND MERCHANDISING (3-5)

Prereq: Home Econ 376, 377, 475, 478; senior status. Supervised experience in a professional interior design studio or retail interiors business. S/U grading only.

478 INTERIOR DESIGN PLANNING (3)

Prereq: Tech 311 and 313; 60 credits in prescribed interior design and merchandising concentration; senior status; permission of department. S/U grading only. Planning course for interior designers. Variety of projects — residential and contract, presentations and critiques. Field trips to professional designers.

479 BUSINESS OF INTERIOR DESIGN (2)

Prereq: junior standing in interior design and merchandising, and permission of department. Case study workshop with emphasis on ethics; contracts and building construction; sources for the environment; compensation and fees; complaints and adjustments; installation; public relations. (Summer only.)

498 SCANDINAVIAN DESIGN (3-5)

Prereq: Home Econ 175 or equivalent courses in art or design; permission of department. Study of design, art, architecture, home furnishings, industrial design, arts and crafts of Norway, Sweden, Finland and Denmark.



HUXLEY COLLEGE OF ENVIRONMENTAL STUDIES

As we approach the beginning of the twenty-first century, it is increasingly clear that one of the important responsibilities of colleges and universities is to help meet the needs of society through education that is sensitive to and aware of environmental problems and issues. What is required is a new synthesis of knowledge that is global in its frame of reference, interdisciplinary in its character, experimental in its work, and holistic in its outlook.

This synthesis of knowledge recognizes that the whole is greater than the sum of its parts — that the contribution of many disciplines is needed to bring about effective problem solving and responsible action in environmental affairs. The real challenge in environmental studies is to bridge the traditional disciplinary barriers between the biologist

and chemist, the planner and engineer, the scientist and humanist in ways that will promote a genuine awareness of the true nature and scope of environmental problems and of the social and cultural values at stake. In a real sense, this challenge defines what an environmentalist is and what environmental studies is all about. Huxley College is committed to this challenge.

At Huxley, faculty, staff and students alike are at work to create a teaching-learning environment that reflects the ideals and values of personal communication, independent learning, new approaches to education, and perhaps most importantly, a sense of community. Huxley is a gathering place and a focus for those genuinely concerned about the environmental well-being of the earth. The College's diverse student body, drawn from across the entire country and other countries, tends to

become involved in the life of the community. They get together to work on projects, to explore issues, to go to the mountains, or simply to talk.

At Huxley there is real opportunity for students to contribute to the growth and functioning of the College. Students work with faculty and staff on decision-making committees and often attend faculty meetings. A new form of community structure is in the making which will create a more coherent and effective student input to the work of the College.

Huxley's courses and seminars are open to all students at Western. Descriptive information about Huxley College, admission requirements, and programs of study are to be found in the Huxley College section of this catalog under "Schools and Colleges of Western."

COMMUNITY

Huxley College is situated at the interface of several important environmental regions: the mountains of the North Cascades range and the shores of Puget Sound and the Pacific Ocean, the urban industrial regions of Seattle and Vancouver, B.C., and the rural agricultural regions of western Washington. Oil refining, logging in the Cascades, pulp and paper manufacture, aluminum production, fisheries, and aquaculture are key industries in the area.

Instruction and research at Huxley are carried out in the Environmental Studies Center, a six-floor laboratory, classroom, and studio facility on the WWU campus. The center also houses the University's Aquatic Studies Program which provides opportunity and specialized equipment for freshwater studies. Leona M. Sundquist Marine Laboratory at Shannon Point on Fidalgo Island, within easy traveling distance of the campus, provides facilities for marine studies.

About 200 students are currently enrolled in Huxley College; in addition, around 100 pre-Huxley students are enrolled in Western's College of Arts and Sciences. Huxley students are members of the WWU student body, which totals almost 10,000. They have access to all library and computer facilities, and the academic, athletic and recreational activities of Western.

HUXLEY FACULTY

- J. RICHARD MAYER (1978) Professor and Dean of Huxley College. BS, Union College; MA, Columbia University; PhD (Organic Chemistry), Yale University.
- JAMES R. ALBERS (1971) Professor and Vice Provost for Instruction and Planning, WWU. BS, Washington State University; MS, George Washington University; PhD (Physics), University of Washington.
- RICHARD H. BERG (1970) Associate Professor. BS, MS, University of Washington; PhD (Sanitary Engineering), Oregon State University.
- DAVID E. CLARKE (1966) Associate Professor. BA, MA, Trinity (Cambridge); PhD, (Political Science), Stanford University.
- SUSAN E. K. COOK (1976) Assistant Professor. BA, Wellesley College; PhD (Forest Zoology), State University of New York (Syracuse).
- RICHARD FRYE (1975) Assistant Professor. BS, U.S. Naval Academy; PhD (Marine Resources Economics), University of Rhode Island.
- ERNST L. GAYDEN (1971) Associate Professor. PhB, University of Chicago; MS (City and Regional Planning), Illinois Institute of Technology.
- JOHN C. MILES (1968) Assistant Professor. BA, Dartmouth College; MA (Recreation and Park Management), University of Oregon.
- GILBERT A. PETERSON (1972) Associate Professor. BS, Youngstown State University; MUP, PhD (Urban Planning), University of Washington.
- LYNN A. ROBBINS (1971) Associate Professor. BA, University of Utah; MA, PhD (Anthropology), University of Oregon.
- GARY C. SMITH (1977) Assistant Professor. BS, Clarion State College; MS, Ohio University; PhD (Zoology), University of Georgia.
- WILLIAM C. SUMMERS (1971) Associate Professor. BMe, PhD (Zoology), University of Minnesota.
- MICHAEL P. SWEENEY (1977) Visiting Assistant Professor. BFA, Utah State University; MLA (Landscape, Architecture), University of Massachusetts, Amherst.
- HERBERT H. WEBBER (1970) Associate Professor. BSc, PhD (Zoology and Marine Biology), University of British Columbia.
- RUTH F. WEINER (1974) Professor. BS, MS, University of Illinois; PhD (Physical Chemistry), The Johns Hopkins University.
- MING-HO YU (1970) Professor. BS, National Taiwan University; MS, PhD (Plant Nutrition and Biochemistry), Utah State University.

ADJUNCT FACULTY

Bert C. Brainard
 Director of Environmental Health
 Bellingham-Whatcom County Health District
 MPH (Public Health), University of Minnesota

DEGREE PROGRAMS

To achieve its purposes in undergraduate education, the College has developed an integrated set of five concentrations within three broad program areas. These concentrations lead to a B.S. in Environmental Studies.

Environmental Science

- Ecosystems Assessment and Management
- Environmental Health

Huxley College

Environmental Planning

- Environmental Planning

Environmental Affairs

- Social Assessment and Policy
- Environmental Education

In addition, the College offers interested students the opportunity to pursue a more general B.A. in environmental studies; student/faculty designed concentrations; or a minor in environmental studies

Students interested in any of these degree programs should contact the Huxley office (Environmental Studies 539) for advisement on admission to Huxley College and selection of a faculty adviser. Each applicant to Huxley College will receive an admissions contract and will be assigned an adviser from among the Huxley College faculty. (See section on admission under "Schools and Colleges of Western.")

B.S. IN ENVIRONMENTAL STUDIES

In general, Huxley students pursuing B.S. degrees will complete certain "common requirements" and, in addition, specific requirements for a concentration.

Huxley Common Requirements

These requirements consist of six core courses, Huxley seminars, and Problem Series (student independent study projects):

Core Courses [24 credit hours]

The core courses provide a common background of environmental concepts, knowledge and perspectives essential for understanding the role of man within an interdependent physical, biological, social and cultural world.

- Hux 312 The Planning Process
- Hux 330 Ecosystems Analysis
- Hux 335 Human Ecology
- Hux 350 Introduction to Environmental Pollution
- Hux 383 Environmental Economics
- Hux 470 Environmental Ethics

Seminars [4 credit hours]

Huxley seminars, which are one- or two-credit courses, serve as a meeting ground for faculty and students to work together on topics of contemporary or special interest. Typically, a seminar will be limited to 15 students, to stimulate discussion and foster communication across disciplinary boundaries. Students are encouraged to initiate

and, with faculty involvement, to conduct seminars. Recent seminars include:

- Stalking the Wild Alga (a study of local edible algae)
- Trace Organic Compounds in the Environment
- Energy and House Design
- Behavior of Marine Animals
- Environment and Personal Growth

Problem Series [10-12 credit hours]

Problem Series at Huxley consists of at least ten credit hours of Hux 498 and, at the option of the student's tutor, two credits of Hux 398. The Problem Series is one or more independent study projects designed to give students a chance to focus their energy, ideas, experience and training on an environmental problem. The Problem Series is normally undertaken in the senior year, is guided by one or more Huxley faculty tutors, and may serve as a single study project or a part of a major investigation. It may take the form of field work, or a laboratory, library, community or internship experience. All Problem Series must be completed with a written, taped, filmed or graphically portrayed statement describing the process and the outcome of the investigation or internship. Two bound copies of the final report are submitted by the graduating student; one of these is kept on file in the Huxley library.

Recent examples of Problem Series:

- The effect of water-soluble fractions of three types of crude oil on *Thais lamellosa* and *Hemigrapsus nudas*
- Trophic relations of benthic macroinvertebrate communities of Brannian Creek, Whatcom County
- Plastic marine surface litter in Puget Sound
- Population dynamics and night roost requirements of bald eagles in the Nooksack Valley, Washington
- Feasibility of institutional recycling for Bellingham, Washington
- The effects of certain environmental pollutants on the ascorbic acid production in germinating *Phaseolus mungo*

Recent examples of internships include work with:

- Youth Conservation Corps
- Town, county, and regional planning agencies
- Wastewater treatment plants
- Nature centers
- National parks
- Public schools

Specific Requirements for Huxley Concentrations

Ecosystems Assessment and Management [95 credit hours]

The concentration in Ecosystems Assessment and Management has as its primary goal to provide students with skills in the scientific and technical dimensions of applied ecology. Program objectives include development of capabilities to measure and assess ecosystem structure and function; mastery of specific skills in environmental sampling, monitoring, analysis and data interpretation; understanding of contemporary thought and ideas in terrestrial, marine and freshwater ecology; and fostering awareness of environmental values and of enlightened management of natural resources.

Career opportunities in Ecosystems Assessment and Management include entry-level positions in federal, state, county and local agencies as well as industry and business, to carry out monitoring, impact assessments, laboratory analysis, field studies, environmental management and conservation. This concentration also prepares students to pursue graduate studies in applied biology and interdisciplinary ecology programs.

- Huxley common requirements (38-40 credits)
- Seven required courses (33 credits)
 - Hux 333 Freshwater Ecosystems Assessment
 - Hux 338 Coastal Ecosystem Assessment
 - Hux 339 Terrestrial Ecosystems Assessment
 - Hux 360 Water Pollution or
 - Hux 362 Air Pollution
 - Biol 340 Biometrics
 - Hux 435 Renewable Resource Management
 - Hux 436 Environmental Impact Statements
- One of the following three courses (4 credits)
 - Hux 433 Freshwater Resource Management
 - Hux 438 Coastal Ecosystems Management
 - Hux 439 Wildlife, Forest, and Park Management
- Electives, under advisement (18-20 credits)

Recommended lower-division preparation for Ecosystems Assessment and Management: Biol 123, Introduction to Genetics; Chem 122, General Chemistry II, or Chem 251, Organic Chemistry; CS 110, Introduction

to Programming, or Math 124, Calculus and Analytical Geometry. Students interested in marine studies should take Chem 121, General Chemistry I, and Chem 122, General Chemistry II. Interested students should seek advisement early regarding lower-division preparation.

Environmental Health [93-101 credit hours]

The Environmental Health concentration is concerned with the understanding of those substances, forces and conditions in the surrounding environment that may influence human health and well-being. Such problems as air and water pollution, nutrition, food contamination, overpopulation, pesticides and radiation exposure are considered. The concentration not only stresses creation of an environment which is healthful and contributes to high-quality living, but also seeks the tools and methods to be used for assessing environmental health related problems.

The environmental health program also provides flexibility so that the student interested in continuing with graduate education can plan his course work to meet graduate school admissions requirements.

There has been and will continue to be a great need for adequately trained people to monitor the environment and to plan and manage environmental health programs. Such persons are prepared to work in a variety of programs such as food quality control, water supply, air pollution, water pollution, institutional health and community nutrition.

- Huxley common requirements (38-40 credits)
- Seven required courses (25 credits)
 - Hux 352a Nutrition I
 - Hux 359a Community Environmental Health Administration
 - Hux 359b Field Practice in Environmental Health
 - Hux 455 Pollutants and Health
 - Biol 345 Fundamentals of Microbiology
 - Biol 348 Human Anatomy and Physiology
 - Biol 349 Human Anatomy and Physiology
- One of the following two options:

Option I - General Environmental Health [34-36 credits]

- Hux 360 Water Pollution
- Hux 361 Water Quality Laboratory
- Hux 362 Air Pollution

Huxley College

- Hux 436 Environmental Impact Statements
- Hux 450 Environmental Biochemistry
- Hux 451 Environmental Biochemistry Laboratory
- Chem 351 and Chem 352 Organic Chemistry
- Chem 353 Organic Chemistry or 333 Introductory Analytical Chemistry

Option II - Food and Nutrition (30 credits)

- Hux 352b Nutrition I Laboratory
- Hux 353 Food and Health
- Hux 400 Independent Study
- Hux 417b Contemporary Nutrition
- Hux 417c Nutrition Education
- Hux 452 Nutrition II
- Chem 251 Elementary Organic Chemistry
- Health Ed 447 Community Health

Recommended preparation for Environmental Health is essentially the same as that given above for Ecosystems Assessment and Management. Interested students should seek advisement early regarding lower-division preparation.

Environmental Planning [110 credit hours]

Environmental planning is concerned with the integration of cultural systems with natural systems. While issues of land use and public decision-making are central to the work of planners, the environmental planner will likely deal with a broader range of problems — from land-fill site selection to appropriate technologies for rural development; from the design of new towns to environmental impact assessments.

In environmental planning there is a need to understand both natural and social systems and to integrate them over time and various scales of human activity. There is also a need to understand how environmental decisions are made and implemented in government, by community groups and by individuals.

Huxley's environmental planning curriculum is designed to provide students with the tools and techniques of gathering, analyzing and presenting relevant data; with a broad, integrative perspective on environmental problems and the plans conceived to address these problems; and with an awareness of and sensitivity to environmental values and aesthetic needs.

Huxley offers a two-year program in environmental planning. The curriculum provides the student with an understanding of aspects

of functional processes of both natural and cultural systems and basic planning theory, principles, policy and methods. Studios in the final year in the three basic scales of planning — regional, urban and site — permit the student to apply the knowledge gained in the preceding year to simulated or actual experiences which may require field investigation, data analysis, professional report preparation and public presentation.

Graduates of the environmental planning program have been accepted in major graduate planning programs throughout the nation. Graduates desiring to enter the job market will be prepared for introductory level positions in city, county, and regional planning agencies and private consulting firms.

- Huxley common requirements (38-40 credits)
- Nine planning courses (37 credits)
 - Hux 313 Graphic Analysis and Presentation
 - Hux 406 Principles of Regional Environmental Planning
 - Hux 407 Principles of Urban Environmental Planning
 - Hux 408 Principles of Environmental Site Planning
 - Hux 410 Biophysical Methods for Land Use Planning
 - Hux 411 Regional Environmental Planning Studio
 - Hux 412 Urban Environmental Planning Studio
 - Hux 413 Environmental Site Planning Studio
 - Hux 415 Theory and Philosophy of Planning
- Four specialized courses (18-19 credits)
 - Hux 436 Environmental Impact Statements
 - Geog 423 Geography of Soils
 - Geol 310 Geomorphology
 - Geog 422 Geography of Water Resources, or
 - Geol 472 Hydrology
- Electives, under advisement (14-17 credits)

Recommended preparation for Environmental Planning includes a course in public speaking; courses in the humanities and the social sciences; a course in statistics; Hux 201, Introduction to Environmental Studies — A Scientific Approach; Geog 203, Physical Geography; and tool courses in drawing, drafting, cartography, design and color.

Social Assessment and Policy [75 credit hours]

The goal of Huxley's concentration in Social Assessment and Policy is to provide knowledge and tools for understanding the social and humanistic dimensions of environmental problems. Studies will focus on cultural premises, perceptions, and values both historic and contemporary, on social change necessary for environmental problem solving and ways to accomplish it, and on social policy and planning and its short- and long-term environmental costs and benefits.

The concentration is a general one designed to give students experience in a wide area of inquiry. It touches on cultural ecology, the dynamics of human population, environmental ethics, political action, ecosystems, pollution, and assessment of environmental impacts, among other subjects. Competent Social Assessment and Policy graduates have little difficulty in finding employment in federal agencies, local service organizations and elsewhere. The background these students acquire serves them well when facing the variety of challenges in their chosen careers.

Graduate study is a second option open to students. Several excellent graduate programs in the U.S. provide a continuation of in-depth study in human ecology and related areas of study; or the student may enter graduate programs in fields such as anthropology, sociology, geography, political science or psychology. The concentration allows many opportunities for self-development in addition to professional and career preparation.

This concentration is structured around a set of specific objectives. Students choose much of their coursework from among courses meeting these objectives.

- Huxley common requirements (38-40 credits)
- One course selected under Objective 1 (3-4 credits)
Objective 1: To teach the perspectives and tools of social science as they apply to analysis of environmental problems. Courses most centrally addressing this objective: Hux 342, 366. Other courses: Hux 308, 353, 365, 406, 407, 419, 420, 430, 467, 491.
- One course selected to meet Objective 2 (4-6 credits)
Objective 2: To provide skills to work within the social system, to understand it, and, where justified, to change it without social disruption and breakdown. Hux 371, 419, 420, 430, 436, 467, 491.

- Two courses — one from each of two of the remaining objectives 3-7

Objective 3: To develop new viewpoints necessary to work out problems, dilemmas and conflicts. Courses most centrally addressing this objective: Hux 377, 467, 471. Other courses: Hux 353, 365, 366, 419, 430, 435, 491.

Objective 4: To examine the past, present and future role of government and governmental structure in environmental affairs. Courses most centrally addressing this objective: Hux 420, 430, 490. Other courses: Hux 308, 365, 419, 436, 491.

Objective 5: To provide skills and opportunities for participation in the local community and in environmental affairs. Courses most centrally addressing this objective: Hux 316. Other courses: Hux 371, 473.

Objective 6: To study the history and dynamics of human cultural and technical evolution. Courses most centrally addressing this objective: Hux 344, 365, 419. Other courses: Hux 467.

Objective 7: To develop logical skill in working through the moral dilemmas involved in social priorities and in the risks involved in seeking to attain them. Courses most centrally addressing this objective: Hux 471. Other courses: Hux 308, 377.

- Electives, under advisement (15-24 credits)

Recommended preparation for Social Assessment and Policy includes a college-level course in history and courses in introductory sociology and political science. Interested students should seek advisement early concerning their lower-division preparation.

Environmental Education

The general objective of the concentration in environmental education is to provide students interested in educational roles of various types with an opportunity to obtain a basic understanding of the qualities of the environment in general and of the environmental education process in particular. Three options have been developed within the program which will allow students with varied interests opportunities to work toward diverse career goals.

The concentration consists of several distinct parts. First, students seek to acquire a synthetic and holistic understanding of the content of environmental studies. Second, students examine the process of education

from the environmental perspective; i.e., how the environmental education process differs from other processes of education, what ideas and methods are central to the process and what specific techniques are available to facilitate the process. Third, students investigate ways of applying environmental education content and techniques in the professional roles which they may pursue. Fourth, students participate in internships, a field practicum, or research.

Option I Teacher Education (36 credit hours minimum) plus Professional Studies Program.

The goal of this option is not to train a specialist in environmental studies but to assist in the training of teachers of one of the traditional subject areas. It is possible to complete this option in the normal four-year college program only if advisement begins in the freshman year. A program in cooperation with the School of Education must be worked out individually for each student.

- Huxley core of six required courses (24 credits)
- Huxley seminars (4 credits)
- Two environmental education courses (8 credits):
Hux 371 Introduction to Environmental Education;
Hux 472 Environmental Education Curriculum
- Certifiable secondary subject concentration
- Professional studies program applicable to teaching level (see "Education" section of the catalog)

Option II — Outdoor Education and Interpretation (90 credit hours)

The goal of this option is to prepare people to pursue environmental education careers in non-formal educational and recreational settings. Persons choosing this option will design programs of study which should prepare them for work as outdoor education leaders and interpreters of various environments.

- Huxley common requirements (38-40 credits)
- Six courses (24 credits)
Hux 371 Introduction to Environmental Education
Hux 372 Outdoor Education
Hux 373 Experiential Learning in Environmental Education
Hux 377 Alternative Futures
Hux 472 Environmental Education Curriculum

- Hux 473 Environmental Interpretation
- Electives, under advisement (26-28 credit hours)

Option III — Mass Communication and Environmental Education (90 credit hours)

This option allows a student to combine his or her interests in education, environmental studies, mass communication, and/or media technology utilizing extensively coursework in other colleges at Western which specialize in various aspects of communications.

- Huxley common requirements (38-40 credits)
- Four courses (16 credits)
Hux 366 Systems Thinking
Hux 371 Introduction to Environmental Education
Hux 377 Alternative Futures
Hux 472 Environmental Education Curriculum
- Electives, under advisement (34-36 credits)

Recommended preparation for Environmental Education: Interested students should seek advisement early in order to formulate a degree program within any of the above options.

Student/Faculty Designed Concentration

Students who wish to design their own concentrations in environmental studies should obtain information on guidelines from the Huxley College office (ES 539). The student-designed concentration should be developed with faculty advisement and must be approved by two Huxley faculty members and the Huxley College Curriculum Committee at least four quarters before the student's anticipated graduation.

B.A. IN ENVIRONMENTAL STUDIES

(70 credits)

Huxley's Bachelor of Arts degree program is designed to help a student develop breadth in environmental studies. The basic college commitment to interdisciplinary study, concern for real-world problems and awareness of environmental values are stressed. By its nature, the B.A. program allows a student wide flexibility of choice among courses, many of which may be taken in other colleges at Western.

- Huxley core of six courses (24 credits)
- Huxley seminars (4 credits)
- Electives, under advisement, and consisting of at least 25 Huxley credits (42 credits)

MINOR IN ENVIRONMENTAL STUDIES
(24 credits)

Huxley Environmental Studies minor is open to all students at Western.

- Hux 201 and 202, or Hux 305 (4-6 credits)
- Two Huxley core courses selected from Hux 312, 330, 335, 350, 383, 470 (8 credits)
- Electives, under advisement (10-12 credits)

GRADUATE STUDIES

Huxley offers a limited number of graduate-level courses in directed research and advanced environmental studies. In addition, the College offers work toward an M.S. degree through two cooperative graduate programs: applied biology (a joint program with the Department of Biology) and environmental planning (a joint program with the Department of Geography and Regional Planning). For further information, see the Graduate School Bulletin, Western Washington University, or contact the dean of Huxley College, the dean of the Graduate School, or the chairman of the appropriate department, College of Arts and Sciences.

COURSE DESCRIPTIONS

Huxley courses and seminars are open to all students at Western. Students enrolled in other colleges and divisions at Western may apply credits earned at Huxley to their elective programs.

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| <p>201 ENVIRONMENTAL STUDIES: A SCIENTIFIC APPROACH (3)</p> <p>An Introduction to environmental studies which stresses a scientific approach toward understanding the nature and scope of contemporary problems in man's environment. The course reflects application of physical, chemical, biological and geologic principles to define ecological change, both natural and man-made.</p> <p>202 ENVIRONMENTAL STUDIES: A SOCIAL SCIENCE APPROACH (3)</p> <p>An overview of the environmental macro-problem with emphasis on specific cases which reveal the complexity of environmental problems. Social, political, economic, humanistic and scientific issues in their environmental context. A basic Introduction to environmental studies from the perspective of the social studies.</p> <p>300 DIRECTED INDEPENDENT STUDY (1-6)</p> <p>Conference Course Permit required from instructor before registering.</p> | <p>305 GENERAL PRINCIPLES OF ENVIRONMENTAL STUDIES (4)</p> <p>This course delineates the complexity of man's interaction with his many social and natural environments. The course uses general systems philosophy as a means of integrating the significance of a multitude of environmental issues.</p> <p>308 CURRENT ENVIRONMENTAL ISSUES (3)</p> <p>Presentation and analytical discussion of current, on-going environmental issues in the United States, and particularly in the Pacific Northwest. Each issue will be examined in depth and with reference to its place in, and contribution to, the development of environmental thought and the environmental movement in the U.S.</p> <p>312 THE PLANNING PROCESS (4)</p> <p>Survey of the four basic steps of the planning process, with emphasis on enabling requirements and implementation. Other topics include state and federal planning, policy, citizen participation, and agency organization.</p> <p>313 GRAPHIC ANALYSIS AND PRESENTATION (3)</p> <p>Graphic techniques for analysis of planning problems; graphics as an alternative to verbal and tabular presentations of information. Tools, materials, and methods in graphics design, execution, and reproduction, especially for papers and reports. Prereq: Hux 312.</p> <p>316 THE COMMUNITY PROCESS (4)</p> <p>Course designed to provide an action component to the problem orientation of Huxley College. Students identify community problems, examine each problem from the perspective of the sociologist, environmentalist, and community organizer. Course requirements include appropriate readings by contemporary community scholars; student involvement in a specific community problem; and the development of an annotated bibliography to assist the student in understanding the problem. Case studies of national, regional and local community problems are presented via guest speakers and media presentations.</p> <p>321 OCEANOGRAPHY (3)</p> <p>Principles of oceanography, with emphasis on a description of the marine environment as an entity. Physics, chemistry and biology of the ocean. Prereq: Introductory biology and chemistry or permission of instructor.</p> <p>330 ECOSYSTEMS ANALYSIS (4)</p> <p>Application of concepts and methods of ecological theory to environmental problems. Prereq: two quarters of general biology.</p> <p>333 FRESHWATER ECOSYSTEMS ASSESSMENT (5)</p> <p>The freshwater environment with emphasis on basic principles governing the function of lake, pond and stream ecosystems. The influence of physical, chemical and biological factors on aquatic communities will be presented. Laboratory experiments are assessments of lake and stream ecosystems. Prereq: Hux 330, 350, 361.</p> <p>335 HUMAN ECOLOGY (4)</p> <p>A survey of the historical development of writings and concepts in human ecology. This course provides an overview of man's views of himself as a creature interacting with the natural environment. Basic human ecology concepts are strongly emphasized.</p> <p>337 FOREIGN STUDY (2-5)</p> <p>(See Huxley 437)</p> <p>338 COASTAL ECOSYSTEMS ASSESSMENT (5)</p> <p>A laboratory course dealing with structure and function of marine coastal ecosystems. Lectures will deal with habitat types, dominant flora and fauna, extent of cultural modification and sensitivity to human impact. Laboratory will deal with methods of analysis of coastal ecosystems. Prereq: Hux 330, organismal biology, general chemistry.</p> |
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- 339 TERRESTRIAL ECOSYSTEMS ASSESSMENT (5)**
 An analysis of the structural components of terrestrial systems, including flora, fauna, soils and climate. Functional attributes of ecosystems such as energy flow, mineral cycling, succession and community stability will be explored. The impact of human activities on the flora, fauna and ecosystems dynamics will be assessed. Laboratory activities will concentrate on methods of measuring vegetation types, population dynamics of animals, soil structure and function and functional attributes of entire communities. Measurements and comparisons will be made between "natural" and man-impacted systems. Prereq: Hux 330 or equivalent.
- 342 SOCIAL IMPACT ASSESSMENT (4)**
 An interdisciplinary approach to the effects of technology, industry, commerce and public and private policy on the lives of human beings. The course uses social science techniques to assess and evaluate problems, issues and strategies. Case studies are used to illustrate central issues. Emphasis is on environmental legislation and policy in social impact assessment. Prereq: a general social science course.
- 344 ENVIRONMENTAL HISTORY AND WESTERN CIVILIZATION (4)**
 Current environmental problems are founded in cultural processes that have spanned many centuries. Historical knowledge is essential to understanding these problems and prescribing solutions. The modification and destruction of the natural environment by human activity in the West and particularly in North America are reviewed. Lessons for the present of the reciprocal impact of culture and the natural environment and the human responses thereto in past civilizations are explored.
- 350 INTRODUCTION TO ENVIRONMENTAL POLLUTION (4)**
 An introduction to the problems of air and water pollution, pesticides, radiation, hazardous substances and noise. This course provides information on the current status of the technology of environmental quality and stresses the interaction of pollutants with human health and the environment. Prereq: general biology, general chemistry.
- 352a,b NUTRITION I; NUTRITION I LABORATORY (4,2)**
 Introduction to the disciplines of food and nutrition with emphasis on relationship between nutrition and health. Laboratory involves experimental techniques used in analysis of food and body fluids. Prereq: general biology and chemistry or permission of instructor. Register concurrently for 352a,b.
- 353 FOOD AND HEALTH (4)**
 Overview of world food problems; the nature and effects of hunger and malnutrition on man's health. Prereq: introductory nutrition.
- 359a COMMUNITY ENVIRONMENTAL HEALTH ADMINISTRATION (1)**
 An introduction to the methods of administering environmental health programs at the local level. Prereq: Hux 350 or permission of instructor.
- 359b FIELD PRACTICE IN ENVIRONMENTAL HEALTH (1)**
 This course will acquaint the student with actual field problems encountered in administering local environmental health programs. Prereq: concurrent enrollment in Hux 359a required.
- 360 WATER POLLUTION (3)**
 Sources, detection, effects, and methods of treatment of pollutants in the freshwater and marine environment are presented. Among the types of pollutants considered are wastewater and thermal discharges, oil and sedimentation. The use of chemical measures and biological indices for assessment of pollution are considered. Prereq: Hux 350.
- 361 WATER QUALITY LABORATORY (3)**
 A laboratory course dealing with basic theory and techniques of water quality analysis, including nutrient analysis, dissolved oxygen and BOD, heavy metals, total and fecal coliforms. Techniques include spectroscopic analysis, titration, bacteriological assay, bioassay, and others. Prereq: general chemistry, Hux 330, 350. (Hux 330 and 350 may be corequisite.)
- 362 AIR POLLUTION (4)**
 Types of air pollutants, their measurement and effects. Removal of air pollutants from gas streams. Air pollution meteorology and dispersion. Air pollution laws and standards. Air resources management. Prereq: Hux 350; general chemistry.
- 363 QUANTITATIVE METHODS FOR ENVIRONMENTAL PROBLEMS (4)**
 A review of basic mathematics and its application to chemical, physical and biological problems. Discussion topics are exponents, trigonometry, functions, dimensional analysis, graphics, calculus, differential equations, statistical inference. Prereq: one quarter of integral calculus.
- 365 ENERGY AND ENERGY RESOURCES (4)**
 The study of the energy concept as it applies to the environment. Concepts of thermodynamics, entropy, chemical rates. Thermodynamics of evolution energy flow in biological systems. Energy flow in primitive and industrial societies, energy legislation, rate structures; methods of power generation. Prereq: general physics or general chemistry or Hux 350; or permission of instructor.
- 366 SYSTEMS THINKING (4)**
 Historical roots in Goethe, Hegelianism, Smuts, Whitehead, etc. The debate between analytical and synthetic approaches to philosophy. Origins in biology and the work of von Bertalanffy; origins in management and the work of Operational Research and the Cyberneticists. Laszlo and the rapprochement with philosophy. Implications of systems thinking for individual, social, economic and political behavior, and the solution of contemporary environmental problems. Prereq: Hux 202 or 305, or permission of instructor.
- 371 INTRODUCTION TO ENVIRONMENTAL EDUCATION (4)**
 The process of environmental education is explored through reading and discussion focusing on environmental perception, attitudes and values in behavior, the educational environment, and the qualities of the environmental education curriculum. The course provides an introduction to environmental education and a review of current thinking in this dimension of education.
- 372 OUTDOOR EDUCATION (4)**
 Classroom and field study of outdoor education, an approach to environmental education. Traditional outdoor learning methods are reviewed. New developments and programs such as Outward Bound and adaptations thereof are reviewed. Field experience in various outdoor settings is included. Prereq: Hux 371 or permission of instructor.
- 373 EXPERIENTIAL LEARNING IN ENVIRONMENTAL EDUCATION (4)**
 The special potential of experiential learning for environmental education is explored. Experiential learning theory and its application in specific settings are reviewed. A range of experiential learning practices such as simulation gaming, role-playing, awareness exercises, field study and outdoor pursuits are examined. The problem of evaluation of this type of learning is given special attention. Fieldwork is required. Prereq: Hux 371 or permission of instructor. Taught in alternate years.

- 377 **ALTERNATIVE FUTURES (4)**
 Predictions, projections, and extrapolations of alternative futures are examined. The course provides an introduction to the growing field of future studies. People learning about the world of today will have to live in a potentially different world tomorrow. What preparation for the future can be made? What efforts today might insure a positive alternative future? The literature of future studies is reviewed.
- 383 **ENVIRONMENTAL ECONOMICS (4)**
 Economic analysis of environmental quality; environmental quality as a public good. Theory of economic efficiency and the concept of an "optimal" amount of pollution. Welfare criteria for resource allocation. Implications of the no-growth economy. Listed jointly as Econ 383. Prereq: Econ 202.
- 398 **INTRODUCTION TO PROBLEM SERIES (2)**
 Practicum in scientific methodologies, experimental designs and analyses, survey techniques and critical evaluation. Problem definition and applied aspects of data handling and presentation are taught with emphasis on a holistic, environmental approach. S/U grading.
- 400 **DIRECTED INDEPENDENT STUDY (1-6)**
 Conference Course Permit required from instructor before registering.
- 406 **PRINCIPLES OF REGIONAL ENVIRONMENTAL PLANNING (3)**
 This course will examine various theories and approaches that have been advanced for regional planning by such persons as Powell, Downing, MacKay, Ikes, Hilberseimer, Mumford, McHarg and others. Selected regional plans will be studied, including the Tennessee Valley Plan, the New York Regional Plan, the Columbia Basin Plan, the Twin Cities Plan, and the Puget Sound Regional Development Plan. Prereq: Hux 312 and permission of instructor.
- 407 **PRINCIPLES OF URBAN ENVIRONMENTAL PLANNING (3)**
 Urban-rural differences in lifestyles, values, education, mobility and technology are rapidly disappearing under the dominance of urban-industrial culture. Thus the "urban environment," whether metropolis, town or village, must first be understood as an evolving system of physical elements and cultural processes, existing for the satisfaction of human needs and wants. The functional relationships among physical elements, and between them and the cultural processes form the basis for principles of planning/design which can be used both to analyze existing settlement problems and to guide the design of new settlements or the redesign of existing settlement complexes, or portions thereof. Prereq: Hux 312 and 335, or permission of the instructor.
- 408 **PRINCIPLES OF ENVIRONMENTAL SITE PLANNING (3)**
 Principles of design that promote ecologically and sociologically sound and esthetically satisfying environments at the scale that most humans perceive. The place of site planning in the comprehensive planning process, site analysis, plan elements, and landscape methodologies. Prereq: Hux 312.
- 410 **BIOPHYSICAL METHODS FOR PLANNING (3)**
 The student will be given experience in identifying and structuring biological and physical data, primarily from secondary sources, to be used as land-use determinants. The course is structured around a series of problems which focus on geology, physiography, hydrology, soils, fish and wildlife habitat, land use and scenic analysis. Students will be required to conduct field studies. Emphasis will be placed on the preparation of data for public presentation — graphic matrices, maps, etc. The course is primarily designed for environmental planning students, but is also pertinent to any student interested in environmental impact analysis methods. Prereq: upper-division standing.
- 411 **REGIONAL ENVIRONMENTAL PLANNING STUDIO (6)**
 Examination of the functional processes of the natural systems in large-scale areas, particularly regional river basins. Identification of natural systems variables as determinants for land-use classifications. Prereq: Hux 406 and permission of instructor.
- 412 **URBAN ENVIRONMENTAL PLANNING STUDIO (6)**
 Developing schemes of functional relationship of the major components of the urban environment. Application of principles of functional design to the problems and needs of contemporary societies, particularly for new towns, villages and cities. Prereq: Hux 407 and 411.
- 413 **ENVIRONMENTAL SITE PLANNING STUDIO (6)**
 Applying principles of design that promote ecologically sound and esthetically satisfying environment at the scale that most humans perceive: the dwelling, the neighborhood, the street, the park, etc. Solutions of the problems will be graphic and non-graphic, and may include such considerations as weather and climate, insolation and orientation, topography and surficial geology, plant cover and landscaping. Prereq: Hux 408 and 412.
- 414 **OPEN SPACE PLANNING (6)**
 Examination of open space as a basic framework for community and regional development. State and federal planning requirements; management planning practices as conducted by selected public agencies; open space as a comprehensive plan element. Prereq: Hux 312, or permission of instructor. Taught in alternate years.
- 415 **ENVIRONMENTAL PLANNING: THEORY AND PHILOSOPHY (4)**
 Development of the rationale for planning; the relation of environmental perception and notions of environmental quality to environmental problems and solutions. The nature and scope of environmental planning, based on a systems view of the natural and man-made environments as different but interacting; the basic concepts essential for developing and using planning methods to resolve man-environment problems. Prereq: Hux 312 or permission of instructor.
- 417b **TOPICS IN ENVIRONMENTAL STUDIES: CONTEMPORARY NUTRITION (4)**
 This course is concerned with various current issues in nutrition. Topics covered will include: fiber and sugar in nutrition, vitamin C and vitamin E, food additives, dental caries and diet, obesity, and nutrition and diseases. Prereq: Hux 352a.
- 417c **TOPICS IN ENVIRONMENTAL STUDIES: NUTRITION EDUCATION (3)**
 This course deals with discussion and development of techniques and materials to be used in nutrition education at various levels. Prereq: Hux 352a.
- 419 **TECHNOLOGY: CHANGE AND ASSESSMENT (4)**
 The ways new technologies are devised and their uses and effects on ecological and human systems. The anthropological, political and economic dimensions of technologies are examined.
- 420 **ENVIRONMENTAL ADMINISTRATION (4)**
 History of administrative treatment of environmental problems. Contemporary difficulties (compartmentalization, incrementalism, etc.) in the way of adequate environmental policy formulation and application. Recent innovations arising from new environmental law. Prospects for reform opened up by operations research, cybernetics, communication engineering, etc. Taught in alternate years. Prereq: Hux 202 or 305 or permission of instructor.
- 430 **ENVIRONMENT AND POLITICS (4)**
 History of environmental problems and their economic and political causes; national and international political reactions; the nature and extent of needed changes. Taught in alternate years.

- 431 APPLIED POPULATION ECOLOGY (3)
Application of the theories and techniques of population ecology to the study of man-animal relationships; e.g., pest control, wildlife management. Prereq: Hux 330 or Biol 325 or equivalent, or permission of instructor. Taught in alternate years.
- 433 FRESHWATER RESOURCE MANAGEMENT (4)
Management principles for lake and stream environments. Water will be considered as a resource of variable quality, quantity and productivity. Principles governing the associated fish populations will be examined. Case studies of various management practices will be presented. Prereq: Hux 333, 435.
- 435 RENEWABLE RESOURCE MANAGEMENT (3)
Exploration of general management principles and concepts for renewable resources of land, water, wildlife and vegetation. Emphasizes management of ecosystems using techniques of ecological and systems analysis. Evaluates the effects of agriculture, urban development and population growth on natural systems and renewable resources. Prereq: Hux 330 or equivalent ecology course.
- 436 ENVIRONMENTAL IMPACT STATEMENTS (6)
A course designed to provide a survey of the environmental impact statement process, including requirements of state and federal environmental policy acts. An understanding of both EIS preparation and review responsibilities will be sought. Various legal aspects, citizen involvement and environmental assessment methodologies will be reviewed. Prereq: senior standing or permission of instructor.
- 437 FOREIGN STUDY (2-5 sem)
An exploration of environmental studies topics particularly appropriate to the location of the course offering. Contact Foreign Study Office, Old Main 400.
- 438 COASTAL ECOSYSTEMS MANAGEMENT (4)
Coastal zone management questions in the coastal ocean. Dredge and fill problems. Competing uses in estuaries, marine and port development, fisheries management, aquaculture. Prereq: Hux 330, 435.
- 439 WILDLIFE, FOREST AND PARK MANAGEMENT (4)
Management strategies for both game and non-game wildlife will be presented. Forest practices will be investigated and management alternatives explored which will guarantee a sustained yield of lumber and pulp in harmony with natural ecological principles. The conflicts arising in multiple use of national forests, parks and wilderness areas will be explored and resolutions to these conflicts will be developed. Specific topics will include game management, endangered species, recreation, non-consumptive uses of natural resources, and the concept of sustained yield for terrestrial renewable resources. Prereq: Hux 330, 435.
- 440 SOCIOBIOLOGY AND ANIMAL BEHAVIOR (4)
A comparative approach to the study of animal behavior encompassing both innate and learned patterns of behavior. Emphasis will be placed on sociobiology, which is the application of evolutionary biology to the social behavior of animals. Applied aspects of animal behavior are also given. Prereq: Hux 330. Taught in alternate years.
- 450 ENVIRONMENTAL BIOCHEMISTRY (4)
Transformation of carbon, nitrogen, phosphorus, sulfur and certain trace elements in soil, water, atmosphere and biological systems; biochemical effects of environmental pollutants. Prereq: Hux 350, Chem 251.
- 451 ENVIRONMENTAL BIOCHEMISTRY LAB (2)
Experimental techniques in the analysis of pollutants in tissues. Prereq: Hux 450 or equivalent.
- 452 NUTRITION II (4)
Chemistry and biochemical role of essential nutrients and their interrelationship; intermediate metabolism of nutrients. Prereq: Hux 352a, Chem 251 and Biol 349.
- 455 POLLUTANTS AND HEALTH (4)
Physiological and toxicological effects of common pollutants found in man's environment. Mechanism of action of individual pollutants, including cellular damage at molecular level. Prereq: Hux 350 and Chem 251 or permission of instructor.
- 465 TECHNIQUES OF ENVIRONMENTAL SYSTEMS ANALYSIS (4)
An introduction to the systems approach. A special emphasis on continuity equations, economic aspects of decision making and decision theory. Prereq: Hux 363 or equivalent.
- 466 NATURAL SYSTEMS SIMULATION (4)
The basic principles of modeling theory are applied to aquatic problems. The application of basic principles of science and systems engineering are used to solve practical problems in the analysis, planning and management of natural systems. Prereq: Hux 465.
- 467 POLITICS, TRANSFORMATION AND ENVIRONMENT (4)
Incompatibility between the growth-oriented goals of contemporary political cultures and environmentally derived "steady-state" imperatives; alienation and environmental degradation as the dual result of the "conquest of nature" ideology; the politics of transformation and value-change. Prereq: Hux 305 or permission of instructor. (Also offered as Pol Sci 467.)
- 470 ENVIRONMENTAL ETHICS (4)
An examination of philosophical dimensions of man-environment relations, with emphasis upon ethical problems. Several contrasting views of man are considered, and the influence of these philosophical positions upon environmental behavior examined. An attempt is made to identify an environmental ethic which might be operable in modern society.
- 471 ENVIRONMENT AND VALUES (4)
How environmental problems are defined and determined by the values we hold. How changing values create or solve environmental problems by changing human behavior. An examination of the possibility of creating and disseminating value systems which are both humanly significant and environmentally benign. Prereq: Hux 470. Taught in alternate years.
- 472 THE ENVIRONMENTAL EDUCATION CURRICULUM (4)
Critical review of curricula that have been developed. The need for environmental education is assessed, learning objectives are examined, and strategies for attaining these objectives studied. The qualities of the ideal environmental education curriculum are identified by each student, based on his research into the matter. Prereq: Hux 371.
- 473 ENVIRONMENTAL INTERPRETATION (4)
A field-oriented course in methods, techniques and design of environmental education programs. Natural, historical and cultural systems are interpreted.
- 474 ENVIRONMENTAL EDUCATION IN THE ELEMENTARY SCHOOL (4)
Reviews the person-centered and interdisciplinary learning process called environmental education as it occurs in the elementary indoor/outdoor "environmental classroom." Examines rationales, methods and materials by which elementary-level environmental education can be achieved. Uses case studies of urban school-community processes to illustrate problems and possibilities of environmental education at the elementary level.

478 TOPICS IN ENVIRONMENTAL STUDIES (variable credit)

Environmental problems of northwest Washington and related topics. A survey course including impact assessment, local and regional planning, pollution problems, problems of the environmental classroom. This course is available only off-campus under the aegis of Continuing Education. It is not available to Huxley majors. May be repeated for credit.

480 URBAN ECONOMICS (4)

Economic forces behind urbanization. Urban public finance, welfare economics and efficient resource allocation. Economic analysis of urban problems, including land use, housing and poverty, education, transportation and environment. Listed jointly as Econ 480. Prereq: Econ 202.

483 RESOURCE ECONOMICS (4)

Theories for the efficient allocation of natural resources over time. Benefit-cost analysis as a criterion for public choice. Effects of property rights; distributional considerations and social cost. Listed jointly as Econ 483. Prereq: Econ 202; Geog 207 recommended.

490 COMPARATIVE ENVIRONMENTAL PROBLEMS AND POLICIES (4)

Examination and analysis of problems of pollution, resource use and depletion, land management, population density, finance capital, technology, and environmental controls — policy and legislation — in major countries of the world.

491 MULTINATIONAL CORPORATIONS AND GLOBAL ECOLOGY (4)

The goal of this course is to explore the character, functions and values of multinational corporations. This will involve assessing the impacts of such companies on Third World economics and environments and the economy of the United States (labor force, capital flows, resource allocation). The course will analyze existing and proposed systems of corporate regulation in the international marketplace. Prereq: Econ 201 or 202.

498a PROBLEM SERIES (2-15)

Problem-solving experience in environmental problems. Conference Course Permit required. May be repeated for credit.

498b PROBLEM SERIES: INTERNSHIPS (2-15)

Internships in positions appropriate to the student's program. Conference Course Permit required. May be repeated for credit. S/U grading.

499a SEMINAR (1)

Student-faculty interaction on topics of general interest. May be repeated for credit. S/U grading.

499b SEMINAR (2)

Student-faculty interaction. May be repeated for credit. S/U grading.

499c SEMINAR (1)

Student-faculty interaction on topics of general interest. May be repeated for credit.

499d SEMINAR (2)

Student-faculty interaction. May be repeated for credit.

GRADUATE COURSES

The following courses are offered for graduate credit for persons enrolled in the college's cooperative graduate programs. For course descriptions and other information about the graduate program, see the current Graduate Catalog.

500 SPECIAL PROJECTS (1-6)

Individual conference.

501 GRADUATE SEMINAR IN ENVIRONMENTAL STUDIES (3)





INTERDEPARTMENTAL PROGRAMS

AMERICAN STUDIES PROGRAM

College of Arts and Sciences

The American Studies Program is intended to serve those students and faculty who are interested in the study of American culture and find that important aspects of our cultural institutions, cultural artifacts or cultural values are not fully revealed by fulfilling the requirements for the major within a single department. Whenever possible, the program takes advantage of the rich curricular offerings of the various departments and colleges in the University. It supplements these with several conference courses and special topics seminars at the upper-division level.

The American Studies major, then, is of interest to students seeking a liberal arts education of some breadth as well as some

depth. It also offers suitable undergraduate background for specialized study in law, social work, business, theology or other professions, for entry into government service, and for graduate work in American Studies or other areas of liberal arts. Students can gain flexibility in career planning by putting the major together with a minor in a vocational area, or gain additional depth within a discipline by putting it together with a minor or the equivalent in one of the participating liberal arts departments.

Program advisement is available from the acting director of the program, W. Stoeber (Liberal Studies); and further information and consultation are available from members of the Executive Committee: R. Buckland (Liberal Studies), J. Hiraoka (Ethnic Studies and Human Services), R. DeLorme (History), T. Lee (English), or J. Bosch (Anthropology).

BACHELOR OF ARTS**Major 70 credits***General Requirements [36-38 credits]*

- Hist 366, 367, or equivalent (10)
- Eng 316, 317, or equivalent (8)
- Two courses in the social sciences, selected under advisement from Anth 201 or Soc 202; Pol Sci 101 or 250; Econ 201 or Hist 360: Geoz 201, 345 (8-10)
- Art History 360 or 460 [and prerequisite: one course from Art History 220, 230, 240] (6)
- American Studies 302 — Introduction to American Studies (4)

Individualized Program of Study
(32-34 credits)

A program formulated by the student, a member of the American Studies faculty, and the director of the program and approved by the Executive Committee. No program may substantially duplicate an existing department program. And ordinarily final approval of the student's course of study must come before the student reaches senior status.

Possible areas of special interest that students may select to study include the American Character, Myth and Folklore, Religion in America, Science and Technology, or Regional Studies — particularly the Pacific Northwest. Students may also wish to combine the major with minors in other interdepartmental programs such as Canadian-American Studies, Women's Studies, or Leisure Studies. In planning their program, students are urged to include courses taught with comparative or interdisciplinary perspective such as those offered in Liberal Studies and other participating departments.

COURSES IN AMERICAN STUDIES**300 DIRECTED INDEPENDENT STUDY (1-6)**

Conference Course Permit required from instructor before registering.

302 INTRODUCTION TO AMERICAN STUDIES (4)

Prereq: two other courses from the general requirements for the major. Also offered as Lib St 302.

400 DIRECTED INDEPENDENT STUDY (1-6)

Conference Course Permit required from instructor before registering.

499 SPECIAL PROBLEMS (4)

Prereq: American Studies 202 and senior status. A research or field project designed to demonstrate the student's competence in working with the tools of the discipline.

AQUATIC STUDIES

*College of Arts and Sciences
Fairhaven College
Huxley College*

Freshwater Studies

The University has had a long standing interest in the study of water, as well it should have in view of its location and tradition of environmental concern. Dozens of streams, hundreds of lakes and an abundance of groundwater resources make Western a logical place to study water.

The Institute for Freshwater Studies (IFS), Room 508 Environmental Studies Building, exists to promote research about freshwater, provide service to those engaged in the study of water and to coordinate activities having to do with this vital resource. Analytical service is available to students and faculty as is its reprint collection which includes several thousand entries. For information about the IFS contact the director, Charles J. Flora, 676-3510.

Several Western Washington University faculty have a professional interest in the study of water. For advice about water, the student should contact any of the following:

Faculty in Freshwater Studies:

Richard H. Berg - Huxley College
Susan Cook - Huxley College
Maurice Dube - Department of Biology
Charles J. Flora - Director, Institute for Freshwater Studies
Dan J. Guthrie - Department of Biology
Gerald F. Kraft - Chairman, Department of Biology
Andre Lehre - Department of Geology
David T. Mason - Fairhaven College
Richard Mayer - Huxley College
Franklin C. Raney - Department of Geography

Courses in Freshwater Studies

Courses having to do with freshwater are held in various parts of the University. (Note: Many have prerequisites. The interested student should study the full course descriptions in the relevant sections of the catalog.)

Interdepartmental

Courses *having to do directly* with freshwater:

Biology 402 - Limnology (5)
Biology 425 - Aquatic Entomology (3)
Biology 456 - Algae (5)
Biology 462 - Ichthyology (5)

Geography 422 - Geography of Water Resources (5)

Geology 472 - Hydrology (4)
Geology 473 - Ground Water Hydrology (4)
Geology 514 - Fluvial Geomorphology (3)

Huxley 332 - Applied Freshwater Ecology (4)
Huxley 361 - Water Pollution (4)
Huxley 437 - Applied Freshwater Resource Management (4)

Courses *having in part or indirectly* to do with freshwater:

Biology 208 - Foreign Chemicals and Natural Systems (3)
Biology 305 - Natural History of the N.W. (5)
Biology 325 - Ecology (5)
Biology 345 - Microbiology (5)
Biology 403 - Physiological Ecology of Animals (5)
Biology 423 - Field Entomology (1-2)
Biology 424 - Entomology (5)
Biology 503 - Advanced Topics in Ecology (4)

Fairhaven 432 - Microbiogeochemistry (3)

Geography 203 - Physical Geography (5)
Geography 331 - Climatology (5)
Geography 423 - Geography of Soils (3)

Geology 211 - Physical Geology (5)
Geology 214 - Environmental Geology (3)
Geology 300 - Directed Independent Study (1-6)
Geology 310 - Geomorphology (5)
Geology 416 - Stratigraphy & Sedimentation (4)

Huxley 330a, 330b - Applied Ecology, Applied Ecology Laboratory (3, 2)
Huxley 350a, b - Introduction to Environmental Pollution, Environmental Pollution Laboratory (4, 1)
Huxley 410 - Biophysical Methods for Planning (3)

Open courses (individually arranged with subject matter open):

Biology 399 - Seminar in Biology (1)
Biology 400 - Directed Independent Study (1-6)
Geography 400 - Directed Independent Study (1-6)

Geology 400 - Directed Independent Study (1-6)
Huxley 400 - Directed Independent Study (1-6)
Huxley 499a,b,c,d - Seminar (1-2)

Concentrations in Freshwater Studies

While no stipulated major has yet been developed, it is possible for a student to construct a major in freshwater studies through the Department of Liberal Studies. This requires that the subject matter be organized in consultation with a faculty adviser and approved by a committee of faculty. For details on this, please see the catalog section for the Department of Liberal Studies or talk with the department chairman, Dr. William K. B. Stoever.

In developing a program concentration in freshwater studies, appropriate background courses in mathematics, chemistry, etc., would be necessary.

The Department of Biology offers an aquatic sub-emphasis under its ecology emphasis. For more on this please see the catalog section for Biology or speak with the department chairman, Dr. Gerald Kraft.

ARTS, INTERDISCIPLINARY

College of Fine and Performing Arts

BACHELOR OF ARTS

Major

Nine-quarter Program

- First year-Interdisciplinary Arts 210, 211, 212 (4 credits each)
- Second year — Interdisciplinary Arts 310, 311, 312 (4 credits each)
- Third Year — Interdisciplinary Arts 410, 411, 412 (4 credits each)
- TOTAL 36 credits**
- Concentration within a department of the College under advisement (35 credits)
- University concentration, under advisement (36 credits)

GRAND TOTAL 10 credits

The head of the Interdisciplinary Arts program, or his/her designated appointee, shall have the primary responsibility for program advising and blue book approval. Each candidate for the Interdisciplinary Arts degree shall also be assigned an adviser in the department of his/her concentration.

The Interdisciplinary Arts major shall have, under advisement, the option of taking one quarter in the Fine and Performing Arts Abroad program.

Students who can demonstrate strong competencies within the interdisciplinary areas may confer with the head of Interdisciplinary Arts for placement within the program.

Minor

Core Program: Interdisciplinary Arts 110, 210, 211, 212, 310, 311, 312
27 credits

I. Option (a) - Core program plus four courses under advisement in any one of the arts (other than the student's major); up to 42 credits.

Option (b) - Core program plus four courses under advisement selected from University programs at large (e.g. journalism, English, business, etc.); 39-42 credits.

II. For students with appropriate credits (approved by director of Interdisciplinary Arts) in music/art/theater/dance: Interdisciplinary Arts 300 and 400 level plus three or four courses under advisement selected from college or University courses; 33-40 credits.

COURSES IN INTERDISCIPLINARY ARTS

110 INTERDISCIPLINARY ARTS (3)

An introduction to human creativity and to the varieties of artistic expression. The process and structure of major art forms are experienced and analyzed. Students will be required to develop critical judgment and techniques for expressing it.

210, 211, 212 INTERDISCIPLINARY ARTS (4 ea)

Prereq: Interdisciplinary Arts 110 and, under advisement, at least one introductory course from the following: Art 190, Music 140, Theatre/Dance 101 or Theatre/Dance 231. A detailed and systematic inquiry into the nature and historical evolution of style, aesthetic theories and the social uses of the arts, and especially the role of artists in social change. Students will be required to identify aesthetic standards and approaches to contemporary art. (210 taught as 297 spring 1978.)

310, 311, 312 INTERDISCIPLINARY ARTS (4 ea)

Prereq: Interdisciplinary Arts 210, 211, 212. The study of traditional mixed-media art forms such as opera, ballet, theatre and the creation of contemporary and experimental multi-media events. The courses will deal with the preservation and dissemination of artistic products and examine the economic environment for the arts on both the evolutionary and the practical level.

410, 411, 412 INTERDISCIPLINARY ARTS (4 ea)

Prereq: Interdisciplinary Arts 310, 311, 312. These courses will permit highly motivated students majoring in any one of the arts or in Interdisciplinary Arts to design a study program under faculty advisement. The subjects will be practical in nature and, wherever possible, career-oriented in the arts: management and administration, public relations, criticism, publishing, cultural policy. The role of amateur participation, voluntary work in cultural institutions and community involvement in the arts will be examined.

CANADIAN-AMERICAN STUDIES PROGRAM

College of Arts and Sciences

The Canadian-American Studies major and minor are designed to expand the knowledge of Canada and the knowledge of Canadian American relations and problems.

The major and minor are designed to accomplish several things. The body of information and understanding of Canada and our relations with Canada is desired by firms, agencies and individuals who do business in Canada or with Canadians, and as such is a great asset when combined with another major. Examples include the combination with business administration, marketing, purchasing, transportation, geography and other specialties for employment in firms doing business in Canada or with Canadians. Political scientists, sociologists, biologists, and others in the employ of government agencies at the state, federal and local level will find the programs of substantial value, especially in the border states and counties. The major is also designed for the individual who wishes to be truly knowledgeable about Canada and things Canadian. It is a valid area of academic study with a strong interdisciplinary orientation.

Program advisement is available from R.L. Monahan, director (676-3728 or 676-3284), office, Canada House or AH 226.

BACHELOR OF ARTS

Canadian-American Studies Major

50 credits

- Core Courses: Canadian-American Studies 200, 400, 401; English 360; French 280; Geography 313; History 277; Political Science 406

Interdepartmental

- Select 10 credits from French 450 (French-Canadian literature); Geog 346; History 477; Pol Sci 417h; Speech 483
- Select credits to complete the major from list above or list following: Anth 361, 411, 461, 462; Ed 414; French 367 (French-Canadian literature); Geog 310, 312; History 337, 468; Pol Sci 301

Minor 30 credits

The minor is applicable to either the Bachelor of Arts or the Bachelor of Arts in Education degree.

- Canadian-American Studies 200, Geog 313, History 277, Pol Sci 406
- 12 additional credits under advisement from Canadian-American Studies 400, 401; English 360, French 280, 450 (French-Canadian literature); Geog 346; History 477; Pol Sci 417h; Speech 483.

COURSES IN CANADIAN-AMERICAN STUDIES

200 THE CANADIAN IDENTITY (5)

A basic interdisciplinary course of studies covering the major physical, historical and socio-political aspects of Canada.

400 DIRECTED INDEPENDENT STUDY (1-6)

Conference Course Permit required from Instructor before registering.

401 RESEARCH AND PAPER WITH INSTRUCTOR (5)

Prereq: Canadian-American Studies 200 and 15 credits from the core courses. Directed interdisciplinary research on a problem or in an area of interest. At least two instructors from two disciplines must be involved with this course.

EAST ASIAN STUDIES

College of Arts and Sciences

In recognition of the increasing importance of East Asia in human affairs, Western Washington University established the Program in East Asian Studies in September of 1970. In September 1978 the program was renamed the Center for East Asian Studies. The Center stresses the interdisciplinary study of the region and is designed to attain three objectives. First, it offers students an opportunity to acquire accurate, detailed and comprehensive knowledge of a region that has traditionally been slighted in American education. Second, it prepares students who wish to teach courses on East Asia in community colleges and high schools or who are attracted by the growing job

opportunities related to East Asia in business and government. Third, it provides solid undergraduate training for students who plan to enter East Asian graduate studies at Western or elsewhere.

Presently, the Center offers a minor in East Asian Studies. Students interested in majoring in East Asian Studies should consult with the Department of Liberal Studies to set up a student-faculty designed interdisciplinary major.

Such student-faculty designed majors have tended to fall into one of the following optional patterns:

Core courses: (usually taken by all students):

- East Asian 30⁺, 302, and 303 (12 cr) or: History 280 and Liberal Studies 272 or 273 or 274 (9 cr) and one year of Chinese, Japanese, or Korean language (15 cr)
- 43-46 additional credits distributed according to one of the following options:

Option I

- Second and third year of Chinese, Japanese, or Korean (up to 30 cr)
- Remainder of credits (i.e. at least 13) distributed under advisement among those courses listed below as approved by the Center. Most of these credits should be in courses dealing with the country whose language the student is learning.

Option II

- Second year of Chinese, Japanese, or Korean (15 cr)
- Remainder of credits (28-31) should be distributed under advisement among the courses listed below as approved by the Center. Most of these credits should be in courses dealing with the country whose language the student is learning.

Option III

- Courses on China, Japan, Korea, and Mongolia from the approved list distributed as follows:
4 courses on one country; 3 courses on a second country; 2 courses on a third and fourth country
- Electives from the approved list to bring total credits (core plus Option III) to 70 credits.

Prospective majors should note that only Options I and II are recommended for those contemplating graduate work in East Asian Studies.

Prospective majors should select a committee of advisers from the list of faculty members associated with the Center appended below. At least three academic disciplines should be represented on the committee, and its chairman should be in the student's primary field of interest.

Minor 30 credits

The following minor is applicable to either the Bachelor of Arts or Bachelor of Arts in Education degree. It may be combined with a major in history or in political science for a major concentration, or may be elected as a minor by majors in other fields. For description of courses, see the sections of cooperating departments.

- At least one of the following: East Asian 301, 302, 303; History 280; Pol Sci 307
- Remaining credits to be selected from:
 - Anth 464
 - East Asian 310, 311, 367, 368
 - Lib St 272, 273, 274, 275
 - History 480, 481, 482, 483, 484
 - Pol Sci 417d, 430, 431, 432, 476

COURSES IN EAST ASIAN STUDIES

301, 302, 303 THE CULTURES OF EAST ASIA: THE EARLY, MIDDLE AND RECENT PERIODS (4ea)

Prereq: the chronologically appropriate courses from either History 105, 106, 107 or Lib St 121, 122, 123 sequences are recommended as background for comparative study of East Asia. Need not be taken in sequence. A survey of East Asian aesthetic, literary and philosophical traditions and their interaction with the evolving political, social and economic institutions of China, Japan, Korea and Mongolia.

- 301** Prehistory to c. 1000 AD. The founding of high civilization in China and the early stages of its transmission to Japan, Korea and Mongolia.
- 302** c 1000 to 1800 AD. The Chinese universal state at the height of its aesthetic and technological creativity and influence within East Asia and beyond. The feudal and early modern culture of Japan and the alternative routes to sophisticated culture in Korea and Mongolia.
- 303** 1800 to the present. East Asia's transition to the contemporary order in the presence of Western civilization's intrusion into East Asia.

310 MONGOLIA AND THE MONGOLS (4)

Prereq: East Asian 301 or 302 or 303 recommended. An introductory survey of the art, architecture, history, languages, literature, music, peoples and religions of Mongolia.

311 KOREA: ITS PEOPLE, CULTURE AND HISTORY (5)

Prereq: Hist 280 or one of the East Asian 301-303 sequence. A general survey of the history of the Korean people and the evolution of their culture and society from prehistoric times to the present. Including the period of Japanese imperial control, 1910-1945, and the contemporary epoch of division, 1945-present.

321 THE SAMURAI: WARRIOR GOVERNMENT, SOCIETY AND CULTURE (4)

Prereq: Junior status (also offered as History 321)

367 THE LITERATURES OF EAST ASIA IN TRANSLATION (5)

Selected readings in Chinese, Japanese, Korean and Mongolian literary masterpieces from earliest times to early modern times.

368 THE LITERATURES OF EAST ASIA IN TRANSLATION (5)

Selected readings in Chinese, Japanese, Korean and Mongolian literary masterpieces from early modern times to the present.

400 DIRECTED INDEPENDENT STUDY (1-4)

Conference Course Permit required from instructor before registering.

Courses from other parts of the university approved by the Center faculty for inclusion in East Asian Studies student-faculty interdisciplinary majors: Anthropology 362, 424, 464, 465; Art History 370, 470, 471; Chinese 101, 102, 103, 201, 202, 203; Ethnic Studies 205, 394; Fairhaven 129, 221, 228, 330, 335; Geography 315; History 280, 390 (relevant topics), 480, 481, 482, 483, 484, 485, 499 (relevant topics); Japanese 101, 102, 103, 201, 202, 203; Korean 101, 102, 103; Liberal Studies 272, 273, 274, 275, 370, 371; Philosophy 350; Political Science 307, 309, 417d, 430, 431, 432, 476.

The Program in East Asian Studies also offers tutorials in Advanced Chinese, Advanced Japanese and Intermediate and Advanced Korean.

For further information and advisement, consult the director of the East Asian Studies Program.

ETHNIC STUDIES

College of Arts and Sciences

The Program in Ethnic Studies provides a major-minor concentration and individual courses for students interested in the issue of cultural diversity in American society. The American experience as it affects Chicanos, Native Americans, Asian Americans and Blacks is the basic context for the study of ethnicity and ethnic groups; however, the boundaries of study include general topics on majority/minority conflicts, cultural pluralism, and comparative studies in community, creative expression, and education.

Courses applicable to the major, minor concentration are offered by various academic units. A program of study should be developed with the help of the Ethnic Studies advisory group.

The Ethnic Studies Program can benefit students who will be working with diverse groups, particularly in public service positions and in education.

Further information and advisement about the program is available from Ethnic Studies faculty: Raul Arellano, Jesse Hiraoka, Robert H. Kim.

Interdepartmental

Major — Ethnic Studies 55 credits

Required Courses

- Two from ES 201, ES 202, ES 203, ES 205
- 12-18 hours in additional ethnic studies courses, including at least one independent study project

Related Courses

- Additional hours to complete major to be selected from: Anth 361, 461, 462; Econ 388; Ed 410, 464; Eng 234, 461; Lib St 371, 372; Hist 361, 362, 375, 387; Pol Sci 313, 346; Soc 467

Minor — Ethnic Studies 30 credits

Required Courses

- Two from ES 201, ES 202, ES 203, ES 205
- 6-12 hours in additional ethnic studies courses.

Related Courses

- Additional hours to complete minor to be selected from courses listed in major related courses.

COURSES IN ETHNIC STUDIES

Many courses which are applicable to the major-minor concentration are offered regularly by other academic units; see above "related courses." The following courses are offered specifically through the Ethnic Studies Program:

201 AFRO-AMERICAN EXPERIENCE (3)

An introduction to the Afro-American experience; history and culture of Blacks in the USA, the unique nature of their experience and their contributions to American culture.

202 INTRODUCTION TO INDIAN STUDIES (3)

The American Indian from earliest times to the present: the origin of American Indians, stereotypes and misconceptions about the American Indian, legislation, education, health and present-day problems.

203 CHICANO HISTORY, SOCIETY AND CULTURE (3)

The history, society and culture of Mexicans in the U.S. from the time of exploration and settlement; historic conflicts affecting economic and political institutions; immigration and settlement; Chicano issues in politics, economics, and education; the Chicano Movement.

205 INTRODUCTION TO ASIAN AMERICAN STUDIES (3)

Survey of the history of Asians in the United States; socio-political problems encountered by Chinese, Japanese, Filipino and Korean communities in America, past and present.

301 COMPARATIVE MINORITY STUDIES (3)

Prereq: ES 201, 202, 203, or 205. Foundations of history, culture and the development of the culturally different groups in the United States. Emphasis upon comparative minority relations and the concepts and terminology necessary to ethnic studies.

310 CHICANO LITERATURE IN SOCIOCULTURAL PERSPECTIVES (5)

Prereq: ES 201, 202, 203, or 205. Artistic and sociocultural aspects of Chicano literature; Chicano literature as a mirror of this group's ethnic history, social and cultural experience, and changing status in American society; poetry, drama, folklore, short stories and essays.

434 STUDIES IN MULTI-ETHNIC LITERATURE (3)

Prereq: ES 201, 202, 203, or 205; or any college course in English or foreign literature. Themes and views of man and society in American ethnic literature; Black, Asian American, Native American, Irish American, Chicano and Jewish-American literatures; Ellison, Baldwin, O'Farrell, Chin, Momaday, Inada and Malamud.

INDEPENDENT STUDY PROJECTS (2-5 credits)

290 TOPICS IN ETHNIC STUDIES (2-5)

300 DIRECTED INDEPENDENT STUDY (1-6)

Conference Course Permit required from instructor before registering.

391 TOPICS IN BLACK STUDIES (2-5)

Prereq: ES 290 or equivalent.

392 TOPICS IN NATIVE AMERICAN INDIAN STUDIES (2-5)

Prereq: ES 290 or equivalent.

393 TOPICS IN CHICANO STUDIES (2-5)

Prereq: ES 290 or equivalent.

394 TOPICS IN ASIAN AMERICAN STUDIES (2-5)

Prereq: ES 290 or equivalent.

395 TOPICS IN COMPARATIVE CULTURE STUDIES (2-5)

Prereq: ES 290 or equivalent.

400 DIRECTED INDEPENDENT STUDY (1-6)

Conference Course Permit required from instructor before registering.

SEMINARS

These seminar courses are designed to provide the advanced student with the opportunity to research and study in such fields as history, education, law, literature, economic development, etc., as these relate to ethnic groups.

450 SEMINAR IN BLACK STUDIES (3-5)

Prereq: ES 201, 202, 203, 205, or 210; or equivalent of fifth-year standing in education.

451 SEMINAR IN CHICANO STUDIES (3-5)

Prereq: ES 201, 202, 203, 205, or 210; or equivalent of fifth-year standing in education.

452 SEMINAR IN NATIVE AMERICAN INDIAN STUDIES (3-5)

Prereq: ES 201, 202, 203, 205, or 210; or equivalent of fifth-year standing in education.

453 SEMINAR IN ASIAN AMERICAN STUDIES (3-5)

Prereq: ES 201, 202, 203, 205, or 210; or equivalent of fifth-year standing in education.

454 SEMINAR IN COMPARATIVE CULTURE STUDIES (3-5)

Prereq: ES 210, 202, 203, 205, or 210; or equivalent of fifth-year standing in education.

455 SEMINAR IN MINORITY EDUCATION (3-5)

Prereq: ES 201, 202, 203, 205, or 210; or equivalent of fifth-year standing in education.

GENERAL SCIENCE

College of Arts and Sciences

Recommendation for teaching competence in general science normally requires completion of the major in general science.

BACHELOR OF ARTS IN EDUCATION

Major Elementary 45 credits

- Physics 131; Ast 103 and/or Geog 331
- Chem 115 or 121; Geol 211, 212
- Biology 120
- Electives under advisement*

Major Concentration 75 credits

This concentration satisfies both the major and the minor for junior high school teachers.

- Physical Science — 25 credits under advisement* including Phys Sci 492, Physics 131, 132, 133, and Chem 115 or 121 or equivalent
- Biological and Earth Sciences — 25 credits in one field and 15 in the other selected under advisement, including Biol 493 or Geol 390, Ast 315 and/or 321 or equivalent
- Gen Sci 405 or equivalent
- Electives under advisement*

COURSES IN GENERAL SCIENCE

405 HISTORY OF SCIENCE(S)

Prereq: 30 credits in biological and/or physical science. The nature, methods, and development of science and the role of science in society; recommended for all science majors.

GERONTOLOGY

*College of Arts and Sciences
School of Education
Fairhaven College*

Gerontology — the study of aging and of subjects especially relevant to older people — is a comparatively new field of academic research and teaching. Perhaps the field's oldest and largest body of knowledge is biomedical in nature, but most other traditional disciplines also have focused on aging and offer knowledge essential to balanced perspectives of the subject.

*The coordinator of Science Education is the adviser for this program.

The multidisciplinary minor spans departmental and collegiate boundaries and meets the following needs: (1) to provide academic background in gerontology for students planning to enter fields which offer services to older adults. The minor complements these students' major programs; (2) to provide knowledge for those already working in the field of aging, where formal education has not been long or widely available; (3) to provide all students with opportunities for understanding the changes in their lives that occur as they grow older and for orienting their discoveries to structured knowledge from a variety of disciplines.

Minor 25 credits

The minor in gerontology, applicable to either the Bachelor of Arts or the Bachelor of Science degree, may be elected by students majoring in a wide variety of fields. Refer to catalog sections of cooperating academic units for descriptions of the following courses:

- Required courses: Fairhaven 231, Biol 334, Soc 333, Psych 357, Anth 426, Fairhaven 235
- Recommended courses for further exploration and for tailoring the minor to specific vocational goals: Fairhaven 421, 422; Home Econ 331, 421; Human Services 335; Sociology 324, 334, 336

For further information and advisement, consult Dr. Douglas D. Rich, Fairhaven College 329.

HUMAN SERVICES PROGRAM

School of Education

The Human Services Program (HSP) is a two-year, upper-division, off-campus learning program leading to a Bachelor of Arts degree from Western Washington University. The curriculum is interdisciplinary, systems oriented, and based on concepts from social science and organizational development perspectives. Curricular goals stress the knowledge needed for effective work in human service activities.

The curriculum is designed to use field experience as a laboratory throughout the two-year period. Students must work for 18 or more hours per week in an organization providing or facilitating human services to clients in the Puget Sound area. The work assignment provides a context in which knowledge can be applied, utilized and

Interdepartmental

verified. The placement in a Human Services agency also helps clarify career opportunities and interests.

Classes are conducted at locations close to the student's living or work area (e.g., Seattle, Everett, Bellingham).

ELIGIBILITY

Applicants to the Human Services Program may be:

- (a) Salaried employees who work in agencies and institutions which fit the human services category.
- (b) Persons who have, or can obtain, volunteer or fellowship placements (paid by the agency) with agencies or institutions which fit the human services category.

Students generally find their own placements. Preference is generally given to applicants who have completed two years of college or university study, including the General University Requirements (sciences, mathematics, communications, social sciences, humanities, non-Western and minority cultural studies).

HUMAN SERVICES

Human Services, as a field of study and practice, is concerned with both voluntary and organized efforts to aid persons in fulfilling their needs for physical and mental health, education, employment, nutrition, shelter and recreation. Human services has become a growing employment and educational area since personal and group services are increasingly in demand both in human development and rehabilitation.

The student's work or placement responsibilities should be programmatic (e.g., direct contact work, program planning, resource mobilization) rather than administrative support (e.g., typing, bookkeeping) to mesh with the academic component. If a student's current responsibilities in a paid position seem inappropriate, a "Directed Independent Study" activity may suffice.

FORMAT FOR COURSES

The academic program is interdisciplinary in nature, focusing on three themes: knowledge acquisition, concept development, and skills application. These three instructional themes are presented in the form of courses which fit the program categories called *Core*, *Seminar*, *Problem Series* and *Theory/Practice Integration*.

FACULTY

- JESSE HIRAOKA (1972) Director of Human Services, Professor of Liberal Studies/Ethnic Studies, BA, Roosevelt University; MA, University of Chicago; PhD, Northwestern University.
- PAUL DAVID (1976) Lecturer. BA, University of Washington; MA, Antioch West.
- BRUCE HARRIS (1976) Lecturer. BA, Western Washington State College.
- GRETCHEN HEGEMAN (1976) Lecturer. BA, University of the City of New York. MA, University of Chicago.
- MARY LIVINGSTON (1977) Lecturer. BA, MA, University of Oregon.
- JOHN W. RIETZ (1976) Lecturer. BA, University of Miami; MEd, Western Washington University, JD, University of Florida.
- FLORENCE WOLFE (1977) Lecturer. BA, MA, San Francisco State University.

COURSES IN HUMAN SERVICES

CORE GROUP SERIES

The CORE courses emphasize organizational and participation patterns. The first-year CORE sequence utilizes the individual and groups as reference; the second-year core sequence utilizes the agency and organizations as reference. Systems study provides a method of viewing inter-relationships, interaction, structuring, and destructuring at different levels of complexity. The CORE courses also provide an opportunity to discuss agency and staff issues and problems. Students generally remain in a CORE group for one year (with the same instructor).

301 INDIVIDUAL SYSTEMS (4)

Basic elements of systems study are introduced, and the effects of interactions studied. The role of values, the management of personal growth and change through problem solving and the development of personality are examined.

303 INTERPERSONAL SYSTEMS (4)

The interactions of two individuals are viewed as separate but interacting sub-systems of a larger interpersonal system. First-quarter themes are examined in the context of personal interactions, with emphasis on interpersonal communications theory and skills and the management and resolution of interpersonal problems and conflicts.

305 GROUP SYSTEMS (4)

The dynamics of group interaction are examined in the context of small groups as systems. Focus is on task-oriented and problem-solving groups, their development and maintenance, and the effective management of their processes, including leadership, decision making, controversy, power and norms.

Second-Year Core

402 ORGANIZATIONAL SYSTEMS (4)

Organizational characteristics and the organization's ability to attain objectives are examined with emphasis on the systems structure, values, technology, and degree of interdependence. Applied skills include data gathering on behavior of the agency system, ability to arrange the data for analysis and to draw conclusions for alternative plans.

404 COMMUNITY SYSTEMS (4)

Theories of community systems and the relationship of the community systems to other sub-systems within the human services (individual, interpersonal, family, group and institution) are examined. Applied skills include community analysis, problem identification and research at the community level.

406 SOCIETAL SYSTEMS (4)

Social forces, social change and their effects on the human services worker are examined. A social change system model and methods of social/cultural research are studied to provide integration and synthesis of the human services CORE sequence.

THE SEMINAR SERIES

The following seminars provide conceptual development based on the theoretical and methodological groundwork for human services work offered under professional supervision in agencies. The focus is on client populations.

Track A: Helping Relationship

341 HELPING RELATIONSHIP: COUNSELING APPROACHES (3)

Basic concepts and skills for counseling in one-to-one settings are examined with emphasis on the basic procedures for interviewing clients, practicing specific skills in class, and applying skills in a field setting.

343 HELPING RELATIONSHIP: CASE MANAGEMENT (3)

Basic procedures for working with clients are examined. Issues include critique of how basic skills are applied, analysis of alternative interventions, the limits of responsible intervention, referral resources, and ethics.

345 HELPING RELATIONSHIP: GROUP (3)

Attention is given to stages of group development, techniques for beginning a group, analysis of members' styles, and practice with interventions appropriate for specific client groups. The group examines and analyzes group experiences in the field.

347 DYNAMICS OF PERSONAL GROWTH (3)

Relevant literature and development strategies derived from the research and clinical findings in humanistic psychology are used to assess personal potential, explore participants skills and potential for growth and change.

440 DREAM THEORIES (3)

Theory beginning with Freud and Jung, through contemporary researchers like Charles Tart, Calvin Hall, Montague Ullman and Richard Jones is examined with the intent of developing understanding of the dream process. Cross-cultural materials are included. This course is directed to students in mental health settings.

442 HUMAN SEXUALITY (3)

Male/female roles and the changing view of sexuality are examined within the context of the human services field.

444 SUBSTANCE ABUSE: ETIOLOGY AND TREATMENT (3)

Examination of the labeling and behavior process in substance abuse (drug, alcohol, food). Exposure to several causation theories and treatment modalities.

446 BEHAVIORISM: THEORY AND PRACTICE (3)

Introduction to the basic principles of behavior theory. Major issues and methods in research and treatment application are explored.

Track B: Human Development

The following seminars provide overviews of clients in the context of today's human services world and provide theoretical and practical knowledge for human service workers with clients.

331 DEVELOPMENTAL PATTERNS: CHILDREN (3)

Study of phases of growth, the tasks of each phase and the sub-cultural, biological, and cross-cultural factors.

333 DEVELOPMENTAL PATTERNS: ADULTS (3)

Theories and examples of adult development in both Western and Non-Western cultures are examined. Physiological changes, as well as work, mating, and parental roles are discussed.

335 DEVELOPMENTAL PATTERNS: SENIORS (3)

Services and attitudes toward the aged are examined and compared with those provided by other cultures.

337 DEVELOPMENTAL PATTERNS: FAMILY (3)

Study of the development of the family within the context of historical, organizational, communication and change patterns. Methods for understanding and changing family dynamics are introduced.

430 TRADITIONAL PERSONALITY THEORY (3)

Introduction to the traditional major theories of personality development, psychopathology, and modes of therapy. Extensive reading and structured experiences, with selected approaches to therapy. Some skill practice, and analysis of cases from students' experience. Theorists discussed include Freud, Jung, Adler and Reich.

432 CONTEMPORARY PERSONALITY THEORY (3)

Examination of contemporary theories and theorists of personality development, such as existentialism, Maslow and the emergence of humanistic psychology, including Perls, Bern and Schutz. Extensive reading and application of major concepts.

434 WOMEN IN TRANSITION (3)

Examination of changes occurring in women's roles. Emphasis on personal awareness as well as social, political, and economic issues of particular interest to women.

436 MEN IN TRANSITION (3)

Examination of changes occurring in men's roles. Emphasis on personal awareness as well as social, political, and economic issues of particular interest to men.

438 HOLISTIC HEALTH (3)

Health from a systems approach and the interplay of body/mind/spirit.

Track C: Agency Management

The following seminars introduce skills and knowledge needed for effective program development and administration. Specifically included in this track are seminars in the theory and techniques of program funding, assessment of "political" influences that direct the resources of institutions, and field research methods.

381 PROGRAM PLANNING AND ADMINISTRATION (3)

Study and application of concepts and skills for budget planning and fiscal management, personnel (recruitment and selection, salary administration, promotions, employee benefits, training and development, equal employee opportunity and affirmative action), public relations, and management information systems.

383 PROGRAM MANAGEMENT AND SUPERVISION (3)

Study and application of concepts and skills for supervising others in a human services setting, including such topics as motivation and productivity selection and orientation of staff, leadership, techniques for supervision, employee development, and performance evaluation.

385 PROGRAM EVALUATION AND PROGRAM DEVELOPMENT (3)

Evaluation is a management technique for the systematic feedback of information used to improve client intervention. Various methods of obtaining feedback from planning stages through long term program implementation are analyzed.

480 POLITICS OF HUMAN SERVICES (3)

Politics as they reinforce the values, institutional practices, and human behaviors on which our present social order rests, or as they challenge those values.

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482 HUMAN SERVICES ACTION RESEARCH (3)

Development of the feedback methods covered in program evaluation and program development into action research study. Data collection and analysis leading to a research report containing recommendations for action.

484 PROGRAM FUNDING AND PROPOSAL WRITING (3)

The competencies of planning, writing, marketing, and evaluating funding proposals. Elements of grant and proposal preparation, including the methods of seeking grant funds, interpreting funding guidelines, designing marketing strategies, and negotiating with funding agencies.

486 HUMAN RESOURCES DEVELOPMENT (3)

Examination of current adult learning theory and direct experience with techniques for the design and conduct of adult learning and training programs, including training for both short-term (i.e. workshop) and longer-term adult learning situations, stand-up training skills, methods of learning delivery, curriculum design, sequencing of materials, workshop design, and technique and training by objectives.

488 ORGANIZATIONAL DEVELOPMENT (3)

Issues to be covered include the roles of internal and external organizational change agents, levels and strategies of interventions and evaluations methodologies.

Track D: Society and Human Services Systems

The following seminars in this track relate human services to such constructs and dimensions as time, the nature of work, communication, the legal system, and forces influencing and affecting the role and structure of human services systems.

371 ISSUES AND CONCEPTS IN HUMAN SERVICES SYSTEMS (3)

Issues stem from the situational context and provide a discussion format for what is on-going and current. The issues change and in that very change reveal the major concerns of those who are providers and recipients of human services. Concepts reveal the symbolic level of the human services systems.

373 LAW AND HUMAN SERVICES (3)

Examination of four major legal processes and their effect on human services client populations and delivery systems. The four processes (legislative, judicial, administrative and policy/procedural) are examined with reference to materials and practices found in work environments.

375 LAW AND MINORS (3)

Examination of the legal basis for special treatment of minors (prenatal through 17): values, assumptions and philosophies behind laws; regulations as well as laws; abortion, adoption, guardianship, dependency, child abuse, neglect, compulsory education, delinquency, juvenile crime, treatment and corrections.

377 MINORITIES AND HUMAN SERVICES (3)

Examination of culturally different groups and their interaction with human services systems. Emphasis upon comparative current ethnic issues, conflicts and institutional practices.

470 ANGER, INDIFFERENCE AND ACTION: SOCIAL SYSTEMS APPRAISAL (3)

Examination of social systems and their respective components. Each component is inspected and examined for wear and possible replacement, given a parts inventory system. The nature and role of responses in the dismantling and reassembly are considered.

472 DESCRIPTIVE AND EXPLANATORY MODELS: ASSUMPTIONS AND TECHNIQUES (3)

Understanding as revealed in assumptions, the structures suggested by those assumptions, and the development of such techniques as miniaturization, extrapolation, reduction, and illustrations. Activities include examining existing models, developing models and understanding approaches to models.

474 WORK AND THE HUMAN SERVICES (3)

Overview of work and career patterns, the levels of knowledge, the views of experience, and the role of "fads and fashions." Terminology used to identify work, workers and clientele is explored and the specifics of resumes, interviews and career planning are presented.

476 THE FUTURE SOCIETY: PROJECTIONS AND CONJECTURES (3)

The considerable writing now available makes mention of human and organizational developments that do not fall into the category of science fiction and utopian writing. Futurist positions and implications for the human services are examined.

THE PROBLEM SERIES

The problem series permits the development of individual interests while the core courses and the seminars emphasize a general approach to human services knowledge and skills. In the problem series, students may select a specific topic such as alcoholism child abuse, nursing homes, senior centers, crisis centers, etc., and develop a study project. It is also possible for students to work on current issues and problems dominating the public interest.

Each quarter a theme is selected to provide a focus for the development of various projects. Examples of such themes include: community centers and human services, mental health and human services, education and human services, accountability and human services, consumerism and human services, prevention and treatment trends and human services, federal policy and human services.

Students are required to attend selected community workshops and scheduled public lectures relating to their assigned projects. Independent study may be combined with the workshops and lectures.

321 INTRODUCTION TO THE PROBLEM SERIES (2)

This course introduces first-year Human Services students to the methods, practices and techniques of project and proposal development.

420 PROBLEM SERIES (2)

This course identifies knowledge on specific issues for project and proposal development. A project may continue for more than one quarter. Proposals and projects must be defined within the first two weeks of the quarter of enrollment.

300 DIRECTED INDEPENDENT STUDY (1-6)

Prereq: HS 301 and permission of core group instructor. For first-year human services students. Independent study as individual or with a group for special projects not covered by courses and problem series workshops. Repeatable once only. S/U grading.

400 DIRECTED INDEPENDENT STUDY (1-6)

Prereq: HS 402 and permission of core group instructor. For second-year Human Services students. Independent study as individual or with a group for special projects not covered by courses and problem series workshops. Repeatable once only. S/U grading.

THEORY/PRACTICE INTEGRATION

Field placement with a human services agency provides a maximum of six credit hours per quarter, which are integrated with nine classroom credit hours to provide the full-time human services student with 15 credits per quarter. Part-time students will receive three credits per quarter for the field placement. Since the theory/practice integration is the work experience accompanying academic study, the theory/practice integration credits relate to all of the classroom work assumed by the student. Within the 90-hour program, a student in human services will accumulate 54 classroom credits and 36 theory/practice integration credits. Variation in [T/P 1] credits may result from summer part-time study. Students should not exceed 36 credits of [T/P 1] within the 90-hour program. The field credits [TP 1] are graded S/U (Satisfactory/Unsatisfactory).

A student in human services must work a minimum of 18 hours per week with a human services agency. The field credits cannot be obtained without the corresponding classroom study to provide theory/practice integration.

The objectives of the work setting are to:

1. Provide an environment for the application of ideas and methods.
2. Provide a source of problems and issues for academic study.
3. Provide a reality test for ideas and methods, as well as working context for criticism of ideas and methods in human services.
4. Provide a means of developing professional competency in human services work.
5. Provide a means of developing and testing new human services technology.
6. Provide an opportunity for the maintenance of a continuing integrated relationship between the two areas of work and study.

390a,b THEORY/PRACTICE INTEGRATION (3,6)

Field experience and project course for first-year students in human services. The theory/practice integration provides the problems and issues for academic study projects relating primarily to individual and groups, both as clients and staff. Staff and agency supervision.

490a,b THEORY/PRACTICE INTEGRATION (3,6)

Field experience and project course for second year students in human services. The theory/practice integration provides problems and issues for academic study and for projects relating to agencies and organizations. Staff and agency supervision.

The following provides a sample full-time program for the two-year Human Services Program sequences.

First Year and Second Year

FALL: Core Group; Seminar; Problem Series; Theory/Practice Integration. WINTER: Core Group; Seminar; Problem Series; Theory/Practice Integration. SPRING: Core Group; Seminar; Problem Series; Theory/Practice Integration. SUMMER: Opportunity to pursue workshops and seminars.

<i>Two-Year Credit Hour Totals: The General Pattern</i>	
Core Group	24 Credits
Seminars	18 Credits
Problem Series	12 Credits
Theory/Practice Integration	36 Credits
Total	90 Credits

INDUSTRIAL DESIGN

College of Arts and Sciences

The Bachelor of Science degree in industrial design provides an interdisciplinary course of studies that develops graduates for professional activities as designers, planners, managers, illustrators or specialists in the areas of industrial production, design education or marketing.

Industrial design students must complete the usual general university requirements. They should be aware of the prerequisite for Math 155 (Math 124, 220, 240 depending on options). They should take Chemistry 115 and Physics 131 as part of the general university science requirement.

While it is possible to complete the requirements for the Bachelor of Science degree within four years, students who do enter the program as freshmen or students who desire to take elective courses outside of the areas included in the Industrial Design

Program should recognize that additional work beyond the usual four-year period may be required. Notice the options for professional enrichment specified as a guide, not required for graduation.

Students are advised to carefully plan to meet the minimum requirements for WWU graduation: fulfill the general university requirements, acquire 60 upper-division credits (the ID program totals approximately 44 upper-division credits), and accrue a minimum of 180 total credits.

Early consultation with the adviser of the Industrial Design Program, Mr. Marvin A. Southcott, Department of Technology, is essential.

BACHELOR OF SCIENCE

Major 110 credits

- Basic Core: (Industrial Design/Technology)** 60 credits
- Tech 120, 210, 214, 215, 222 or 223, 224, 231
 - Tech 311, 313, 315, 316, 317, 333
 - Tech 416

- Supporting Courses:** 50 credits
- BA 301, 330
 - Psych 201 or Lib St. 105
 - Physics 131, 132
 - Art 101, 202, 370
 - Art History 230*, 240*
 - Math 250, 251, 252, or 124, or 220, 240, Computer Sci 110

Recommended: These courses are suggested for a more comprehensive foundation for professional practice.

- Tech 222 or 223, 240, 260, 309, 391*, 400, 418
- BA 271
- Home Econ 175*, 375
- Art Hist 220*
- Chem 115*, 208*, 209
- Physics 133
- PE 301

For extension of experience and professional enrichment (not required for graduation):

- Tech 402 (up to 15 credits)
- Tech 323, 328, 335, 420, 421, 422, 434

Minor 25 credits

- Approved courses selected from the Industrial Design major basic core, under advisement of Industrial Design Program adviser

*Courses applicable to general university requirements, 50-70 credits required.

Interdepartmental

INDIAN EDUCATION SPECIALISTS

School of Education

The Center for Indian Education Specialists was initiated in 1977 as a field-based training program for paraprofessional educators of Indian students. The major function of the Center is to offer training and advisement to counselor aides and teacher aides who provide compensatory services through tribal and school based education programs. The Center is located within the School of Education and works in conjunction with the Departments of Education and Psychology and the Office of Indian Education in Olympia.

In addition to aide training, the Center provides resources and in-service training to certified counselors and teachers who work with Indian students. Special Projects courses in education and/or psychology can be arranged on a contractual basis with the director of the Center, Dr. Susanna Hayes, Miller Hall 333.

**CERTIFICATE OF STUDY PROGRAMS
[NON-DEGREE]**

The programs for paraprofessional educators consist of four required core courses and two applied courses specifically related to the teacher aide and/or counselor aide roles. Upon successful completion of the appropriate six courses, students will receive a certificate of study from Western Washington University in recognition of their training as Indian education specialists in either the teacher aide or counselor aide roles.

Following is a list of the courses offered in the field by the Center.

Required Core Courses

- Ed 109, Introduction to Education (3 credits)
- Psych 220, Human Adjustment (3 credits)
- Ed 340, Paraprofessional Advisement (3 credits)
- Ed 391, Human Relations (3 credits)

Applied Courses for Teacher Aides

- Ed 221, Teacher Aide Consultation (3 credits)
- Ed 222, Issues in Indian Education for Teacher Aides (3 credits)

Applied Courses for Counselor Aides

- Psych 245 Current Issues for Counselor Aides (3 credits)
- Psych 246 Field Experiences for Counselor Aides (3 credits)

LATIN AMERICAN STUDIES

College of Arts and Sciences

This program is offered so that students interested in the area of Latin America may be able to concentrate a portion of their academic work in this area free of the stricture of departmental programs and to make more viable the relationships among the separate courses in this area offered by the departments of this University. The following minor is applicable to either the Bachelor of Arts or the Bachelor of Arts in Education degree. A major in Latin American Area Studies is available through the student-faculty designed majors program (see Liberal Studies section of this catalog).

Minor 30 credits

- 15 credits in Spanish 100 and 200 level courses, or demonstration of proficiency
- 15 credits in courses relating to Latin America

For advisement, consult Dr. Harley E. Hiller, Department of History.

LEISURE STUDIES

College of Arts and Sciences

As our society becomes increasingly leisure-oriented and responsive to needs for leisure activity, career opportunities for professionals in recreation become more numerous and diverse. The Leisure Studies curriculum prepares students to plan, develop and manage leisure resources; to pursue careers in the leisure-oriented professions; and to conduct and interpret leisure research.

The curriculum adapts the quarter system of scheduling classes to a phase system. Students enter phase I of the program during spring quarter of their sophomore year. They continue through the curriculum as a group, as indicated in the schedule below.

	<i>Fall</i>	<i>Winter</i>	<i>Spring</i>	<i>Summer</i>
<i>Fresh.</i>				
<i>Soph.</i>			I	
<i>Junior</i>		II	III or III	
<i>Senior</i>		IV		

The phase system allows maximum flexibility in scheduling workshops, field experiences, conferences, and seminars both on and off campus. By making use of other departments at Western, statewide recreation resources, and recreation professionals, a wide range of educational experiences is available to the student.

The Leisure Studies program emphasizes preparation in the broad areas of outdoor recreation and community recreation. Outdoor recreation graduates have been very successful in finding employment with federal recreation agencies, state parks systems, community recreation departments, mental health agencies, and commercial recreation businesses. Community recreation graduates find employment with municipal parks and recreation departments, community recreation service agencies, county parks systems, and commercial recreation businesses.

Students interested in this program should contact Leisure Studies for current information on admission procedures. The program is popular and the number of major and minor students is limited.

BACHELOR OF ARTS

Major Concentration 65 credits

- Basic Core: LS 171
- Phase I: LS 271, 272, 274, 275, 276
- Phase II: LS 372, 373, 374, 375, 376
- Phase III: LS 471
- Phase IV: LS 445, 450, 472, 475

Support Area

In place of a minor, leisure studies majors must develop a 35-credit support area. Support area prescriptions are worked out cooperatively with the student's faculty adviser and must have the adviser's final approval. They may range from traditional minors in sociology, environmental studies and other fields, to interdisciplinary studies incorporating courses from a broader spectrum of university course offerings. Support areas are designed on the basis of previous experience in leisure related programs, skills and interests, and professional aspirations.

Example Support Areas

Business Administration
Sociology
Special Education
Communications

Retail Management
Psychology
Therapeutic Recreation
Journalism
Natural Resource Management
Environmental Planning
Physical Education
Cultural Arts
Commercial Recreation
Biology

Minor 35 credits

- Basic Core: LS 171
- Complete Phases I and II in the modular scheduling

COURSES IN LEISURE STUDIES

- 101 LEISURE AND SOCIETY (3)
Service course dealing with the expanding role of leisure in contemporary American life; emphasis on contemporary factors influencing leisure; analysis of leisure values as related to individual and society.
- 171 FOUNDATIONS OF RECREATION AND LEISURE (3)
Professional course dealing with the background, present status, future goals and challenges of leisure and the leisure service professions.
- 201 WILDERNESS AND LEISURE (3)
Historical and philosophical analysis of American wilderness and its relationship to leisure experience. Emphasis on current wilderness issues and legislation.
- 271 DYNAMICS OF COMMUNITY LEISURE SERVICES (4)
Prereq: LS 171. Community-based leisure service agencies: philosophies, functions, services, personnel and facilities. Emphasis on the diversity and inter-relatedness of community leisure service agencies.
- 272 DYNAMICS OF OUTDOOR RECREATION (4)
Prereq: LS 171. Introduction to the major professional components of the outdoor recreation field; interpretive services, camping, resource management, programming, private recreation and tourism. Focuses on trends, programs, and related professional issues.
- 273 CAMP COUNSELING AND ORGANIZATION (3)
Camp program components, counseling skills; types of organized camp settings; American Camping Association standards.
- 274 PROGRAMS FOR SPECIAL GROUPS (3)
Prereq: LS 171, majors and minors only. Techniques, materials and methodology for conducting recreation programs for the aged, handicapped, mentally ill, mentally retarded, delinquent, disadvantaged and other special groups.
- 275 PROFESSIONAL PRACTICUM (2)
Prereq: LS 171. Program observation and participation in a variety of community agencies providing leisure services.
- 276 PHILOSOPHICAL AND HISTORICAL BASIS OF LEISURE (3)
Prereq: Phase I. Philosophical and historical implications of leisure; changing concepts of time, work, education and leisure, and their impact on American values, culture and life style.

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- 300 DIRECTED INDEPENDENT STUDY (1-6)
Conference Course Permit required from instructor before registering.
- 372 LEISURE GROUP STRATEGIES (3)
Prereq: Phase I. Principles and techniques employed in guiding and directing leisure experiences through group processes.
- 373 RECREATION PROGRAM DEVELOPMENT (3)
Prereq: Phase I. Principles and methodology involved in design and implementation of recreation programs. Assessment and analysis of user preference and needs. Emphasis on correlation of program with philosophical rationale.
- 374 SUPERVISED FIELD WORK (3)
Prereq: Phase I. Supervised laboratory experience in the leisure service professions.
- 375 INTERPRETATION IN LEISURE SETTINGS (4)
Prereq: LS 171 and Phase I. Philosophy, organization, content, and process of interpretation in human and natural environments. Equal emphasis placed on classroom instruction and field technique.
- 376 MAINTENANCE MANAGEMENT (3)
Prereq: Phase I. Management considerations in maintenance of recreation facilities and resources: community centers, open space, waterfronts, golf courses, athletic complexes, hiking trails, swimming pools, classroom lectures and on-site workshops.
- 390 TOPICS IN SPECIALIZED RECREATION (3)
Prereq: junior standing. Topics dealing with leisure services for specific populations — alcoholic, delinquent, criminal, mentally ill, nursing home. Subject of each class will be announced in the class schedule. Repeatable.
- 400 DIRECTED INDEPENDENT STUDY (1-6)
Conference Course Permit required from instructor before registering.
- 451 LEISURE AND RETIREMENT (3)
Prereq: junior standing. Concepts of leisure, recreation and retirement are developed and examined as potential social replacements for work and productivity in modern society.
- 445 CURRENT TRENDS IN LEISURE SERVICES (4)
Prereq: Phase III. An in-depth examination of trends and issues affecting the provisions of leisure services.
- 450 LEISURE RESEARCH DESIGNS (3)
Prereq: Phase III. Research techniques in leisure settings: questionnaire development, surveys, interviews, experimental designs, report writing, computer familiarization, and grant writing.
- 452 LITERATURE REVIEW AND ANALYSIS (3)
Prereq: Phase III. Current literature in the field of leisure is reviewed and analyzed. Emphasis is on discussion of selected literature and expanding student awareness of the resources available.
- 471 INTERNSHIP AND SEMINAR (15)
Prereq: Phase II. Full-time supervised professional experience emphasizing functional proficiency under joint sponsorship of university and agency personnel. S/U grading.
- 472 ADMINISTRATION/SEMINAR (5)
Prereq: Phase III. Entry level administrative skills associated with managing personnel, fiscal and physical resources of leisure service systems. Lecture plus seminar based on internship and related experiences.

475 PARK AND FACILITIES DESIGN (3)

Prereq: Phase III. Design considerations for the leisure services administrator. Program development, site analysis, public involvement, facility program relationships, functional considerations, site plans, plan evaluation, master plans.

LINGUISTICS

College of Arts and Sciences

Linguistics provides valuable background information about man's use of language, knowledge of which is essential to careers in teaching language and helpful to those in anthropology, psychology, speech and education.

Minors

These concentrations in general and applied linguistics may be taken by candidates for the Bachelor of Arts or the Bachelor of Arts in Education degrees. Minors are available in the departments of anthropology, English, foreign languages and speech.

Basic Courses

- Linguistics 201, 301, 302, 303
- Speech 373

Additional work according to department chosen:

- English (Arts and Sciences) — add English 370, 470, 471
- English (Teacher Education) — see English minor with Linguistics Emphasis
- Foreign Languages (either degree) — add 6 credits selected under departmental advisement in a foreign language
- Anthropology (Arts and Sciences) — add Anth 448 and 5 additional credits selected under departmental advisement
- Speech (consult the director)

For advisement, consult Mr. Vladimir Milicic (Humanities Building 219), Director of Interdepartmental Program in Linguistics.

COURSES IN LINGUISTICS

- 201 INTRODUCTION TO LINGUISTICS SCIENCE (5)
Survey of linguistic method and theory.

- 202 COMPARATIVE LINGUISTICS (3)
Prereq: Ling 201. Principles of language typology, linguistic geography, comparative methods, and historical reconstruction.
- 301 PHONOLOGY (5)
Prereq: Ling 201. Theory, methods, and problems of phonological analysis and description.
- 302 MORPHEMICS (3)
Prereq: Ling 201. Theory, methods, and problems of morphemic analysis and description.
- 303 SYNTAX (3)
Prereq: Ling 201. Comparative survey of modern theories of grammar with special reference to syntax.
- 402 READINGS IN LINGUISTICS (3)
Prereq: permission of instructor. Directed research on topic selected by student; may not be repeated.
- 404 LINGUISTICS AND LITERATURE (3)
Prereq: Ling 201 or Foreign Languages 410. Importance of linguistic contributions to literary analysis; linguistics and theory of literature; common problems.

PHYSICAL SCIENCE

College of Arts and Sciences

BACHELOR OF ARTS IN EDUCATION

Major Secondary 45 credits

- Gen Sci 405 or equivalent
- Chem 121, 122, 251
- Physics 231, 331, 332 (or 131, 132, 133)
- Phys Sci 492
- Electives selected under advisement to include at least one upper-division course

Bachelor of Arts in Education programs leading to teaching certification in earth science-physical science and in biology-physical science are available. For these programs, see the Geology Department and the Biology Department listings, respectively.

For the physical science majors, Dr. John Miller, Chemistry Department, is the adviser.

COURSES IN PHYSICAL SCIENCE

- 382 PHYSICAL SCIENCE FOR THE ELEMENTARY SCHOOL (3)
Prereq: Sci Ed 380; general education requirements in science or equivalent. Philosophy, concepts, learning experiences and materials for the physical sciences suitable to the elementary school. (Also offered as Sci Ed 382.)

- 492 PHYSICAL SCIENCE FOR THE JUNIOR AND SENIOR HIGH SCHOOL (3)
Prereq: 15 credits in chemistry or physics. Content, materials, and methods of teaching general physical science, physics, and chemistry in junior and senior high schools.

SCIENCE EDUCATION

College of Arts and Sciences

Students planning to major in a science for elementary or junior high teaching, see majors in general science, physical science or earth science.

Questions relating to these courses should be directed to Dr. Robert Christman, Geology Department, the Coordinator of Science Education. Students interested in other science education courses see Biology 493, Geology 390, Physical Science 492.

COURSES IN SCIENCE EDUCATION

- 380 SCIENCE FOR THE ELEMENTARY SCHOOL (3)
Prereq: general education requirements in science and mathematics. Selected generalizations and processes in science adaptable to the elementary school; an introduction to theory and practice in science education.
- 381 SCIENCE FOR THE ELEMENTARY SCHOOL (3)
Prereq: Sci Ed 380. Classroom-laboratory study of "new" curricula; observation and participation in public schools. Intended for students preparing to teach at the elementary level.
- 382 PHYSICAL SCIENCE FOR THE ELEMENTARY SCHOOL (3)
Prereq: Sci Ed 380; general education requirements in science or equivalent. Philosophy, concepts, learning experiences and materials for the biological sciences suitable to the elementary grades.
- 383 BIOLOGICAL SCIENCE FOR THE ELEMENTARY SCHOOL (3)
Prereq: Sci Ed 380; general education requirements in science and mathematics. Philosophy, concepts, learning experiences, and materials for the biological sciences suitable to the elementary grades.
- 384 EARTH SCIENCE FOR THE ELEMENTARY SCHOOL (3)
Prereq: Geol 101 and Sci Ed 380. Concepts, experiences, and materials from the earth sciences adaptable to the elementary school with emphasis on the elementary grades. (Also offered as Geol 384.)
- 430 ENVIRONMENTAL EDUCATION (2-5)
Prereq: Sci Ed 380 or Biol 493 or Phys Sci 492 or Geol 390; teaching experience or permission of instructor. Methods of teaching environmental science in selected content areas with related examination of environmental problems.

Interdepartmental

445 CURRENT TRENDS IN SCIENCE EDUCATION

445a Classroom Methods (3-6)

Prereq: Sci Ed 360 or equivalent; teaching experience or permission of instructor. Activity-centered approach to a study of modern science curriculum materials and activities for use in elementary and junior high classes.

445b Field Methods in Environmental Education (3-12)

480 SPECIAL PROJECTS IN SCIENCE FOR THE ELEMENTARY GRADES (2-5)

Prereq: one course from Sci Ed 361, 382 (or Phys Sci 382), 383 or 384; permission of instructor. Projects involving science instructional materials and curriculum. Repeatable for credit.

490 SPECIAL PROJECTS IN SCIENCE TEACHING IN THE JUNIOR AND SENIOR HIGH SCHOOL (2-5)

Prereq: one course from Biol 493, Geol 390, Phys Sci 492; permission of instructor. Projects involving science instructional materials and curriculum. Repeatable for credit.

GRADUATE COURSES

The following courses are offered for graduate credit for persons enrolled in the department's graduate program. For course descriptions and other information about the graduate program, see the current Graduate Catalog.

500 SPECIAL PROJECTS (1-6)

Individual conference.

501 ADVANCED STUDIES IN SCIENCE EDUCATION (3-5)

511 INTERNSHIP IN SCIENCE EDUCATION (3)

512 INSERVICE WORKSHOPS IN SCIENCE EDUCATION (3)

513 SCIENCE CURRICULUM, GRADES K-12 (3)

514 SEMINAR IN ELEMENTARY SCIENCE EDUCATION (1-3)

560 SPECIAL PROBLEMS IN SCIENCE TEACHING IN THE ELEMENTARY SCHOOL (2-5)

562 SPECIAL TOPICS IN THE PHYSICAL SCIENCES FOR ELEMENTARY SCHOOL TEACHERS (4)

563 SPECIAL TOPICS IN THE BIOLOGICAL SCIENCES FOR ELEMENTARY SCHOOL TEACHERS (4)

564 SPECIAL TOPICS IN THE EARTH SCIENCES FOR ELEMENTARY SCHOOL TEACHERS (4)

590 SPECIAL PROJECTS IN SCIENCE TEACHING IN THE JUNIOR AND SENIOR HIGH SCHOOL (2-5)

690 RESEARCH (2-6)

SOCIAL STUDIES EDUCATION

College of Arts and Sciences

The interdepartmental programs emphasize history and the social sciences. Students electing these programs develop academic areas most frequently represented in common school curricula. Majors develop one area in depth plus support areas.

For advisement or approval of these majors, students should consult the advisers listed under each major or Dr. Peter J. Hovenier, director of Social Studies Education.

BACHELOR OF ARTS IN EDUCATION

Major-Minor Concentration in History-Social Studies

Adviser: Dr. Harry D. Jackson

History-Social Studies for junior and senior high school teacher Option I—95 credits

- History — 50 credits
 - European two courses
 - Non-west two courses
 - United States three courses (two of which must be upper-division)
 - History 401
 - History 391
 - Social Studies Education 426
 - History electives under advisement to total 50 credits
- Social Sciences — 45 credits
 - Geography or Political Science 25 credits
 - Social Science 20 credits (from two social science areas not otherwise developed in the program)

(Successful completion of this program with a 2.5 GPA leads to teaching competency recommendations for both history and the social studies.)

Major-Minor Concentration in Geography-Social Studies

Adviser: Dr. Robert W. Teshera

Geography-Social Studies for junior or senior high school teachers Option II — 93 credits

- Geography Secondary Education major: 45 credits (see Geography section of this catalog)
- Other social sciences: 48 credits
 - History 391
 - Other history or political science: 25 credits including at least 10 hours of upper-division credit
 - Other social science: 20 credits in any combination from any two social sciences not otherwise developed in the program

(Successful completion of this program with a 2.5 GPA leads to certification of teaching competency in both geography and the social studies.)

Major-Minor Concentration in Political Science — Social Studies

Adviser: Dr. Siegrun F. Fox

Political science-social studies for junior and senior high school teachers. Option III — 94 credits

- Political Science — 53 credits: Pol Sci 101, 250, 270, 291, 311 or 313, 320, 481; political science electives under advisement to total 13 credits
- History — 23 credits: History 391; history electives under advisement to total 20 credits
- Social Science — 20 credits: electives under advisement from anthropology, economics, geography, psychology and sociology
- Soc St Ed 426

(Completion of this program with a minimum 2.5 grade point leads to teaching competency recommendations for both political science and the social studies.)

Major — Social Studies 45 credits

Adviser: Dr. Peter J. Hovenier

(For Elementary Education minors only)

- History 103, 104; Geog 201, 311
- Anth 201
- Pol Sci 250 or Econ 201
- Electives — 15 credits under advisement in one of the following six fields: anthropology, economics, geography, history, political science or sociology

Extended Minor 35 credits

Adviser: Dr. Peter J. Hovenier

- 20 credits from one of the social sciences or history
- 15 credits from two other social sciences or history
- A minimum of 15 of the 35 credits must be from upper-division work

A minimum GPA of 2.5 is required to secure approval of the major and extended minor for graduation.

COURSES IN SOCIAL STUDIES EDUCATION

- 400 DIRECTED INDEPENDENT STUDY (1-6)
Conference Course Permit required from instructor before registering.
- 425 SOCIAL SCIENCE FOR THE ELEMENTARY SCHOOL (3)
Prereq: Psych 316 (or 352). The development of social science concepts and skills in the elementary program.

- 426 SOCIAL STUDIES FOR THE SECONDARY SCHOOL (3)
Structures, materials and strategies for teaching social studies and history at the junior and senior high school levels.
- 430 CURRENT ISSUES FOR THE ELEMENTARY SOCIAL STUDIES CLASSROOM (3)
A course designed to identify resources and methods for integrating current social issues into the content areas of social studies with special emphasis on the valuing process and the influence of the television media on values and behavior.
- 435 USING COMMUNITY RESOURCES IN SOCIAL STUDIES (3)
Prereq: junior standing. Course explores community resources and the incorporation of the resources in the curriculum.
- 445a CURRENT TRENDS IN SOCIAL STUDIES EDUCATION: STRUCTURES, MODELS AND STRATEGIES (1-5)
Prereq: permission of instructor.
- 445b CURRENT TRENDS IN SOCIAL STUDIES EDUCATION: LAW FOCUSED TEACHING AND CURRICULUM (1-5)
Prereq: permission of instructor. Course to enable teachers to teach about criminal justice system, police, juvenile justice, consumer law, due process, etc. Course will provide teachers with tested classroom procedures, substantive law and field experience with justice agencies.

VISUAL COMMUNICATION EDUCATION [VICOED]

College of Arts and Sciences

The Bachelor of Science degree program in VICOED is designed to prepare graduates to enter industry as production, supervisory, or management personnel in the field of visual communication, and to prepare prospective teachers in the academic background necessary for curriculum development and instruction in secondary schools which are planning on carrying forward programs in visual communication education. Early consultation with the director of VICOED, Dr. Ray A. Schwalm, is essential.

VICOED students will follow the usual general education sequence, but should take Mathematics 121 or 240 or Computer Science 110 in lieu of 151, and Chemistry 115 rather than 101. Physics 101 will normally be taken.

VICOED Concentration 110 credits

- Art 101, 270, 371, Art History 240
- English 201 or 202 or Journ 104
- Speech 340
- Tech 210, 240, 340, 341, 362, 379, 444, 447, 448
- Take 19 credits from two of the following areas; maximum of 9-10 from one area:

Interdepartmental

- Industrial Graphics (Technology)
 - Graphic Arts (Technology)
 - Photography (Technology)
 - Graphic Design (Art and Technology)
 - Professional Writing (English and Journalism)
 - Educational Media (Education and Technology)
- Chem 208, 209
 - Acctg 251; BA 330; Econ 338
 - Math 122 or Comp Sci 110
 - Anth 431
 - Psych 320
 - 11 credits selected from art, economics, business, sociology/anthropology, psychology, mathematics, physics, chemistry, educational psychology

See departmental sections of the catalog for descriptions of these courses.

Teacher Education Program

Students enrolling in VICOED for teacher certification must complete the requirements for the Bachelor of Science program described above, satisfy the professional education requirements, and complete Technology 493 (4) prior to student teaching. This program might require up to two (2) extra quarters to complete.

WOMEN'S STUDIES

College of Arts and Sciences
Fairhaven College

The Women's Studies Program offers students an interdisciplinary approach to the particularly female dimensions of human experience and thought. It provides: (1) electives for those with a general interest in learning more about women, (2) preparation for those whose career choices involve working with or for women, and (3) undergraduate training for those who intend to pursue women's issues in their graduate or professional programs.

The minor includes four core courses and 14 hours of electives to be selected according to the individual needs of each student from the other relevant courses in the various departments.

Dr. Kathryn Anderson, Fairhaven College, is the adviser for this minor.

Minor 30 credits

Core: 16 credits

- WS 111/Fairhaven 111: Introduction to Women Studies (4)
 - Anth 353: Sex Roles in Culture (4)
 - English 338: Women and Literature (4)
 - Psych 319: Psychology of Sex Roles (4)
 - Electives: 14 credits
- English 217: Survey of Women's Literature (5)
 - Health Ed 152: Society and Sex (2)
 - History 490b: Women in American History (3)
 - Home Econ 330: Legal Environment of the Family (3)
 - Lib St 310u: Images of Women in Culture and Society (3)
 - Pol Sci 345: Women and Politics (3)
 - Psych 317: Human Sexuality (5)
 - Soc 368: Sex Roles and Social Structure (5)
 - Speech 492: The Rhetoric of Social Women's Studies I (5)
 - WS 313/Fairhaven 313: American Women's Studies II (5)
 - WS 329/Fairhaven 329: Women in Modern Economic Life (4)

COURSES IN WOMEN'S STUDIES

111 INTRODUCTION TO WOMEN'S STUDIES (4)

Introduction to the issues, questions, conceptual frameworks and methods basic to a study of human societies, their institutions and cultural artifacts from a perspective that comprehends women's experience. (Also offered as Fairhaven 111.)

317 AMERICAN WOMEN'S STUDIES I (5)

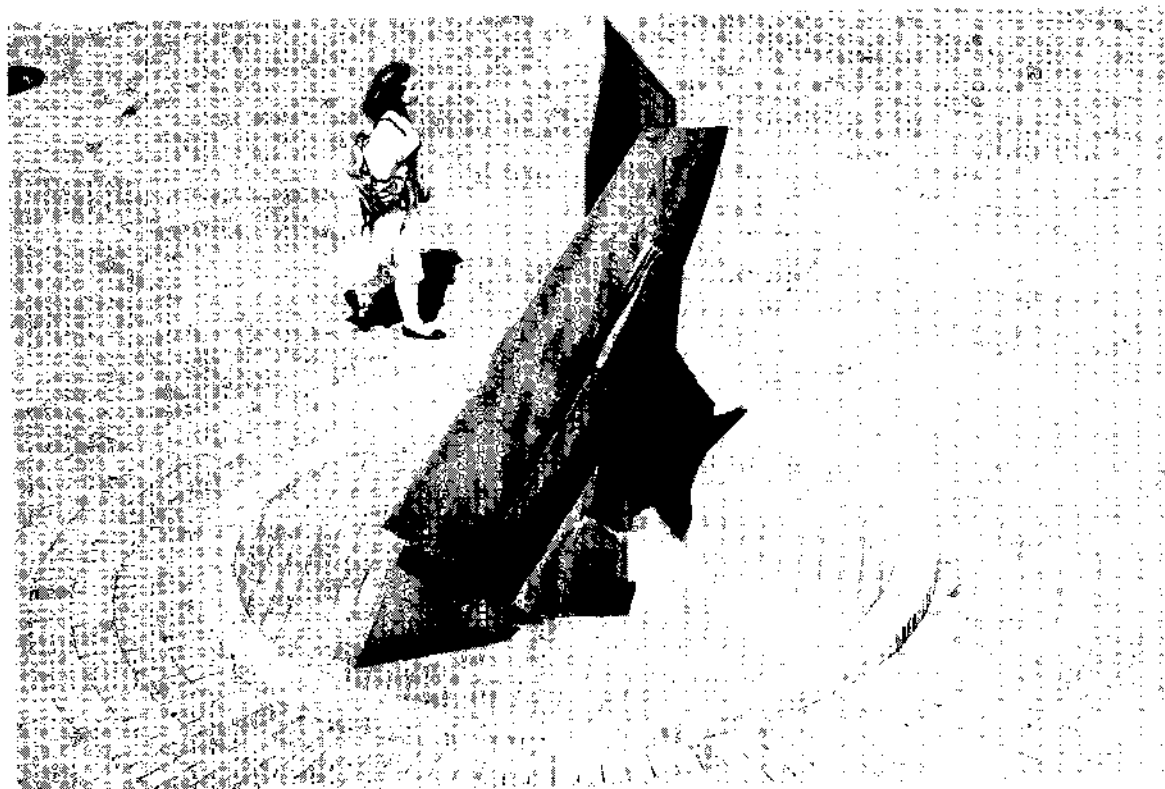
Prereq: History 103 or 104 or English 216 or 217 or another WS course. Women's role in American society from colonial times to the mid-nineteenth century, with attention to differences of race and class. Emphasis on changing sex roles for both women and men as a result of changes in the structure of the family, immigration, urbanization, expansion of the frontier, education, religion, development of the nation, and industrialization, including a focus on white and non-white women. (Also offered as Fairhaven 317.)

313 AMERICAN WOMEN'S STUDIES II (5)

Prereq: History 103 or 104 or English 216 or 217 or another WS course. Factors influencing the female gender role as it changed in the last century and a half from the "Cult of True Womanhood" to the "New Woman," to the "Feminine Mystique" to the "Liberated Woman." Emphasis on the impact of changing modes of American capitalism; women's efforts for equal rights and social reform; changing patterns of fertility; women's increased participation in the work force; changes in women's role in the domestic sphere. (Also offered as Fairhaven 313.)

329 WOMEN IN MODERN ECONOMIC LIFE (4)

Prereq: Econ 201 or equivalent. A look at the ways in which modern capitalism affects women in their personal and public lives (e.g., education, marriage, divorce, fertility, labor force participation, etc.) and how capitalism utilizes the various capacities and functions of women as a distinct group. (Also offered as Fairhaven 329.)



'India' sculpture.



JOURNALISM

College of Arts and Sciences

The Journalism Department offers a theoretical and practical communications major and minor in a liberal arts setting. Students gain practical experience on Western's prize-winning student publications, and majors additionally take field internships with newspapers, broadcast stations or with other professional organizations.

Courses emphasize the gathering, writing and ethical presentation of news, developing skills and general knowledge that serve more than communications careers. Students are challenged to master a broad range of other disciplines. They are encouraged to undertake double-majors or major-minor combinations offering depth in one or more specialized areas. They are helped to learn to write with accuracy, precision and clarity. By enriching their language skills and understanding of news processes, they learn to

communicate swiftly and lucidly in a changing world.

Graduates find careers in newspapers, magazines, radio, television, publishing, advertising, public relations, teaching and throughout government and industry wherever communications skills, with general knowledge, are vital.

JOURNALISM FACULTY

- R. E. STANNARD JR. (1969) Chairman.
Associate Professor. BA, University of Washington; MA, Cornell University.
- LYLE E. HARRIS (1976) Assistant Professor. BA, MA, University of Montana; PhD, University of Missouri.
- GERSON F. MILLER (1967) Professor. AB, University of California, Berkeley; MA, Pennsylvania State University.
- PETE STEFFENS (1972) Professor. BA, Harvard; BA, MA, Balliol College, Oxford.

BACHELOR OF ARTS

Major 61 credits

- Journ 104 or 406
- Journ 160, 204, 304, 340, 350, 404, 470, 480
- Three journalism staff courses from list (a) and three additional courses from list (a) or (b):
 - (a) Journ 111, 112, 113, 114, 211, 212, 213, 214, 311, 312, 313, 314, 411, 412, 413, 414
 - (b) Journ 121, 122, 123, 221, 222, 223, 321, 322, 323, 421, 422, 423, 431, 432, 433
 (May be waived by substitution of equivalent professional experience.)
- Journ 430
- 15 credits in related academic areas selected under advisement of journalism faculty

Minor 25 credits

Applies to both Bachelor of Arts and Bachelor of Arts in Education.

- Journ 104 or 406
- Journ 160, 204, 304, 340, 350
- Three staff courses, or equivalent professional experience, from:
 - (a) Journ 111, 112, 113, 114, 211, 212, 213, 214, 311, 312, 313, 314, 411, 412, 413, 414
 - (b) Journ 121, 122, 123, 221, 222, 223, 321, 322, 323, 421, 422, 423, 431, 432, 433
 At least two courses of the above are to be selected from list (a)

COURSES IN JOURNALISM

104 NEWSWRITING (3)

Prereq: ability to type 25 or more words per minute. Writing for news media; news elements and values; gathering news, structure and style of news stories; covering speeches and meetings, interviewing.

111, 112, 113, 114 NEWSPAPER STAFF (2 ea)

Prereq: freshman standing; Journ 104. Participation on the staff of the university newspaper; critiques in news reporting, writing, editing and make-up.

121, 122, 123 PERIODICAL STAFF (2 ea)

Prereq: freshman standing; Journ 104. Workshop in periodical design, layout and production, training in the creative combination of type, headline, photographs and other illustrative material, text and caption writing; creative layout techniques; publication production; participation on the university periodical.

160 CURRENT EVENTS AND THE MEDIA (3)

Discussions and interpretation of news in context of interaction with media; for potential journalists and others interested in current events.

204 COPY EDITING (3)

Prereq: Journ 104. Newspaper copy desk operations: editing, heading writing; dummies; page make-up; editorial writing.

211, 212, 213, 214 NEWSPAPER STAFF (2 ea)

Prereq: sophomore standing; Journ 104. Participation on the staff of the university newspaper; critiques in news reporting, writing, editing and make-up.

221, 222, 223 PERIODICAL STAFF (2 ea)

Prereq: sophomore standing; Journ 104. Workshop in periodical design, layout and production; training in the creative combination of type, headline, photographs and other illustrative material, text and caption writing; creative layout techniques; publication production; participation on the university periodical.

237 FOREIGN STUDIES (2-3)

See Journ 437.

300 DIRECTED INDEPENDENT STUDY (1-6)

Conference Course Permit required from instructor before registering.

304 REPORTING (3)

Prereq: Journ 104. Interviewing, news coverage, including campus sources, and standard community news sources, with emphasis on social agencies; writing for news media.

305 PHOTOJOURNALISM (3)

Prereq: Journ 104. Basics of news photography; use of equipment; news picture planning and coverage; composing effective news pictures; essentials of processing for publication; photographic notes and files; picture editing and layout; professional ethics and the law.

310 ADVERTISING IN THE MASS MEDIA (3)

Role of mass media advertising in the economy and advertising methods; research, planning and preparation of the message, selection of media, budgets and schedules; social performance of advertisers.

311, 312, 313, 314 NEWSPAPER STAFF (2 ea)

Prereq: junior standing; Journ 104. Participation on the staff of the university newspaper; critiques in news reporting, writing, editing and make-up.

321, 322, 323 PERIODICAL STAFF (2 ea)

Prereq: junior standing; Journ 104. Workshop in periodical design, layout and production, training in the creative combination of type, headline, photographs and other illustrative material, text and caption writing; creative layout techniques; publication production; participation on the university periodical.

337 FOREIGN STUDIES (2-5)

See Journ 437.

340 THE PRESS AND SOCIETY (3)

Historical backgrounds of journalism, tracing the rise of mass communications in the Western World with social, economic and political trends.

350 LAW OF THE PRESS (4)

Rights and legal restrictions on freedom of the press; constitutional guarantees, libel, contempt, privacy; other restrictions.

390 THE NEWS PROCESS (4)

Critical examination of the news process by visiting news media professionals. Repeatable to 12 credits.

400 DIRECTED INDEPENDENT STUDY (1-6)

Conference Course Permit required from instructor before registering.

404 FEATURE WRITING (3)

Prereq: Journ 304. In-depth article writing; development of ideas, gathering of materials and writing; special attention to individual interests; exploration of free-lance writing markets.

405 PRINCIPLES OF PUBLIC RELATIONS (3)

Prereq: Journ 104 or English 101. Methods, tools and media used in planning and developing company, community and institutional public relations programs. Publicity and promotional techniques: copy preparation, news releases, publications, relations with the press.

406 JOURNALISM FOR PUBLICATION ADVISERS (3)

Methods and techniques in teaching public school journalism; news elements, values and writing for newspapers. Not open to students who have taken Journ 104.

411, 412, 413, 414 NEWSPAPER STAFF (2 ea)

Prereq: senior standing; Journ 104. Participation on the staff of the university newspaper; critiques in news reporting, writing, editing and make-up.

421, 422, 423 PERIODICAL STAFF (2 ea)

Prereq: senior standing; Journ 104. Workshop course in periodical design, layout and production, training in the creative combination of type, headline, photographs and other illustrative material, text and caption writing; creative layout techniques; publication production; participation on the university periodical.

430 FIELD INTERNSHIPS (6)

Prereq: Journ 204, 304, 350, and newspaper staff courses. Supervised field work on newspapers, magazines, radio and TV stations, public relations and advertising agencies, or other appropriate professional situations; for journalism majors between junior and senior years; usually during summer session. S/U grading.

431, 432, 433 TELEVISION NEWS STAFF (2 ea)

Prereq: Journ 304, Speech 240. Workshop course in gathering and preparing news for television; training in planning, organizing and carrying out news coverage; weighing visual and non-visual news values; writing news scripts which integrate words, sound and pictures; critiques on the completed work; participation on the staff of the university television news program. Concurrent enrollment in Speech 442 recommended.

437, 337, 237 FOREIGN STUDIES (2-5)

A study of journalistic topics particularly appropriate to the location of the course offering. These courses are offered only through the WWU Study Abroad Program. Contact Foreign Study Office, Old Main 400.

440 PRESS AND WORLD AFFAIRS (3)

The international role and operations of the press; factors affecting the free flow of news; major world news systems.

460 LITERATURE OF JOURNALISM (3)

Prereq: Journ 160. Readings and critical evaluation of literature by and about journalists.

470 MASS COMMUNICATIONS THEORY AND RESEARCH (3)

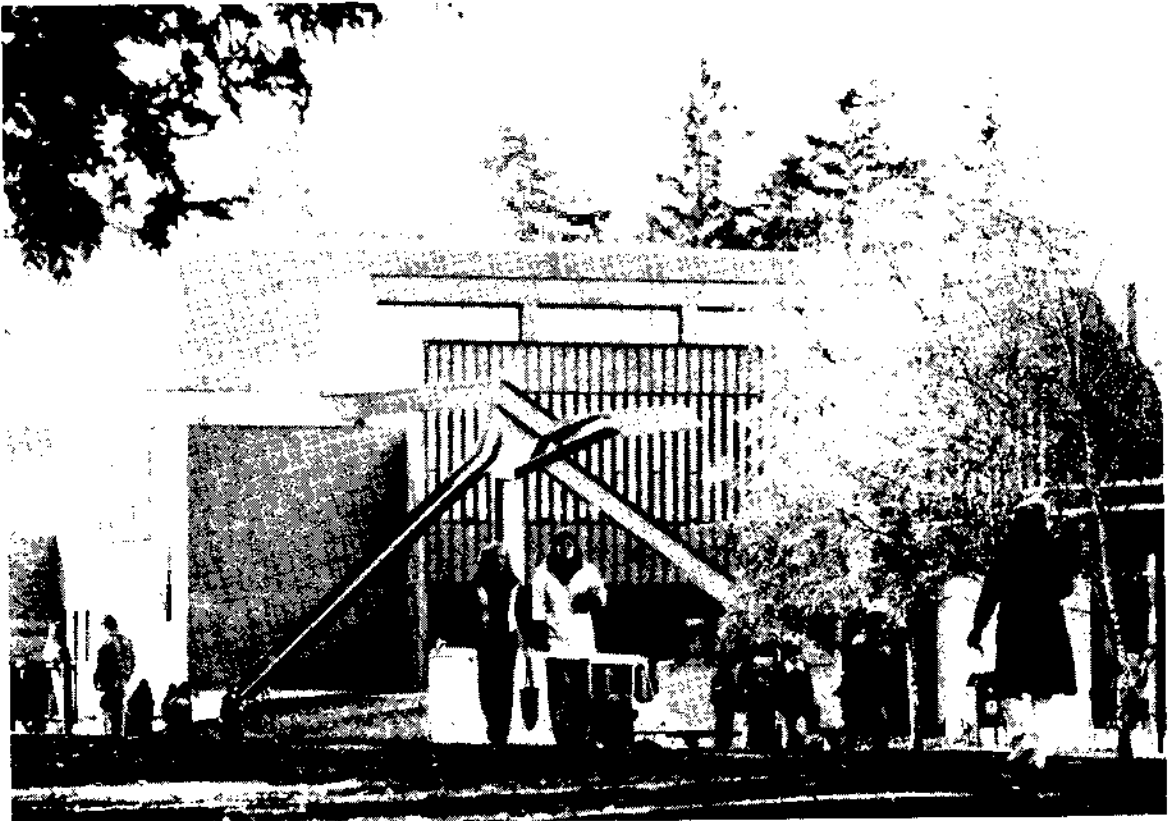
Introduction to theory and research in mass communications; review of pertinent literature; limited field studies.

480 CURRENT PROBLEMS (3)

Prereq: Journ 350. The modern function of the press in a democratic society; virtues and shortcomings of the press in current trends; management structure of media and its interaction with journalistic ethics.

490 THE NEWS PROFESSIONAL (5)

Prereq: permission of the Journalism Program. In-depth studies with visiting news media professionals in their specialties, including individual and/or team projects. Repeatable to 15 credits.



Performing Arts Center, 'For Handel' sculpture.



LIBERAL STUDIES

College of Arts and Sciences

The Liberal Studies Department serves the Western Washington University community in two ways:

1. The Liberal Studies Department offers interdisciplinary courses that partially fulfill the WWU General University Requirement. (See the Arts and Sciences section of this catalog for the complete General University Requirements and the various options for their fulfillment.)
2. The Liberal Studies Department also offers a major program (B.A.) in Liberal Studies. This program crosses traditional departmental lines and permits development of integrated courses of study in areas where there is no existing departmental program. Completion of this major results in a Bachelor of Arts degree in Liberal Studies. Model programs are available for majors in Religious Studies, Medieval Studies, Classical Studies, area

studies and folklore in the Liberal Studies office (Miller Hall 361). Other options are available.

LIBERAL STUDIES FACULTY

- WILLIAM K. STOEVER** (1970) Chairman. Associate Professor BA, Pomona College; MDiv, Yale Divinity School; PhD, Yale University.
- ROSCOE L. BUCKLAND** (1970) Professor. BA, MA, University of Idaho; PhD, State University of Iowa.
- NITA CLOTHIER** (1964) Assistant Professor. BA, MEd, Western Washington State College.
- BRIAN P. COPENHAVER** (1971) Professor. AB, Loyola College; MA, Creighton University; PhD, University of Kansas.
- MICHAEL H. FISHER** (1978) Assistant Professor. MA, University of Chicago; PhD, University of Chicago.
- JESSE HIRAOKA** (1972) Director of Human Services and Professor of Liberal Studies/Ethnic Studies. BA, Roosevelt University; MA, University of Chicago; PhD, Northwestern University.

- MILTON H. KRIEGER (1970) Associate Professor. BA, Reed College; PhD, University of Toronto.
 STUART LASINE (1977) Assistant Professor. BA, University of Michigan; MA, University of Wisconsin; PhD, University of Wisconsin.
 *ULRICH MAMMITSCH (1971) Associate Professor. BA, University of Hamburg, Germany; MA, Southern Illinois University; PhD, University of Hawaii.
 **RODNEY J. PAYTON (1970) Associate Professor. BA, MA, Washington State University; PhD, University of Chicago.
 WILLIAM L. WALLACE (1970) Associate Professor. BS, Appalachian State University (North Carolina); MA, PhD, Ohio University.

**BACHELOR OF ARTS
 IN LIBERAL STUDIES**

Arts and Sciences Major 60 credits

This major is designed to meet the needs of those students who can profit most from an interdisciplinary approach to study. It is meant to provide a disciplined approach to integrated study. For each student choosing this major, the subject matter is organized in consultation with a departmental adviser and approved by a committee of the department. The student and a faculty adviser construct a program that involves work in more than one discipline. The proposed program must receive the support of two other faculty members who, with his major adviser, comprise the student's committee.

Bachelor of Arts in Liberal Studies

- Lib St 201
- Lib St 301
- Lib St 499
- Electives approved by departmental major committee

No program may substantially duplicate an existing major; normally not more than 30 of the 60 units may be taken from any one department, other than Liberal Studies. Not more than 20 units taken prior to enrollment in Liberal Studies 301 may be applied to the major. Forty of the units of the major must be 300 level or above. Credits used to satisfy general education or minor requirements may not be applied to the major.

Competence in a foreign language is recommended for all Liberal Studies majors and may, where appropriate, be required as supporting courses for some. A more detailed description of the major is available in the Liberal Studies office.

*On Sabbatical Leave 1980-81
 **On Sabbatical Leave 1979-80

Minor—Humanities 31 credits

Interdisciplinary study of the traditional material of the Humanities — i.e., major beliefs about and images of human beings and their place in society and the universe — in western and other cultural traditions.

- Lib St 121, 122, 123
- One course from Lib St 232 or 242
- Two courses from Lib St 271, 272, 273, 274, 275, 276
- Lib St 332

Minor—The Study of Religion 24-27 credits

A scholarly, critical, non-sectarian study of religious traditions and religious behavior. Through such study students seek to understand the role of religion in human existence and the complex relationship between religion and other cultural forms and also to gain informed acquaintance with a variety of religious expressions.

- Lib St 231
- Three courses from Lib St 235, 272, 278; History 267, 287; Phil 113
- Remaining credits from the following: Anth 330; English 362; Lib St 233, 331, 332; History 327; Psych 346; Soc 363; other appropriate courses under advisement

LIBERAL STUDIES COURSES

105 BEHAVIORAL SCIENCE (5)

Man as a biological, psychological and social organism; the processes of perception, learning and motivation, and their social and cultural context.

121, 122, 123 HUMANITIES (5 ea)

(These courses need not be taken in sequence.) Ideals and their expression in the Western Tradition. Interdisciplinary introduction to significant cultural themes from art, music, history, philosophy, literature; readings, discussions, lectures, arts programs.

- 121 The Western Tradition I: The Ancient World, Concepts of man in Near Eastern and Mediterranean cultures: Mesopotamia, Egypt, Greece, Palestine, Rome.
- 122 The Western Tradition II: Concepts of Man in Medieval and Modern Europe. Emphasis on emergent "modernity" and associated problems of "world-view," authority vs. reason, the individual in the universe.
- 123 The Western Tradition III: Man in Modern Times. Nineteenth and twentieth century ideologies; their philosophies of man; alienation and integration of the individual in society.

200 INTRODUCTION TO ECONOMIC AND POLITICAL INSTITUTIONS (4)

Investigation of economic, legal, and political institutions in the context of private property from the preconstitutional period to the present.

Liberal Studies

- 231 INTRODUCTION TO INTERDISCIPLINARY STUDIES (4)
Methods and principles of interdisciplinary studies through investigation of an interdisciplinary problem.
- 231 INTRODUCTION TO THE STUDY OF RELIGION (4)
Examination of religious phenomena from several scholarly perspectives. Topics include mysticism, corporate religion, symbolism and ritual, contemporary developments. Readings, lectures, discussion.
- 232 MYTH AND FOLKLORE (4)
An introduction to the study of myth and folklore and its cultural impact. Lectures, readings, discussion.
- 233 RELIGION IN AMERICA (4)
Examination of the place of religious values, traditions and institutions in American culture, from historical, social-scientific and religious-phenomenological perspectives. Directed toward fuller understanding of contemporary issues and events. Readings, lectures, discussion.
- 235 THE BIBLICAL TRADITION (4)
Examination of selected topics in the development and textual analysis of the Hebrew and Christian scriptures: interdisciplinary perspective; attention to original languages. Reading, lectures, discussion.
- 237 FOREIGN STUDY (2-5)
(See Liberal Studies 437.)
- 242 MUSIC AND THE IDEAS OF WESTERN MAN (4)
The relation of the art of music to mathematics, cosmology, psychology and aesthetics. Not open to music majors.
- 271 HUMANITIES OF INDIA (4)
The Indian experience and the development of its cultural unity, the challenge of Islam and the British colonial experience, the conditions of modernization and the emerging synthesis of values.
- 272 MYTHOLOGY/RELIGION AND SOCIETY IN CHINA AND JAPAN (4)
Study of formal religious thought and of popular religion in the traditional cultures, the impact of Christian denominations, and the character of contemporary religious life.
- 273 ARTISTIC EXPRESSION AND SOCIETY IN CHINA AND JAPAN (4)
Studies of the aesthetic traditions of East Asia, both courtly and popular, secular and religious, followed by consideration of the impact of foreign ideas and of the recent role of art in the propaganda, architecture and industrial design as well as in traditional modes of expression.
- 274 SOCIETY AND LITERATURE IN CHINA AND JAPAN (4)
Study of Chinese and Japanese authors from traditional and modern times, emphasizing the forms of literary expression and literature as a guide to social attitudes and value systems.
- 275 HUMANITIES OF JAPAN (4)
An interdisciplinary introduction to Japanese civilization, both traditional and modern, with particular emphasis on religions, historical, artistic, and literary patterns, societal and cultural ideals.
- 276 HUMANITIES IN AFRICA (4)
Introduction to cultural heritage of sub-Saharan Africa, and to the contemporary civilization that draws upon it. Emphasis on the process by which Africans currently build and use coherent accounts of that heritage.
- 278 RELIGIONS OF INDIA (4)
Evolution of religious thought in India; Vedic religion; the Upanishads, Buddhism; Classical Hinduism; systems of meditation; devotional poetry; Sikhism, Sufism; Epic, Puranic and popular mythology; village religion. Reading, lectures, discussion.
- 300 DIRECTED INDEPENDENT STUDY (1-6)
Conference Course Permit required from instructor before registering.
- 301 SPECIAL PROBLEMS (2-5)
Prereq: Lib St 201. Development of student plan of study, preparation of bibliography, completion of a program of reading, planning for a final project.
- 302 INTRODUCTION TO AMERICAN STUDIES (4)
Prereq: two other courses from the general requirements for the major. Methods and principles of interdisciplinary studies through investigation of a topic in American studies. Also offered as American Studies 302.
- 310 SPECIAL TOPICS IN THE HUMANITIES (3)
Prereq: junior status. Ideas and issues in Western and non-Western culture. Subject, instructor and syllabus announced prior to registration.
- 311 GREAT BOOKS REPRESENTATIVE OF THE HUMANITIES (3)
Prereq: junior status. Reading list, instructor and syllabus announced prior to registration.
- 331 MAGIC, ASTROLOGY, WITCHCRAFT, DEMONOLOGY: THE ACADEMIC STUDY OF OCCULTISM (4)
Prereq: junior status. The academic analysis of various occultist beliefs and practices (magic, astrology, witchcraft, demonology, Cabala, numerology, divination, alchemy, magical medicine) in the Western tradition from historical, social-scientific, and philosophical points of view. Lectures, discussions, and readings in primary and secondary sources.
- 332 UNIVERSAL RELIGIONS: FOUNDERS AND DISCIPLES (4)
Prereq: junior status. Examination of traditional images of founders of religions and quasi-religions which make universal claims; of the emergence of second-generation teaching by disciples and the subsequent growth of tradition; and of problems of cultural diffusion. Reading, lectures, discussion.
- 335 MODERN RELIGIOUS THOUGHT (4)
Prereq: junior standing. A study of the development of Christian religious thought in America and Europe during the nineteenth and twentieth centuries, in relation to the contemporary religious situation.
- 336 CHRISTIANITY AND SOCIAL JUSTICE (4)
Prereq: junior standing. A study of the relationship between religion and social ethics; survey of the historical sources of Christian social ethics and an examination of the efforts of contemporary Christian thinkers to relate their religious tradition to the problems of modern society.
- 337 FOREIGN STUDY (2-5)
(See Liberal Studies 437.)
- 341 ART AND IDEOLOGY: THE EFFECTS OF IDEOLOGY UPON THE FINE ARTS IN MODERN AND EARLY MODERN EUROPE (4)
Prereq: junior status or one course in art history or music history. An examination of the relationships that exist between the fine arts of a society and its major ideologies.
- 342 THE FOUNDATIONS OF SCIENTIFIC INQUIRY: AN INTRODUCTION TO SOME PROBLEMS IN THE HISTORY AND PHILOSOPHY OF SCIENCE (4)
Prereq: junior status. A study of selected issues in the philosophy of science through selected cases from the history of science. Emphasis on problems of explanation, verification, induction, reductionism, and scientific method and on materials from the history of physics, biology, and chemistry.



370 MAJOR NON-WESTERN TRADITIONS: THE TRADITIONAL ORDER (4)

The basic cultural assumptions, value systems and social orders of China, Japan, India and Africa, to the nineteenth century.

371 MAJOR NON-WESTERN TRADITIONS: THEIR MODERN FATE (4)

Transformations from traditional peasant-based agrarian societies to the variety of contemporary social, economic and political formations, and the circumstances and constraints currently experienced by the "developing" world, particular emphasis on the interaction of indigenous and foreign forces, on patterns of education, culture and ideology, and on the emergence of a third-world identity and variations within it.

372 MODERNIZATION AND THE PLACE OF THE INDIVIDUAL IN THE NON-EUROPEAN WORLD (4)

Prereq: junior status. The effects of rapid change on individuals and the resulting reflections about the place of individuals in society, as shown in novels, autobiography, poetry, and other literary expressions from contemporary Asia and Africa.

373 STRATEGIES AND VISIONS OF MODERNIZATION IN THE NON-EUROPEAN WORLD: CONSERVATIVES, REFORMERS, REVOLUTIONARIES (4)

Prereq: junior status. Studies based on the 20th century non-European literature on modernization, emphasizing the total range of ideology about the values of tradition and modernity and their incorporation in contemporary societies.

400 DIRECTED INDEPENDENT STUDY (1-6)

Conference Course Permit required from instructor before registering.

432 AMERICAN FOLKLORE (4)

Prereq: Lib St 232 or one course in American history or American literature. American folklore in its various forms: folk tale, folk song and dance, proverb, superstition, nature lore, myth, and hero legend.

437, 337, 237 FOREIGN STUDY (2-5)

A study of humanities topics particularly appropriate to the location of the course offering. These courses are offered only through the WWU Study Abroad program. Contact Foreign Study Office, Old Main 400, for information.

466 POPULAR CULTURE (4)

Prereq: History 103 or 104. Popular 19th century American ideas expressed in the arts and the sciences, and in cultural activities and ceremonies.

480 STUDIES IN HUMANISTIC EDUCATION: THE HUMANITIES APPROACH (3)

Prereq: permission of department. Foundations in humanistic education. Consideration of the manner in which humanities materials are presented. Demonstration and discussion of presentation and integration of material, of course design; individual projects. Offered as part of the Colloquium in Humanistic Education during summer quarter. Open to all interested students.

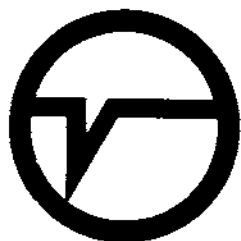
499 SPECIAL PROBLEMS (3)

Project designed to demonstrate the student's interdisciplinary focus; for Liberal Studies majors.

$$x - 3 \equiv 1 \pmod{4}$$

$$= \frac{1}{2}(a + b\sqrt{-3}) \text{ where}$$

$$= \frac{1}{2}(b + a\sqrt{-3}) +$$



MATHEMATICS & COMPUTER SCIENCE

College of Arts and Sciences

The Department of Mathematics and Computer Science offers a wide variety of majors and minors. Degrees are offered in mathematics, mathematics education, and computer science. There are joint degrees in mathematics and computer science, biology and mathematics, chemistry and mathematics, economics and mathematics, geology and mathematics, and physics and mathematics. There are also joint degrees in accounting and computer science and in business administration and computer science. On the graduate level there are two degrees available: Master of Arts and Master of Science.

The need for persons with quantitative skills is increasing dramatically as the world grows more complex. Mathematicians and computer scientists have employment opportunities in business, industry, government and teaching. Persons planning careers in almost

any field will find their opportunities for interesting and challenging careers enhanced by the study of mathematics and computer science. The degrees are intended to prepare students for just such careers. It is generally the case that the person who develops his quantitative skills increases his ability to attack many of the complex problems of society. Advances in science, technology, the social sciences, business, industry and government become more and more dependent upon precise analysis and the extraction of information from large quantities of data. Environmental problems, for example, require careful analysis by persons (or teams of persons) with skills in mathematics, statistics and computer science as well as biology, geology, physics and many other fields.

MATHEMATICS

The unique blending in mathematics of

man's rational, creative and aesthetic impulses has attracted the intellectually curious for over 2,000 years. The body of mathematical knowledge is a magnificent achievement: it is now growing more rapidly than ever before. The habits of systematic and creative thought developed in the study of mathematics are recognized as invaluable in most areas of human endeavor. Western's Bachelor of Science major in mathematics is designed to introduce the student to the excitement of mathematical ideas; it allows the maximum possible freedom to explore those areas of mathematics that the student finds most interesting.

The department has a sound program in mathematics with a proven record of preparing students for successful graduate study at the very best universities in the nation. There are sequences of courses in calculus, advanced calculus, linear algebra, differential equations, number theory, abstract algebra, topology, geometry, statistics, complex analysis and mathematical analysis. Students of mathematics who do not go on to graduate school are well prepared for industrial or governmental jobs if they have some exposure to computer science or one of the natural, social or applied sciences.

APPLIED MATHEMATICS

Many of the greatest achievements in mathematics were inspired by problems in the natural sciences; today mathematics has wide application in both the natural and social sciences. Applied mathematics provides a broad arena for the intellectual and creative impulses of man. The Bachelor of Science major in mathematics allows enough freedom in choice of courses so that students may prepare themselves well as applied mathematicians. Many students interested in applications of mathematics will want to pursue a joint major with some other department.

All of the sequences listed earlier are available to students of applied mathematics. The courses or sequences in calculus, linear algebra, differential equations and statistics provide the central core of studies in applied mathematics. The courses or sequences in probability theory, numerical analysis and operations research are of great interest; the student of applied mathematics should study at least the basics of computer science. The student who contemplates graduate study in applied mathematics will benefit from the study of abstract algebra and mathematical analysis.

COMPUTER SCIENCE

Computer science is a steadily growing area of human endeavor; its impact is felt in nearly every part of our society. It provides great opportunity for employment in business, industry, government and teaching. It also provides a wealth of problems of intellectual interest. As in mathematics, it is an area in which systematic habits of thought may be combined with rational and creative impulse to produce achievements of both aesthetical and practical significance.

The curriculum in computer science is broad and well-balanced. In addition to the usual introductory courses, there is a sequence in assembler language programming and courses in automata theory, advanced features of programming languages, computer organization, data structures, compiler design and implementation, operating systems, and simulation and modeling. There are courses in data base management, business computer systems, computerware, and systems analysis, which are especially concerned with applications to business. There are also sequences in numerical analysis and operations research. The department offers degrees in computer science, in mathematics-computer science, accounting-computer science, and business administration-computer science. The Computer Center has an IBM 360 model-50 with large scale auxiliary storage. There are a number of minicomputers on campus, among which is an Interdata 70 available to Computer Science students for hands-on experience. There are also facilities for interactive computing and for computer graphics.

Computer science students are encouraged to gain considerable competence in a field in which computer application plays a role (for example, accounting, biology, business administration, environmental sciences, geology, geography, or geophysics). Employment opportunities are enhanced by such a course of study. The major in computer science provides a rich, broad background for entry into the computer field. Those who are interested in graduate school in computer science or who are especially interested in scientific programming should consider very seriously the joint mathematics-computer science degree as an alternative.

The minor in computer science is of great value in improving the quantitative skills of students pursuing other majors. The person who completes such a minor will find that he is able to communicate with computer scientists. Such a skill is quite valuable today.

MATHEMATICS EDUCATION

The Bachelor of Arts in Education major may be completed with either of two concentrations; one prepares the graduate for teaching mathematics on the secondary level, the other concentrates on the elementary level. Those who intend to pursue one of these concentrations must complete at least one course in algebra and one course in geometry on the upper division level. Secondary teachers will find that calculus, linear algebra, number theory, statistics, probability and the course in mappings and continuity are of considerable value to them. Successful completion of these courses provides a good part of the training necessary for technical expertise in the classroom.

The elementary concentration emphasizes breadth in mathematics. Breadth of experience is important so that the teacher may expose elementary students to a wide variety of mathematical topics. The specialist in mathematics on the elementary level must be particularly skilled at transforming the material mastered in college to a form suitable for the level in question.

Secondary majors learn the methods of teaching mathematics in Math 483; elementary majors learn such methods in Math 481.

ACADEMIC PLACEMENT

Students who need advice in registering for the proper course in mathematics or computer science are urged to seek help at the departmental office in Bond Hall 202.

Freshmen

Both calculus and linear algebra are required for most majors offered by the department. At least one of them is a prerequisite for almost every other course in mathematics. The prospective major should normally take calculus in his freshman year and linear algebra within his first two years. He is prepared to take Math 124 if he has completed the following courses in high school:

- (a) one and one-half years of algebra,
- (b) one year of geometry,
- (c) one-half year of trigonometry, and
- (d) one additional year of work including the real number system, equations, inequalities, and functions and their graphs.

Math 105 is offered for students needing a knowledge of the topics listed in (d). The student who is deficient in (a) should enroll in Math 103; students deficient in (c) should enroll in Math 104. These courses, if needed,

should be completed before enrolling in Math 124.

Mathematics and computer science majors are strongly urged to plan their program of studies in collaboration with their departmental adviser. Those students pursuing a joint major should have an adviser in each of the departments involved. A departmental adviser may be obtained upon request in Bond Hall 202.

Freshmen are allowed to begin study in computer science with the course CS 210 (Programming I) if they have had four years of high school mathematics including an introduction to calculus. Those without such preparation should complete Math 124 (Calculus and Analytic Geometry) before registering for CS 210. The latter group of students may, if they wish, take CS 107 (Programming in BASIC) and/or CS 110 (Introduction to Programming) before completing Math 124. Students with fewer than three years of high school mathematics should seek advice in the department office before registering for computer science courses. It is not essential that computer science majors complete more than CS 210 in their first year of study.

Transfer Students

Mathematics majors who expect to enter Western from a two-year college should complete a sequence in calculus unless they plan to take that sequence at Western. Courses in linear algebra, differential equations, probability theory, and mathematical statistics are also good preparation.

Computer science majors who expect to enter Western from a two-year college should complete as many mathematics courses and computer science courses as possible. They should, if possible, learn to program in a higher level language such as Fortran, PL/1 or Algol. Those students who have followed a program of studies centered around data processing are welcome to the program. They will find, however, that a certain number of their courses will not apply toward a degree in computer science. For example, courses in BASIC, RPG, and JCL and courses which require little or no programming often will not apply toward a degree in computer science.

Transfer students must complete at this institution a minimum of nine upper-division credits for a major in the department or five upper division credits for a minor in the department.

INFORMATION

Those interested in study of computer

science or mathematics are welcome to write, telephone, or visit the Chairman of the Department of Mathematics and Computer Science, Western Washington University, Bellingham, WA 98225. Telephone: (206) 676-3785.

**MATHEMATICS AND
COMPUTER SCIENCE FACULTY**

- RICHARD G. LEVIN (1967) Chairman. Associate Professor. BS, University of Pennsylvania; PhD, University of California, Davis.
- DONALD R. CHALICE (1967) Associate Professor. BA, University of Wisconsin; MA, PhD, Northwestern University.
- *ROBIN W. CHANEY (1969) Professor. BA, PhD, Ohio State University.
- KEITH CRASWELL (1966) Associate Professor. BS, MS, PhD, University of Washington.
- JAMES E. DUEMMEL (1966) Associate Professor. BA, MA, PhD, Ohio State University.
- ALBERT J. FRODERBERG (1968) Associate Professor. BS, MS, PhD, University of Washington.
- SARA JEANNE GAMLEN (1967) Associate Professor. BA, Linfield College; MA, Bowling Green State University; PhD, Washington State University.
- GLENN B. GOODRICH (1978) Assistant Professor. BS, University of Washington.
- NEIL R. GRAY (1964) Associate Professor. BA, San Francisco State College; MS, PhD, University of Washington.
- JOSEPH HASHISAKI (1962) Professor. BA, Montana State University; MA, PhD, University of Illinois.
- FRANCIS H. HILDEBRAND (1968) Associate Professor. BS, Kent State University; MS, University of Illinois; PhD, Michigan State.
- JAMES L. HILDEBRAND (1952) Associate Professor. BA, MA, North Texas State University.
- FRED M. IVES (1971) Associate Professor. BA, MS, PhD, Washington State University.
- ROBERT I. JEWETT (1970) Professor. BS, California Institute of Technology; MS, PhD, University of Oregon.
- ROBERT M. KAUFFMAN (1967) Professor. BA, The University of the South; MS, PhD, Louisiana State University.
- NORMAN F. LINDQUIST (1967) Associate Professor. BA, Linfield College; PhD, Oregon State University.
- LARRY DEAN MENNINGA (1970) Associate Professor. BA, University of Iowa; MA, PhD, University of Washington.
- MARTIN L. OSBORNE (1977) Assistant Professor. BA, Hamilton College; MA, University of Oregon; PhD, Oregon State University.
- THOMAS T. READ (1967) Professor. BA, Oberlin College; MA, PhD, Yale University.
- JOHN R. REAY (1963) Professor. BA, Pacific Lutheran University; MA, University of Idaho, PhD, University of Washington.
- PAUL T. RYGG (1962) Professor. BA, Montana State University; MS, PhD, Iowa State University.
- DONOVAN F. SANDERSON (1963) Associate Professor. BS, MS, PhD, Iowa State University.
- GEORGE E. WITTER (1955) Associate Professor. BA, MA, Miami University.
- JOHN W. WOLL (1968) Professor. BS, Haverford College; PhD, Princeton University.

*On Sabbatical Leave 1979-80

BACHELOR OF ARTS IN EDUCATION

Major Elementary 45 credits

- Math 124, 125, 241, 281, 305, 481
- Math 307 or 401
- Math 360 or 460
- Math 240 or 341
- CS 107 or 110 or 210
- Electives under departmental advisement

Major Secondary 45 credits

- Math 124, 125, 205, 241, 341, 483
- Math 305 or 312
- Math 307 or 401
- Math 360 or 460
- CS 107 or 110 or 210
- Electives under departmental advisement

Minor 30 credits

- Math 124, 125
- Math 481 or 483
- CS 107 or 110 or 210
- Electives under departmental advisement, including no fewer than two courses in mathematics numbered 300 or above.

Combined Major Concentration

See the Chemistry Department section for Mathematics-Chemistry major. See the Physics/Astronomy Department section for the Physics-Mathematics major.

Teaching Competence

Recommendation for teaching competence normally requires completion of the appropriate major with a minimum grade point average of 2.50.

Qualification for teaching competence for junior high (grades 6-9) school level mathematics may be obtained as above, or by completing with a minimum grade point average of 2.50, an augmented minor which includes Math 124, 125, 126 or 205, 241 or 305, 360 or 460, 307 or 401, 483.

BACHELOR OF SCIENCE

Major—Mathematics
69 credits plus Supporting Courses

- Math 124, 125, 126, 224
- Math 205
- CS 210

Mathematics/Computer Science

- Not fewer than 20 credits in approved mathematics or mathematics-computer science courses numbered 400 or above except Math 481, 483, 494, and 495
- Electives under departmental advisement
- Supporting courses: one approved sequence in an area of application. Some acceptable sequences are: Physics 231, 331, 332; Econ 201, 202, 301, 302; Psych 306, 307, 311; CS 310, 311, 312; Chem 121, 122, 123
- Language competency in French, German or Russian is strongly recommended for those students who may go to graduate school
- Four of the courses Math-CS 335, 435, 436, 375, 475, 476
- CS 210, 310, 311
- 21 additional credits in computer science and mathematics as advised
- Supporting courses: at least 12 credits in an area of application. Acceptable sequences are: Acctg 251, 252, 350, 351; Physics 231, 331, 332; Econ 202, BA 375, 376; Chem 121, 122, 123; Geol 211, 212, and one 300 level course; Biol 121, 122, 123; Psych 306, 307, 311

Minor—Mathematics 33 credits

(Not available to computer science majors.)

- Math 124, 125, 126, 224
- Math 205
- CS 107 or 110 or 210
- Electives under departmental advisement

Major—Computer Science 72 credits plus Supporting Courses

- CS 123, 210, 211, 217, 301, 310, 311, 312, 410, 440
- Math-CS 335 and 375
- Math 124, 125, 126, 205
- 12 additional credits in 400 level computer science courses, which may include a maximum of six credits in CS 400 or math-computer science courses and which may not include CS 470 or 471
- At least 12 credits in an area of application. Acceptable sequences are: Acct 251, 252, 350, 351; Physics 231, 331, 332; Econ 202, BA 375, 376; Chem 121, 122, 123; Geol 211, 212, and one 300-level course; Biol 121, 122, 123; Psych 306, 307, 311

Minor—Computer Science 26 credits

(Not available to mathematics majors.)

- CS 210
- CS 211 or 217
- CS 310 or 351 or 353
- Math 124 or 156 or 220
- 10 to 12 additional credits, no fewer than 8 of which must be in upper-division courses in computer science

Major—Mathematics-Computer Science 86 credits plus Supporting Courses

- Math 124, 125, 126, 224; 205, 312, 331; 332 or 430; 401 or 404

Combined Majors

The Mathematics and Computer Science Department cooperates with other departments in offering combined (or double) majors for students wishing to achieve considerable depth in both areas.

Biology-Mathematics: See Biology Department section for details.

Economics-Mathematics: See Economics Department section for details.

Physics-Mathematics: See Physics Department section for details.

Physics-Mathematics Special Honors Concentration: See Physics Department section for details.

Geology-Mathematics: See Geology Department section for details.

Accounting-Computer Science: See Accounting Department section for details.

Business Administration-Computer Science: See Business Administration Department section for details.

DEPARTMENTAL HONORS

Arts and Sciences

In order to graduate with "honors in mathematics," a student must complete Math 331, 401, 402, 404, 423, 424, 425; 18 additional upper-division or graduate credits in mathematics as advised by the Honors Committee, at least 12 credits of which must be at the 400 or 500 level; attain a 3.5 grade average in the courses taken for the above, and a 3.0 grade average in all university courses; complete an Arts and Sciences major in mathematics together with supporting courses; complete two non-departmental Honors colloquia; be recommended by the department Honors Committee and the Honors Board.

In special cases, with the approval of the departmental Honors Committee, the student may elect to write a senior thesis.

Teacher Education

In order to graduate with "honors in mathematics," a student must complete Math 312, 401, 425, two quarters of geometry, and additional upper-division credits in mathematics as advised by the Honors Committee to total 30 credits; attain a 3.5 grade average in the above courses and a 3.0 grade average in all university courses; complete the requirements for a teacher education major in mathematics; complete two non-departmental Honors colloquia; be recommended by the departmental Honors Committee and the Honors Board.

In special cases, with the approval of the departmental Honors Committee, the student may elect to write a senior thesis.

GRADUATE STUDY

For concentrations in mathematics leading to Master of Arts or Master of Science degrees, see the *Graduate Bulletin*.

COURSES IN MATHEMATICS

[Courses in Mathematics-Computer Science and in Computer Science are listed after the listings in Mathematics.]

- 103 ALGEBRA (5)
Prereq: clearance of mathematics proficiency entrance requirement. Intended for students who have had one year of high school mathematics. Polynomials, first and second degree equations and inequalities, graphs, quotients of polynomials, roots and radicals, an introduction to the quadratic formula. Basic computational algebraic skills are emphasized. Students who have a reasonably good knowledge of two and one-half years of high school mathematics should take Math 103 rather than Math 103. Cannot be counted toward majors or minors in mathematics or computer science.
- 104 TRIGONOMETRY (3)
Prereq: Math 103 or two years of high school mathematics; basic computational algebraic skills are a prerequisite. Angles and angle measurement, trigonometric functions, identities, trigonometric equations, inverse trigonometric functions. Student with a reasonably good knowledge of high school trigonometry should not take Math 104. Cannot be counted toward majors or minors in mathematics or computer science.
- 105 COLLEGE ALGEBRA (5)
Prereq: basic algebraic skills comparable to those described under Math 103; students should either have trigonometric skills comparable to those described under Math 104 or else they should register for Math 104 concurrently. Complex numbers; arithmetic and geometric progressions; quadratic equations and the quadratic formula; the binomial theorem; exponential and logarithm functions; introduction to conic sections (circles, parabolas, hyperbolas, and ellipses). Accurate graphing is emphasized throughout the course. Students with four years of high school mathematics are usually well advised to skip Math 105 and go directly to a more advanced course.

- 124 CALCULUS AND ANALYTIC GEOMETRY (5)
Prereq: knowledge of topics listed under Math 104 or 105. Coordinate geometry for the plane, differentiation, rules for computing derivatives, anti-derivatives, and an introduction to the definite integral.
- 125 CALCULUS AND ANALYTIC GEOMETRY (5)
Prereq: Math 124. Application of the definite integral to area, volume, planar motion, etc. Logarithmic and exponential functions. Techniques of integration. Taylor's Theorem, improper integrals and separable differential equations.
- 126 CALCULUS AND ANALYTIC GEOMETRY (5)
Prereq: Math 125. Conic sections, polar coordinates, vectors in two and three dimensions, differentiation of vector-valued functions, optimization in two or three variables.
- 151 INTRODUCTION TO MATHEMATICS (3)
Prereq: clearance of mathematics entrance test. Not open to students with credit in Math 105. Introduction to the methods of thought and logic in mathematics. A cultural approach to mathematics which emphasizes historical aspects of mathematics and the influence of mathematics upon modern society. Students interested in studying a single area of mathematics in detail should consider substituting a course from Math 105, 124, 155, 205, 220, 240, 241.
- 155 ALGEBRA WITH APPLICATIONS TO ECONOMICS AND BUSINESS (4)
Prereq: Math 103 or qualifying examination (to be given on the first day of class). Systems of linear equations and systems of linear inequalities; matrix notation for linear systems; logarithms; geometric series, and mathematics of finance.
- 156 CALCULUS AND PROBABILITY WITH APPLICATIONS TO ECONOMICS AND BUSINESS (5)
Prereq: Math 155. Differential calculus, including the chain, product, and quotient rules and derivatives of exponential and logarithmic functions; anti-derivatives and the area beneath a curve; elementary probability including conditional probability, Bayes theorem, probability laws, density functions, normal distributions, the normal probability table, mean, and standard deviation.
- 205 VECTORS AND MATRIX ALGEBRA (4)
Prereq: one course from Math 124 or 156 or 220. Matrices, determinants, matrix algebra, linear equations, linear transformations, characteristic roots and characteristic vectors, orthogonality.
- 220 SURVEY OF CALCULUS (5)
Prereq: Math 103 or equivalent. This course is intended to introduce students to the basic notions and computational techniques of calculus for a limited range of functions. Students who complete the course will find they understand many articles or lectures in which calculus is used, but they will not have sufficient knowledge to use calculus in unfamiliar situations as a problem-solving tool in their disciplines. Those who wish to use calculus actively should consider the sequence Math 124, 125, 126.
- 224 MULTIVARIATE CALCULUS (5)
Prereq: Math 126. Vector functions and their derivatives, partial differentiation, multiple integration, vector fields, infinite sequences and series.
- 240 INTRODUCTION TO STATISTICS (3)
Prereq: Math 103 or equivalent. This course deals with the nature of statistical reasoning, descriptive statistics, ideas of probability and measurement, sampling distributions, the binomial and normal distributions, confidence intervals, and the testing of statistical hypotheses.
- 241 INTRODUCTION TO PROBABILITY (3)
Prereq: Math 105. Introduction to probability with applications.

- 256 STATISTICS AND COMPUTER PROGRAMMING WITH APPLICATIONS TO ECONOMICS AND BUSINESS (5)
 Prereq: Math 156. An elementary programming language such as BASIC is introduced and used in solving problems in statistics. The topics in statistics include ratios and frequency distributions, measures of dispersion, various probability distributions, decision making, statistical inference, and hypothesis testing.
- 281 THEORY OF ARITHMETIC (4)
 Prereq: Math 103 or successful completion of an entrance test based on the material in Math 103; not open to students with credit in Math 205 or 307. Systems of numeration, sets, relations and number systems, and integration of these concepts.
- 300 DIRECTED INDEPENDENT STUDY (1-6)
 Conference Course Permit required from instructor before registering.
- 305 NUMBER THEORY (4)
 Prereq: Math 205 or 125. The properties of integers, Euclid's algorithm, Diophantine equations, congruences, continued fractions and residues.
- 307 THE ALGEBRAIC FOUNDATION OF MATHEMATICS (4)
 Prereq: Math 125. Not open to students with credit in Math 401. Algebraic systems; the concepts of order and completeness; the natural numbers and construction of rational and real numbers.
- 312 MAPPINGS AND CONTINUITY (4)
 Prereq: Math 126 and one of 205 or 305. Open and closed sets in the line and plane; sequences; definitions and elementary properties of continuous functions, Bolzano-Weierstrass theorem and applications. The student is expected to develop some competence in proving basic theorems.
- 331, 332 ORDINARY DIFFERENTIAL EQUATIONS (4 ea)
 Prereq: Math 126; students should also have (or take concurrently) Math 205. 331 is prerequisite to 332. An introductory course in ordinary differential equations and applications, including topics selected from first order differential equations and systems, higher order differential equations, series and numerical solutions, Laplace transforms, special functions, Fourier series, Sturm-Liouville theory, comparison theorems, stability theory, and applications of these concepts to scientific problems.
- 341, 342 STATISTICAL METHODS (4 ea)
 Prereq: Math 105, 241, Computer Science 110 or 210; 341 prerequisite to 342. Elementary course in statistical methodology with emphasis on point estimates and confidence interval estimation, hypothesis testing, and analysis of variance.
- 360 EUCLIDEAN AND NON-EUCLIDEAN GEOMETRY (3)
 Prereq: Math 205 or 125. Metric development of Euclidean geometry and consideration of non-Euclidean geometries.
- 400 DIRECTED INDEPENDENT STUDY (1-6)
 Conference Course Permit required from instructor before registering.
- 401, 402 INTRODUCTION TO ABSTRACT ALGEBRA I, II (4 ea)
 Prereq: Math 205, plus junior standing. Math 401 prerequisite to 402. Vector spaces, linear transformations, matrices and determinants, introduction to algebraic structure, groups, rings, integral domains, fields and field extensions.
- 404 LINEAR ALGEBRA (4)
 Prereq: Math 205, plus junior standing. Vector spaces, subspaces, linear independence, span, bases, dimension, linear transformations, the matrix of a linear transformation with respect to two given bases, rank and nullity of linear transformations, systems of linear equations, determinants, Cramer's rule, inner products, the transpose of a linear transformation, characteristic polynomials, eigenvalues, eigenvectors, reduction of a symmetric linear transformation to diagonal form by means of an orthogonal change of basis.
- 412 METRIC TOPOLOGY (4)
 Prereq: Math 312. Metric spaces and metric topology; product metrics; uniform equivalence and homeomorphism; compactness and other topological properties. Offered in alternate years. To be offered in 1979-80.
- 417 SPECIAL TOPICS
 417a Topics in Algebra (4)
 417b Topics in Analysis (4)
 417c Topics in Geometry (4)
 417d Topics in Topology (4)
- 423 ADVANCED CALCULUS (4)
 Prereq: Math 224 and 312. This course treats in detail topics of advanced calculus that are of basic importance in many applications, both scientific and theoretical, of the calculus. These topics include uniform convergence, the Riemann integral, properties of continuous functions, and the theory of the derivative. Normally offered fall quarter.
- 424, 425 MATHEMATICAL ANALYSIS (4 ea)
 Prereq: Math 423 and Math 205; Math 424 prerequisite to 425. This course uses advanced calculus to study subjects arising from modern science. Topics vary but have included in different years advanced ordinary differential equations (stability theory and its applications) and the partial differential equations of mathematical physics. Normally offered winter and spring quarters.
- 430 FOURIER SERIES AND PARTIAL DIFFERENTIAL EQUATIONS (4)
 Prereq: Math 331 and 224. Math 430 is an introduction to the Fourier method for solving boundary value problems arising in physics and engineering. Fourier series, the wave equation, the heat equation, the Fourier transform, and related topics.
- 431 INTRODUCTION TO COMPLEX VARIABLES (4)
 Prereq: Math 331 or 423. Differentiation and integration of complex-valued functions; Cauchy integral theorem; calculations of residues.
- 441, 442, 443 MATHEMATICAL STATISTICS (4 ea)
 next. Probability theory; development of distributions; generating functions; averages, moments, regression, correlating functions; averages, moments, regression, correlation, variance, and statistical inference.
- 460 MODERN GEOMETRY (4)
 Prereq: Math 205. General geometric structures, topics from affine and projective geometries. Offered in alternate years. To be offered in 1980-81.
- 461 MODERN GEOMETRY (4)
 Prereq: Math 401. Bi linear functions, orthogonal groups, general symmetries. Offered in alternate years. To be offered in 1980-81.
- 481 MATHEMATICS IN GRADES 1 THROUGH 8 (4)
 Prereq: Math 281. The teaching of mathematics in terms of objectives and methods of presentation.
- 483 MATHEMATICS IN THE SECONDARY SCHOOL (3)
 Prereq: upper-division courses in algebra and geometry. Mathematics content of advanced high school courses from the teacher's viewpoint; the major experimental programs.

- 494 EXPERIENCES IN THE MATHEMATICS LABORATORY (3)
 Prereq: one year of teaching experience and currently teaching mathematics. Each participant develops materials and experiences for use in the mathematics laboratory approach in his own teaching.
- 495a DEVELOPING THE MATHEMATICAL LABORATORY ENVIRONMENT: PRIMARY (4)
 Prereq: one year of teaching experience. Techniques for preparing and implementing the laboratory approach in elementary school mathematics programs at the primary level.
- 495b DEVELOPING THE MATHEMATICAL LABORATORY ENVIRONMENT: INTERMEDIATE (4)
 Prereq: one year of teaching experience. Techniques for preparing and implementing the laboratory approach in elementary school mathematics programs at the intermediate level.
- 495c DEVELOPING THE MATHEMATICS LABORATORY ENVIRONMENT: JR-SR HIGH LOW ACHIEVERS (4)
 Prereq: one year of teaching experience. Techniques for preparing and implementing the laboratory approach for junior and senior high low achievers in mathematics.

GRADUATE COURSES

The following courses are offered for graduate credit for persons enrolled in the department's graduate program. For course descriptions and other information about the graduate program, see the current Graduate Catalog.

- 500 SPECIAL PROJECTS (1-6)
 Individual conference.
- 501 ADVANCED ABSTRACT ALGEBRA (3)
- 504 COMBINATORICS (3)
- 517 TOPOLOGY (3)
- 519 ALGEBRAIC TOPOLOGY (3)
- 520 LEBESGUE MEASURE AND INTEGRATION (3)
- 521 HILBERT SPACE THEORY AND APPLICATIONS (3)
- 522 FOURIER-LAPLACE TRANSFORM AND APPLICATIONS (3)
- 530 COMPLEX VARIABLES (3)
- 541 PROBABILITY (3)
- 545 STOCHASTIC PROCESSES (3)
- 564 GRAPH THEORY (3)
- 570 OPTIMIZATION (3)
- 590 SEMINAR ON SPECIAL METHODS IN MATHEMATICS EDUCATION (1)
- 599 MATHEMATICS SEMINAR (1-3)
- 690 THESIS (variable credit)
- 699 MATHEMATICS SEMINAR (1-3)

COURSES IN MATHEMATICS - COMPUTER SCIENCE

The courses listed below require background in both mathematics and computer science. The problems attacked in these courses cannot be solved without fruitful wedding of knowledge from both areas.

- 335 LINEAR PROGRAMMING (4)
 Prereq: Math 205 and CS 210. Linear and quadratic programming; applications to game theory and to allocation and transportation problems.
- 375 NUMERICAL METHODS (4)
 Prereq: CS 210 or 211; Math 126. Elementary discussion of error, solution of non-linear algebraic equations, polynomial interpolation, least squares approximation, numerical quadrature, and numerical differentiation.
- 435 OPERATIONS RESEARCH I (4)
 Prereq: Math 126 and Math-CS 335. Non-linear programming with emphasis on basic theory (including Lagrange multipliers and the Kuhn-Tucker conditions), algorithms for numerical solution of problems, and applications. Introductory dynamic programming, with emphasis on applications and algorithms.
- 436 OPERATIONS RESEARCH II (4)
 Prereq: Math-CS 435 and some knowledge of probability theory (for example, Math 241 or Math 341 or Math 441). Linear, non-linear and dynamic programming problems in which statistical considerations form an essential part of the problem.
- 475, 476 NUMERICAL ANALYSIS (4 ea)
 Prereq: Math-CS 375; Math 205, Math 331. 475 prerequisite to 476. Numerical solution of ordinary differential equations, solution of systems of linear equations, calculation of eigenvalues and eigenvectors, numerical solution of partial differential equations.

COURSES IN COMPUTER SCIENCE*

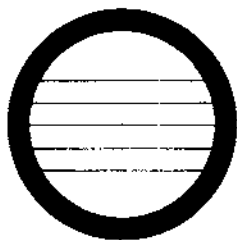
- 107 PROGRAMMING IN BASIC (3)
 Prereq: Math 103 or equivalent. An introduction to computer programming and problem solving using the computer language BASIC. This course is intended primarily for students who wish to use BASIC in applications to social and physical science. Students who may wish to major or minor in mathematics or computer science should usually begin with CS 210 (or perhaps with CS 110 if so advised) rather than with CS 107.
- 110 INTRODUCTION TO PROGRAMMING (4)
 Prereq: Math 103 or equivalent. Basic concepts of computer programming. Design and construction of computer programs to solve problems. Emphasis on application, including data manipulation and use of prepared programs. Not open to students who have credit in CS 210. Persons who intend to take upper-division Computer Science courses should take CS 210.
- 123 ALGOL (1)
 Prereq: CS 110 or 210. Programming using the ALGOL language. Satisfactory/Unsatisfactory grading.
- 124 FORTRAN (1)
 Prereq: SC 110 or 210. Programming using the FORTRAN language. Satisfactory/Unsatisfactory grading.
- 210 PROGRAMMING I (4)
 Prereq: Math 124 or 220 or 156. Intended as an introduction for students who plan to take upper-division courses in computer science. Design and implementation of algorithms. Includes overview of machine level programming and operating systems. Emphasis on good programming practices which are transferable between programming languages.

*The facilities of the Computer Center, including an IBM 360/50 with large scale disk capacity and tele-communications capability, are available to qualified students free of charge for instruction in computer techniques, for research, and for general education in computer applications. Computer Science 107 or 110 or 210 provides basic instruction in the use of the computer.

Mathematics/Computer Science

- 211 **PROGRAMMING II (4)**
Prereq: CS 210. Design and implementation of large programs. Emphasis on programming techniques which contribute to efficiency, legibility, generality, and correctness of programs.
- 217 **COBOL (3)**
Prereq: CS 210. COBOL programming with emphasis on business applications using auxiliary storage.
- 300 **DIRECTED INDEPENDENT STUDY (1-6)**
Conference Course Permit required from instructor before registering.
- 301 **INTRODUCTION TO DISCRETE STRUCTURES (4)**
Prereq: CS 110 or 210. Basic algebraic structures; Boolean algebra and propositional logic; elementary graph theory; applications to computer science.
- 310, 311, 312 **COMPUTERS AND ASSEMBLER LANGUAGE PROGRAMMING (3 ea)**
Prereq: CS 110 or 210; to be taken in sequence. Computer structure and system organization. Machine language, instruction execution, addressing techniques and digital representation of data; structure of assemblers; program segmentation and linkage; input/output and interrupts; operating system services; laboratory computer experience.
- 350 **DATABASE MANAGEMENT (3)**
Prereq: CS 211 or 217. A theoretical introduction in which students are not required to write computer programs. (See CS 351.) Basic concepts, storage structures, data description and management languages, techniques of organization and access, security and integrity of databases. The course includes case studies and case problems.
- 351 **APPLIED DATABASE MANAGEMENT (2)**
Prereq: CS 211 or CS 217; the student must register for CS 350 concurrently. Computer programming for problems in database management.
- 352 **BUSINESS COMPUTER SYSTEMS (3)**
Prereq: CS 211 or 217. Management information systems, components of a business computer system, controls and feedback, analysis of business data; applications in general accounting, inventory, sales and ordering. (See CS 353.)
- 353 **BUSINESS COMPUTER SYSTEMS PROJECT (2)**
Prereq: SC 217 and concurrent reegistration in CS 352. Programming for business computing; maintenance and modification of an existing system and the coding of a module in a new system.
- 391 **INTRODUCTION TO CAI PROGRAMMING (5)**
Prereq: one year of teaching experience. The rudiments of Computer-Assisted Instruction (CAI) programming including the two languages BASIC and PILOT; also the editing of CAI materials by making alterations to existing programs. Over half of the terminal time will be devoted to production of, and testing of, instructional computer programs in the student's field of interest. (Normally offered summers only.)
- 400 **DIRECTED INDEPENDENT STUDY (1-6)**
Conference Course Permit required from instructor before registering.
- 401 **INTRODUCTION TO AUTOMATA THEORY (4)**
Prereq: CS 301. Finite- and infinite-state machines, recursive functions, effective computability, the halting problem and other unsolvable problems.
- 405 **DESIGN AND ANALYSIS OF ALGORITHMS (4)**
Prereq: CS 211 and 301. Design of efficient algorithms, examples of efficient algorithms. Computational models and measures of complexity. Correctness proofs for algorithms. Examples of problems for which no "good" algorithms can exist.
- 410 **PROGRAMMING LANGUAGES (4)**
Prereq: CS 123, 211, 217 and 311. Introduction to the structure of programming languages; syntax and semantics; properties of algorithmic languages; special purpose languages.
- 417 **SEMINAR IN SPECIAL TOPICS (4)**
- 420 **COMPUTER ORGANIZATION (4)**
Prereq: CS 211, 301 and 311. Basic digital circuits, Boolean algebra and combinatorial logic, digital arithmetic; input-output facilities, system organization, reliability; features for multiprogramming, multiprocessing, and real-time systems; alternate organizations.
- 439 **COMPUTER MODELING AND SIMULATION (4)**
Prereq: a college-level course in statistics; a college-level course in calculus; CS 110 or 210; and any one of BA 302, 403, Geog 430, Hux 435, Pol Sci 427, Psych 307, Soc 421, or 15 upper-division credits in mathematics and/or computer science. Basic concepts of dynamic modelling and system simulation, design and methodology of simulation models, model validation, simulation languages, application to decision making.
- 440 **DATA STRUCTURES (4)**
Prereq: CS 211, 301, and 311. Basic concepts of data; storage management and operations on structures; searching and sorting; data structures in programming languages.
- 450 **COMPILER DESIGN AND IMPLEMENTATION (4)**
Prereq: CS 440; 410 may be taken concurrently. Lexical and syntactical analysis; code generation and optimization; implementation of compilers and interpreters.
- 460 **OPERATING SYSTEMS (4)**
Prereq: SC 420, 440. Batch processing; multi-programming and multi-processing; time-sharing; input-output; storage allocations; file system design and management.
- 470 **COMPUTERWARE AND INSTALLATION MANAGEMENT (3)**
Prereq: CS 350 or 352. Selection of computer and communications hardware within technical and financial constraints. Evaluation of both hardware and software. Management of a computer installation. Visits to computer installations. Computerware selection project.
- 471 **SYSTEMS ANALYSIS, DESIGN, AND IMPLEMENTATION (3)**
Prereq: CS 350 and CS 352. Steps in analysis and design, planning tools, cost analysis, implementation analysis and post-implementation analysis, long-range systems planning. No programming assignments.
- 496 **SEMINAR (1)**
Prereq: one 400-level computer science or mathematics-computer science course. Survey of field applications. Field trips, investigation of hardware and software products including mini- and micro-computers and their applications.





MUSIC

College of Fine and Performing Arts

At Western we believe music is doing — performing, composing, searching for new insights and sharing the joy of the art with others. An education in music is the result of interaction among students and between students and faculty actively pursuing musical endeavors.

Here at Western Washington University we believe in the personalization of music education and the need for ongoing counseling for all music majors. The University takes pride in the quality of its instruction and the fact that Western offers a *balanced* program in choral, instrumental, private instruction and academic music aimed toward professional competency in teaching, performance, composition, music history/literature and jazz studies.

Explorations in early, traditional, contemporary, avant-garde, jazz and electronic music

exist in the various course activities and degree plans with the emphasis always on dealing directly with the art through performance, composition and analysis.

Five undergraduate professional degree programs are offered by the Department of Music: The B.Mus. with majors in music performance, music history and literature, music composition and jazz is offered for those who wish to continue advanced musical study in graduate school, enter private studio teaching or launch a professional career in music. The B.Mus. in Music Education with majors in choral music, instrumental music or elementary classroom music is offered for those who plan to teach in the public schools. State certification to teach is received concurrently with the granting of the degree.

Job placement in public school music teach-

Music

ing has remained excellent at Western in spite of the general overall decline in the availability of teaching positions. While most other professional degree holders continue in graduate programs, those who do not usually secure positions in studio teaching, church music, professional performance, and allied fields such as radio, television and the music industry.

The Music Department provides individual advisement and program planning for all music majors. This takes place officially during the registration period at the beginning of each academic quarter. We also provide individual advisement at any time prior to entrance by appointment. Many students prefer to spend a day on campus in the spring prior to transfer at which time they may receive advisement and visit the various departmental performance groups and classes and meet with instructors. Write or phone for an appointment if interested.

Many music courses and activities are open to majors and non-majors. Students may select from among University Choir, Concert Choir, Chamber Choirs, Symphonic Band, Wind Ensemble, Jazz Workshop, Jazz Ensembles, University Symphony Orchestra, Chamber Music, Opera, and Collegium Musicum.

MUSIC FACULTY

- ALBERT C. SHAW (1978) Chairman. Professor. BME, Wheaton College; MME, Drake University; DME, Indiana University.
- AMERICOLE BIASINI (1970) Associate Professor. BS, MS, New York State University.
- WILLIAM D. COLE (1970) Professor. BS, University of Illinois; MA, University of Washington.
- BARTON FRANK (1969) Professor. Curtis Institute of Music; BM, MM, Tulsa University.
- CHARMIAN GADD (1977) Associate Professor. Teacher's and Performer's Diploma, New South Wales Conservatorium, Sydney, Australia.
- JEROME GLASS (1955) Associate Professor. BS, New York University; MMus, University of Southern California.
- FORD D. HILL (1975) Associate Professor. AB, Wisconsin State University; MA, Indiana University.
- EDWIN M. LABOUNTY (1968) Associate Professor. AB, Yankton College; BM, MM, MusD, Indiana University.
- C. BRUCE PULLAN (1975) Associate Professor. BA, MA, Cambridge; Diploma of Ed, Oxford.
- SCOTT D. REEVES (1976) Lecturer. BM, Indiana University.
- CARLA S. RUTCHMAN (1975) Assistant Professor. BA, University of Northern Colorado; MM, Arizona State University; PhD, University of Washington.
- ROBERT L. SCANDRETT (1967) Associate Professor. BA, Seattle Pacific College; MA, PhD, University of Washington.
- DAVID B. SCHAUB (1953) Professor. BA, MusB, Lawrence College; MA, Harvard University; PhD, University of California, Berkeley.

PAUL H. STONER (1961) Associate Professor. BM, University of Kansas; MA, University of Iowa; DMA, University of Southern California.

MARY TEREY-SMITH (1967) Associate Professor. BA, Liszt Academy of Music, Budapest; MA, University of Vermont; PhD, University of Rochester.

EUGENE S. ZORO (1969) Associate Professor. BM, MM, Eastman School of Music of the University of Rochester.

ADJUNCT FACULTY

Richard Goldner

Edward Rutschman

AFFILIATE MUSIC FACULTY

Byron Akita, woodwinds

Dana Bricht, flute

Nicholas Bussard, oboe

Chuck Deardorf, electric bass

Susan Erickson, voice

David Forbes, horn

Bruce Grainger, bassoon

Phyllis McFall, flute

George Oram, trumpet

Tom Patterson, classical guitar

H. Dennis Smith, trombone

Nancy Bussard, professional accompanist

Lucille Oster, professional accompanist

MUSIC PERFORMANCE

All students majoring in music must be members of a major performing group each quarter of residence except those quarters in which music education majors are enrolled in student teaching. Those groups designated as major performing groups are the Symphonic Band, Wind Ensemble, University Choir, Concert Choir and Symphony Orchestra. The participation requirement must be met through the student's major instrument or voice. Pianists, organists and guitarists may elect to participate in any of the major performing groups for which they are qualified. Pianists majoring in music performance may, under advisement, substitute up to 12 credits in chamber music for this requirement. Jazz majors may substitute up to 12 credits in chamber jazz ensembles under advisement. Performance groups may be repeated for credit.

APPLIED PERFORMANCE PROFICIENCY

All entering students in applied instrumental or vocal private study will be expected to demonstrate their proficiency before a faculty committee to assist in their proper placement in the program. This placement audition will be arranged for all incoming students during the first week of the quarter in which the student enters the program. Freshmen and transfer students with marginal qualifications may be placed on probation at the beginning of their first quarter of study and will be re-examined at the end of the quarter. A student who fails to have proba-

tionary status removed at the end of two consecutive quarters may be denied continued applied instruction. All applied private music study is included in the student's regular fees. Applied music may be repeated for credit.

Minimum applied performance proficiency levels required for entrance to private applied music study are as follows:

PIANO — Classic, Romantic and contemporary literature of the difficulty of Bach, "Short Preludes" and "Inventions." Clementi, Haydn, Mozart, and Beethoven "Sonatinas"; Bartok, "Mikrokosmos," Books 3 and 4. Major and harmonic minor scales, hands together four octaves. It is expected that three pieces be prepared from different style periods and that at least one be played from memory. Sight reading will also be a part of the audition.

VOICE — Two songs of contrasting styles demonstrating potential beauty and body of tone, innate sensitivity to pitch and rhythm.

ORGAN — Ability to play, at the piano, a Bach "Chorale" and a Bach "Two-Part Invention."

VIOLIN — Mazas, "Special Studies," opus 36, Book 1, edited by Hermann or Saenger; Handel, Corelli, Vivaldi or other sonatas. Solo pieces through five positions; scales two octaves (major and melodic minor).

VIOLA — Handel, Purcell or other sonatas; Telemann Concerto in G major or Vivaldi Concerto in E minor. Scales two octaves (major and melodic minor).

VIOLONCELLO — Completion of the Lee, "Method" Book 1 or Dotzauer "Studies" Book 1 or Grutzmacher "Studies" Book 1; short pieces or a sonata of the difficulty of Vivaldi or Marcello. Scales through the fourth position.

GITAR — One piece from the classical guitar repertoire of the applicant's choice and one study from the collection "Twenty Etudes" by Fernando Sor, edited by Andres Segovia.

DOUBLE BASS — Simandl, "New Methods for the Double Bass," Book 1. Scales through half, first and second positions.

FLUTE — Any Handel sonata (except the E minor Sonata) [select at least one sonata]. Any etude from Anderson Etude Method, opus 41 [select any two of the 18 studies]. Major and minor scales and arpeggios through four sharps and four flats (two octaves when possible).

OBOE — Handel Sonata No. 1; Bach "Cavotte in D Major"; Grieg "Solweig's Song" [select any two]. Major and minor scales and arpeggios through four sharps and four flats (two octaves when possible).

CLARINET — Any two etudes from "Thirty-two Etudes for Clarinet" by C. Rose, or from "Preliminary Studies for the Accomplished Clarinetist," Vol. I, by R. Jettel. One solo work comparable in difficulty to the Weber "Concertino" or Hindemith "Sonata." Major and minor scales and arpeggios through four sharps and four flats (two octaves when possible).

BASSOON — Three or four selected studies from the Weissenborn Complete Method. Any two studies from the Weissenborn Advanced studies. Mozart "Concerto in Bb" (second and third movements), or Galliard "Sonatas I and VI," or Phillips "Concert-piece" or Telemann "Sonata in F Minor," or J. C. Bach "Concerto in Bb." Major and minor scales and arpeggios through four sharps and four flats (two octaves when possible).

FRENCH HORN — Two or three etudes selected from "Method for French Horn" by Pottag, edited by Hovey. Mozart "Concerto No. 3" or Saint-Saens "Romance." Major and minor scales and arpeggios through four sharps and four flats (two octaves when possible).

TRUMPET — Any characteristic study from Arban Complete Method. Haydn "Concerto" (first and second movements), or Vidal "Concertino" or Thome "Fantasy in Eb" or Corelli "Sonat VIII," edited by Fitzgerald. Major and minor scales through four sharps and four flats (two octaves when possible).

TROMBONE (TENOR AND BASS TROMBONE) AND EUPHONIUM — Two or three studies from "Melodious Etudes" by Rochut, Book I (bass trombone should play one octave lower where feasible). Studies one through ten of the Blashevich Flef Studies. Five selected studies from the Arban Method, Book I. Major and minor scales and arpeggios through four sharps and four flats (two octaves when possible).

TUBA — Any two of the first four solos in "Solos for the Tuba Player" by Wechselblatt. First ten studies from the "Studies for BBb Tuba" by Tyrell. Major and minor scales through four sharps and four flats (two octaves when possible).

PERCUSSION — On entering, percussion students should have considerable prior training in at least one of the following five

Music

categories, and some experience and ability on the remainder: timpani; snare drum; mallet instruments; bass drum; cymbals, and miscellaneous percussion; and drum set. *For Timpani:* tuning, stick technique, pedaling, intonation, tone production, roll and attack. *For Snare Drum:* all rudiments, rhythm studies, stick technique (both matched and traditional grip), control and bounce. *For Mallet Instruments:* tone production, mallet technique, scales and arpeggi in all major and minor keys, and experience on xylophone, marimba, vibraphone, chimes, etc. *For Bass Drum, Cymbals, and Miscellaneous Percussion:* experience and technique on all. *For Drum Set:* basic rhythms in all styles and traditional and Latin American patterns. In any category a minimum of two prepared pieces (one to be memorized) and demonstrated ability on selected sight-reading, is necessary for entrance to program of studies. Prior experience on piano is encouraged.

SAXOPHONE — Two or three studies from "Twenty-five Exercises for Saxophone" by Klose. Solos selected from "Cantilena" by Benson, "Chant Corse" by Tomasi, or "Concerto" by Larsen. Major and minor scales through four sharps and four flats (two octaves when possible).

JAZZ GUITAR — Two or three standard jazz compositions (such as "Tune-Up," "Here's That Rainy Day," and "Straight No Chaser") with melody, chords and improvised solo. Major, dorian and mixolydian scales in all keys. Ability to sight-read sequences of major-seventh, minor-seventh and dominant-seventh chords in all inversions. Ability to sight-read jazz melodies.

ELECTRIC BASS — Two or three standard jazz compositions (such as, "Tune-Up," "Footprints" and "Freedom Jazz Dance") with melody, improvised solo and appropriate bass lines. Major, dorian and mixolydian scales in all keys. Ability to improvise a bass line in different styles (Swing, Be-bop, Latin, Funk) from a given sequence of chords. Major-seventh, minor-seventh and dominant-seventh arpeggios in all keys. Ability to sight-read jazz melodies and chord symbols.

THEORY AND MUSIC HISTORY PLACEMENT EXAMINATION — TRANSFERS

All students transferring to Western with less than two years of college theory will be assigned to the theory course that succeeds the last course taken. (Students may repeat theory courses previously taken elsewhere.) All students transferring to Western who have completed two years of college theory will write prior to enrollment a Theory Placement

Examination; this examination may be written at Western or it may be written and examined at any college or community college (administered by professors at that college) prior to transferring to Western upon individual request. This examination is an evaluative instrument; the results of this examination are advisory only. All credit received in theory previously at other institutions will be transferred at the level for which it was earned and may apply toward fulfillment of the requirements for the major in music or in music education.

The Music History Placement Examination is no longer administered as an entering transfer requirement. Transfer students will be expected to meet the junior-level music history requirement as stated in the catalog. Music history courses numbered at the 100 and 200 level will not be accepted in lieu of the requirement. Students may challenge any of the required music history courses (341, 342, 343, 344) through the institutional course challenge procedure.

PIANO COMPETENCY

All music majors are required to pass a functional keyboard proficiency examination in order to complete this program. Students who enter as freshmen should take it by the end of their sophomore year. Transfer students should take the examination during their first quarter at Western; they must take it before completing their first full year at this University.

SCHOLARSHIPS

In addition to general university scholarships, several awards are available from off-campus music organizations. For further information, consult the Music Department.

PROGRAM ADVISEMENT

All undergraduate music majors are assigned to the departmental undergraduate program adviser for scheduling and program approval. Minor approval is secured from this adviser.

BACHELOR OF MUSIC

Professional Programs 108 credits

Basic Core (required for all concentrations)
72 credits

- Musicianship: Music 131, 132, 133, 231, 232, 233
- Music History/Literature: Music 342, 343; Music 341 or 344

- Conducting: Music 307; Music 308 or 309
- Area Concentrations: Performance, Composition, Music History/Literature or Jazz (see area concentration requirements)
- Chamber Music: 6 credits to be selected under advisement from Music 425, 426, 427, 434, and 440
- Major performing group (pianists may substitute up to 12 credits in master classes / pedagogy / accompanying / chamber music under advisement)

Area Concentration—Performance 36 credits

- Entrance by performance audition — student must expect to achieve upper-division applied instruction by sophomore year
- Applied Music: on major instrument or voice, 30 credits, minimum of 3 credits in courses numbered 411-416
- Pedagogy/master classes (under advisement), 6 credits
- Successful completion of junior and senior recitals

Area Concentration—Composition 36 credits

- Entrance by compositional accomplishment and interview — student must qualify for upper-division composition courses by junior year
- Courses in composition, 20 credits
- Applied music on major instrument or voice, 10 credits, minimum of 3 credits in courses numbered 311-318 or above
- Music 331, 333, 6 credits
- Successful completion of a senior recital of original compositions

Area Concentration—Music History/Literature 36 credits

- Entrance by interview and distinguished accomplishment in musicianship
- Music 331, 332, 333, 9 credits
- Applied music on major instrument or voice, 12 credits, minimum of 3 credits in courses numbered 311-318 or above
- Music 444, 3 credits
- Music 446 or 443, 9 credits
- Music 490, 3 credits

Area Concentration—Jazz 36 credits

- Entrance by performance audition to include: all major, dorian and mixolydian scales; all major seventh, minor seventh, and dominant seventh arpeggios; sight reading and improvisation

- Music 250, 3 credits
- Jazz Improvisation: Music 328, 329, 330, 6 credits
- Jazz Arranging: Music 428, 430, 436, 9 credits
- Applied music on major instrument or voice, 11 credits, minimum of 3 credits in courses numbered 311-318 or above
- Jazz Ensembles: Music 229, 425, 429, 8 credits
- Successful completion of jazz recital demonstrating mastery in improvisation and writing/arranging

Jazz majors who play piano, guitar or electric bass may substitute up to 12 credits in jazz ensembles (Music 229, 425, 429) for the major performing group requirement. Jazz majors who play instruments other than those listed above may substitute up to 12 credits in jazz ensembles "under strict advisement." Jazz majors may meet the chamber music requirement in Chamber Jazz Ensemble (Music 425).

Minor 28 credits

- Musicianship: Music 131, 132, 133, 231, 232
- Music History/Literature: one from Music 341, 342, 343, 344
- Applied Music: major performing instrument or voice, four quarters in courses numbered 211-218 or above — students will be expected to participate in a major performing group during each quarter of applied lessons

**BACHELOR OF MUSIC
IN MUSIC EDUCATION**

Major 91 credits

This Specialist in Music Education concentration satisfies requirements for both a major and a minor.

- Musicianship: Music 131, 132, 133, 231, 232, 233
- Music History/Literature: Music 342, 343; Music 341 or 344
- Conducting: Music 307; Music 308 or 309
- Applied Music: on major instrument or voice each quarter in residence except quarters student teaching — minimum of three credits in courses numbered 311-318 or above
- Music 351 and 451 (elementary emphasis) or Music 462 and 463 (secondary emphasis)

Music

- Pedagogy for instrumental specialists: Music 105, 106, 301, 302, six quarters of Music 209. Pedagogy for choral and elementary specialists: Music 105, 106, 301, two quarters of 209. Vocal majors do not take Music 105, 106 and must add two credits to their music electives (see below)
- Music electives (under advisement): choral and elementary specialists are required to select five additional music credits except that those who are vocal majors must select seven additional music credits (see Pedagogy above)
- Major performing group
- Successful completion of student teaching in music

BACHELOR OF ARTS IN EDUCATION

Major Elementary
47 credits plus Performance Requirement

- Musicianship: Music 131, 132, 133, 231, 232
- Music History/Literature: Music 342, 343; 341 or 344
- Education: Music 351, 451
- Methods: Music 105, 106, 107. Those with voice as major instrument, replace Music 105, 106, 107 with equal credits in music electives under advisement
- Applied Music: major performing instrument or voice, minimum 6 quarters, with a minimum of 3 credits numbered 311-318 or above
- Major performing group as stated above for all majors
- Music 233 recommended as an elective as it is prerequisite to graduate study

Minor 28 credits

- Musicianship: Music 131, 132, 133, 231, 232
- Music History/Literature: one from Music 341, 342, 343, 344
- Methods: Music 105
- Applied Music: major performing instrument or voice. Three quarters in courses numbered 211-218 or above — students will be expected to participate in a major performing group during each quarter of applied lessons

Teaching Competence

Recommendation for teaching competence in music normally requires completion of the major with a grade average of 2.5 or better and departmental approval.

Supervised Teaching

Students enrolling in the 74 credit major will complete a 16 credit supervised teaching assignment in secondary or elementary music; those enrolling in the 47 credit elementary major will complete supervised teaching in elementary music and in a general elementary assignment.

GRADUATE STUDY

For concentrations in music leading to the Master of Music and Master of Education degrees, see the *Graduate Bulletin*.

It is possible to take an Interdisciplinary Arts major with a concentration in music. See "Arts, Interdisciplinary" in the Interdepartmental Programs section of this catalog for full details of the major.

COURSES IN MUSIC

101, 102, 103 BEGINNING CLASS PIANO (1 ea)

Each course prerequisite to the next. Basic techniques, sight reading skills and functional application of the scale and harmonic materials learned in theory class.

105 CLASS VOICE AND PEDAGOGY (1)

Prereq: open to music majors and minors only; each course prerequisite to the next. Tone production, song repertoire interpretation and pedagogy for non-voice majors.

106/107 CLASS VOICE AND SIGHTSINGING (1 ea)

Prereq: open to music majors and minors only; each course prerequisite to the next. Continuing emphasis on content of Music 105 with additional emphasis on sight singing.

128 INTRODUCTION TO MUSIC THEORY AND NOTATION (3)

(Open to non-majors). Basic components of music notation: major and minor scales, intervals, triads and keys.

129 INTRODUCTION TO MUSIC THEORY AND EAR-TRAINING (3)

Prereq: Music 128. Continuation of Music 128 with added emphasis upon ear-training and writing skills.

130 INTRODUCTION TO MUSICIANSHIP (3)

Prereq: Music 129. Continuation of Music 129 with expansion of harmonic vocabulary and emphasis upon practical applications.

131, 132, 133 MUSICIANSHIP I (4 ea)

Each course prerequisite to the next. Sound sources and the nature of sound. Writing skills and use of the musical symbol: notation. Basic vocabulary of music. Formal, stylistic and historical concepts and principles from music literature: evolution of concepts, techniques and processes. The scale and melody, harmony, counterpoint; the score and the concepts of mensuration and instrumentation; the emergence of modality-tonality and resultant 20th century practices. Performance skills; rhythmic, melodic and harmonic drill, invention and dictation, keyboard skills, score reading and score construction; the impact of modern technology and cultural forces on expanding uses of non-traditional techniques, sound-sources and formal organization. Implementation through organic combination of three major activities: performance, composition and analysis. Introduction to form and forms.

- 140 **THE ART OF LISTENING TO MUSIC (3)**
 Non-technical basis for enjoyable listening to music; performance practices relating to symphony orchestras, instrumental ensembles, opera, choral groups, and solo performance.
- 201, 202, 203 **INTERMEDIATE CLASS PIANO (1 ea)**
 Each course prereq to the next. Functional techniques for utilizing the piano as a tool for musical study and preparation for piano competency examinations.
- 209 **INSTRUMENTAL LAB FOR SECONDARY INSTRUMENTS (1)**
 Laboratory in comprehensive musicianship and instrumental pedagogy for all instruments. Performance on major and secondary instruments, conducting, developing teaching strategies with goals and objectives. May be repeated for credit.
- 211-216a,b,c,d **INDIVIDUAL INSTRUCTION (1-4)**
 Prereq: open to music majors and minors only; minimum applied performance audition. One-half hour private instruction for "a" courses, one credit; one hour instruction per week for "b,c,d" courses, two to four credits ("b,c,d" courses require permission of area coordinator). May be repeated for credit.
 211a,b,c,d Organ
 212a,b,c,d Piano
 213a,b,c,d Strings
 214a,b,c,d Winds and Percussion
 215a,b,c,d Voice
 216a,b,c,d Classical Guitar
 217a,b,c,d Jazz Guitar
 218a,b,c,d Electric Bass
- 219 **BEGINNING CLASS GUITAR (1)**
 Strumming, chord progressions and guitar tablature reading for the beginning guitar player.
- 221 **UNIVERSITY CHOIR (2)**
 Prereq: permission of instructor. Preparation and performance of major choral works and part-songs. Open to all students having the ability to sing mixed part-songs. May be repeated for credit.
- 223 **SYMPHONIC BAND (2)**
 Prereq: permission of instructor. Preparation and performance of major band works. Open to all students with band experience. May be repeated for credit.
- 229 **JAZZ WORKSHOP (2)**
 Prereq: by audition. Performance and interpretation of contemporary jazz in an ensemble situation. May be repeated for credit.
- 231, 232, 233 **MUSICIANSHIP II (4 ea)**
 Prereq: Music 133; each course in this series prerequisite to the next. Sound sources and the nature of sound. Writing skills and use of the musical symbol: notation. Basic vocabulary of music. Formal, stylistic and historical concept and principles from music literature; evolution of concepts, techniques and processes. Performance skills: rhythmic, melodic and harmonic drill, invention and dictation, keyboard skills, score reading and score construction; the impact of modern technology and cultural forces on expanding uses of non-traditional techniques, sound-sources and formal organization. Implementation through organic combination of three major activities: performance, composition and analysis. Advanced study of traditional forms and of new musical practices which deny older formal and aesthetic formulae in the making of music.
- 250 **JAZZ: GENESIS AND EVOLUTION (3)**
 Open to all students. Personalities, styles and social/cultural influences on jazz from its beginning to the present day.
- 280 **ELEMENTARY COMPOSITION (1-2)**
 Prereq: permission of instructor. Elementary craft of melodic, harmonic, rhythmic, instrumental and contrapuntal writing in traditional modes; participation in concomitant composition seminars. May be repeated for credit.
- 281 **COMPOSITION IN POPULAR IDIOMS (1-2)**
 Prereq: permission of instructor, and Music 128. Creating of ballads, blues, combo charts and the making of tapes for demonstration. May be repeated for credit.
- 300 **DIRECTED INDEPENDENT STUDY (1-6)**
 Conference Course Permit required from instructor before registering.
- 301, 302 **STRING TECHNIQUE AND PEDAGOGY (1 ea)**
 Each course prerequisite to the next. Principles and techniques of playing and teaching string instruments.
- 307 **BASIC CONDUCTING (3)**
 Prereq: Music 233. Music 307 prerequisite to 308 and 309. Basic conducting, conducting techniques, score reading and interpretive analysis.
- 308 **INSTRUMENTAL CONDUCTING (3)**
 Prereq: Music 307. Advanced instrumental techniques, score reading, interpretive analysis and rehearsal techniques.
- 309 **CHORAL CONDUCTING (3)**
 Prereq: Music 307. Advanced choral techniques, score reading, interpretive analysis and rehearsal techniques.
- 311-316a,b,c,d **INDIVIDUAL INSTRUCTION (1-4)**
 Prereq: open to music majors and minors only; upper-division examination. One-half hour private instruction for "a" courses, one credit; one hour instruction per week for "b,c,d" courses, two to four credits. ("b,c,d" courses require permission of area coordinator). May be repeated for credit.
 311a,b,c,d Organ
 312a,b,c,d Piano
 313a,b,c,d Strings
 314a,b,c,d Winds and Percussion
 315a,b,c,d Voice
 316a,b,c,d Classical Guitar
 317a,b,c,d Jazz Guitar
 318a,b,c,d Electric Bass
- 328 **JAZZ IMPROVISATION I (2)**
 Prereq: open to all accepted jazz majors or Music 232 or permission of instructor. Study of basic chord changes, scales and patterns with improvisation based on these principles. Analysis of transcribed solos and study of jazz repertoire.
- 329 **JAZZ IMPROVISATION II (2)**
 Prereq: Music 328. Study of altered chords, scales and patterns with improvisation based on these principles. Analysis of transcribed solos, study of jazz repertoire and ear-training.
- 330 **JAZZ IMPROVISATION III (2)**
 Prereq: Music 329. Study of bi-tonal chords, atonality, and patterns with improvisation based on these principles. Analysis of transcribed solos, study of jazz repertoire, and ear-training.
- 331 **COUNTERPOINT (3)**
 Prereq: Music 131. Modal counterpoint in the style of the 16th century. Two-voice motets, composition and analysis.

Music

- 332 COUNTERPOINT (3)**
Prereq: Music 331. Modal counterpoint in the style of 16th century. Composition and analysis in three and more voices.
- 333 COUNTERPOINT (3)**
Prereq: Music 233. Tonal counterpoint in the style of the 18th century. Compositions in the style of the Bach two- and three-part Inventions. Introduction to the fugue.
- 337 STRING INSTRUMENT TECHNOLOGY (3)**
History, construction, maintenance and repair of string instruments especially oriented to the needs of public school and studio teachers. Laboratory experience stressed and students must supply basic lab tools and materials. Summers only.
- 339 PIANO TECHNOLOGY (3)**
Techniques, equipment and its use for the tuning and maintenance of pianos. Laboratory experience stressed. Students must supply basic laboratory tools. Summers only.
- 341 HISTORY OF MUSIC TO 1600 (4)**
Prereq: Music 232. Main styles, forms, terminology and composers up to 1600. Individual research projects.
- 342 HISTORY OF MUSIC 1600-1750 (4)**
Prereq: Music 232. Main styles, forms, terminology and composers from 1600-1750. Individual research projects.
- 343 HISTORY OF MUSIC 1750-1900 (4)**
Prereq: Music 232. Main styles, forms, terminology and composers from 1750 to 1900. Individual research projects.
- 344 HISTORY OF MUSIC 1900 TO PRESENT (4)**
Prereq: Music 232. Main styles, forms, terminology and composers from 1900 to present. Individual research projects.
- 350 MUSIC FOR ELEMENTARY TEACHERS (3)**
For elementary classroom teachers, not music majors. The skills of singing, reading, writing, playing, and hearing music; techniques and materials used in the elementary grades.
- 351 ELEMENTARY MUSIC EDUCATION (3)**
Prereq: Music 232 and music major or minor. Teaching techniques, materials, and organization of the elementary music program; observations and laboratory experience.
- 380 COMPOSITION (3)**
Prereq: Music 233 and successful completion of upper-division competency examination in composition. Writing pieces in part forms, variation form and sonata form for solo instruments and small ensembles; choral writing. May be repeated for credit.
- 400 DIRECTED INDEPENDENT STUDY (1-6)**
Conference Course Permit required from instructor before registering.
- 402 VOCAL PEDAGOGY (1)**
Prereq: one year of private voice study or permission of instructor. Vocal problems and their corrections; suitable collections of repertoire.
- 403 VOCAL PEDAGOGY (1)**
Prereq: Music 402. Vocal problems and their corrections; suitable collections of repertoire.
- 404 VOCAL PEDAGOGY (1)**
Prereq: Music 403. Vocal problems and their corrections; suitable collections of repertoire.
- 405 VOCAL TECHNIQUE AND PEDAGOGY (2)**
Vocal problems and their corrections; suitable collections of repertoire for young soloists.
- 408 PIANO PEDAGOGY (3)**
Open to all students taking applied piano (312 or higher). A study of the basic concepts involved in piano pedagogy with special emphasis on beginning study as well as advanced pedagogy involving technique, style and interpretation.
- 409 CHORAL CONDUCTING PRACTICUM (1)**
Prereq: Music 307 and 309, and permission of instructor. Direction of student chamber ensemble under faculty supervision. Project includes rehearsal techniques, repertoire research and public performance. May be repeated for credit. Subject to availability of small vocal ensembles.
- 411-418a,b,c,d INDIVIDUAL INSTRUCTION (1-4)**
Prereq: open to music majors and minors only; upper-division examination. One-half hour private instruction for "a" courses, one credit; one hour instruction per week for "b,c,d" courses, two to four credits ("b,c,d" courses require permission of area coordinator). May be repeated for credit.
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|------------|----------------------|
| 411a,b,c,d | Organ |
| 412a,b,c,d | Piano |
| 413a,b,c,d | Strings |
| 414a,b,c,d | Winds and Percussion |
| 415a,b,c,d | Voice |
| 416a,b,c,d | Classical Guitar |
| 417a,b,c,d | Jazz Guitar |
| 418a,b,c,d | Electric Bass |
- 420 ELECTRONIC MUSIC LABORATORY (4)**
Instruction in the use of the ARP Synthesizer, tape recording techniques, audio generators and modifiers for use in electronic music composition and performance. Equipment for teaching electronic music on a low budget. Group instruction and studio time in the use of this equipment. Open to non-majors. Summers only.
- 421 CONCERT CHOIR (2)**
Prereq: by audition. Selected group experience, vocal ability, reading skill, musicianship and interest in serious choral music considered for membership.
- 422 UNIVERSITY SYMPHONY ORCHESTRA (2)**
Prereq: by audition; open to all students who qualify.
- 423 WIND ENSEMBLE (2)**
Prereq: by audition.
- 424 OPERA PRODUCTION (1-2)**
Admission by audition. Preparation of opera scenes or a major musical production to include a public performance each quarter.
- 425 CHAMBER JAZZ ENSEMBLE (2)**
Prereq: by audition; Music 328 or 428 strongly recommended. Supervised small ensemble playing in jazz idioms stressing repertoire, improvisation and performance of written arrangements and compositions. One public performance per quarter required. May be repeated for credit.
- 426 APPLIED CHAMBER MUSIC (2)**
Open to string and piano performers by permission of instructor.
- 427a,b,c,d CHAMBER VOCAL ENSEMBLES (2 ea)**
Prereq: permission of instructor. May be repeated for credit.
- 427a Early Music Group**
Voices with early instruments performing music prior to 1600.

- 427b Madrigal Ensemble
Secular literature of 16th century.
- 427c Workshop Choir
Experimental vocal music including popular styles and jazz. Audition required.
- 427d Chamber Choir
Literature for small vocal ensemble without period restrictions. Opportunities for student direction.
- 428 JAZZ ARRANGING I (3)
Prereq: Music 233 or 328. Writing and arranging for small jazz ensembles. Analysis of small jazz ensemble styles.
- 429 JAZZ ENSEMBLES (2)
Prereq: by audition. Advanced performance and interpretation of contemporary jazz in an ensemble situation; recent developments in the idiom; performance of student compositions and arrangements.
- 430 JAZZ ARRANGING II (3)
Prereq: Music 428. Writing and arranging for a variety of instrumental combinations. Analysis of jazz ensemble styles.
- 431 ORCHESTRATION (3)
Orchestration, with special reference to the needs of the instrumental director.
- 432 ANALYTICAL TECHNIQUES: 20th CENTURY MUSICAL PRACTICES (3)
Isolated phenomenon from various composers which have generated the major trends of the 20th century.
- 433 ANALYTICAL TECHNIQUES: LATE 19th CENTURY MUSICAL STYLES AND PRACTICES (3)
Techniques and practices unique to the late 19th century and their historical precedents in the works of Beethoven and Berlioz.
- 434 APPLIED CHAMBER MUSIC — WINDS (2)
Prereq: permission of instructor. Open to brass/woodwinds and percussion performers.
- 435 COMPOSITION (3)
Prereq: Music 380 for at least two quarters. Writing pieces of broad proportions for various media. May be repeated for credit.
- 436 JAZZ ARRANGING III (3)
Prereq: Music 430. Writing and arranging for large jazz ensemble. Analysis of large jazz ensemble styles.
- 440 COLLEGIUM MUSICUM (2)
Music literature studies from an analytical and performance viewpoint from early to pre-classic music culminating in a public performance each quarter.
- 443 HISTORY OF MUSICAL MEDIA (3 ea)
Prereq: Music 343. Development and literature of important musical media from their origin to the present.
443a Choral Music
443b Solo Song
443c Opera
443d Keyboard Music
443e Chamber Music
443f Symphonic Music
443g Concerto
443h Symphonic Music in the 20th Century
- 444, 445 NOTATION (3 ea)
Reading and interpreting early, contemporary or other extant systems.
- 445b CURRENT TRENDS IN MUSIC EDUCATION PRACTICES (2-3)
Techniques, activities and materials in a program of music development for grades K-6. May be repeated with different topics.
- 445c CURRENT TRENDS IN MUSIC EDUCATION PRACTICES (2-3)
Techniques, activities and materials in a program of music development for middle school and high school. May be repeated with different topics.
- 446 SEMINAR IN MUSIC HISTORY (3)
Prereq: Music 342-343. The student in consultation with the instructor will select one or more given musical developments for individual research. On-going results of this research will be shared with other members of the seminar. Focus of the course will vary from quarter to quarter. Course may be repeated for credit.
- 449 SYMPHONY ORCHESTRA (1)
Prereq: permission of instructor. Rehearsal of standard symphonic repertoire leading to a public concert.
- 450 SEMINAR IN CHORAL DIRECTION AND LITERATURE (6-12)
Techniques of choral development, tradition, style, direction, repertoire research, conducting techniques, musical manuscripts and instrument collections in England. (Seminar participants may register for Lib St 310 and/or Lib St 311, with remaining credits taken in Music 417b.)
- 451 ADVANCED METHODS FOR ELEMENTARY SCHOOLS (3)
Prereq: Music 350 or 351. Introduction to Kodaly method; advanced teaching techniques, activities, materials and literature for elementary music teaching.
- 454 STRING TECHNIQUES AND MATERIALS (2)
Summers only.
- 455 BRASS AND PERCUSSION TECHNIQUES AND MATERIALS (2)
- 456 WOODWIND TECHNIQUES AND MATERIALS (2)
- 458 CHAMBER MUSIC READINGS (6)
Prereq: permission of instructor. Selected quartet and quintet music from the classic, romantic, impressionistic and modern periods with special emphasis on sight reading and style. Open to string, woodwind and brass players and pianists. Offered summers only.
- 459 COACHING SMALL ENSEMBLES (3)
Organization, coaching, and repertoire for small vocal and instrumental ensembles of high school students.
- 460 MARCHING BAND TECHNIQUES (3)
Marching band organization, parade marching, and show routine.
- 462 SECONDARY SCHOOL MUSIC ADMINISTRATION AND MUSIC IN GENERAL EDUCATION (3)
Philosophy, curriculum development, teaching strategies, materials, evaluation and administrative problems for secondary music teachers with emphasis on comprehensive musicianship as well as traditional methods and materials. Students will be expected to research, sing, compose, perform, improvise, conduct, instruct and react to live musical thought. Must be completed prior to student teaching.
- 463 SECONDARY SCHOOL MUSIC ADMINISTRATION AND MUSIC IN GENERAL EDUCATION (3)
Continuation of Music 462.
- 465 GENERAL MUSIC WORKSHOP (2)
Offered summers only. May be repeated for credit.
- 466 STRING TEACHER WORKSHOP (2)
Offered summers only. May be repeated for credit.
- 467 BIRCH BAY BAND MUSIC WORKSHOP (2)
Offered summers only. May be repeated for credit.
- 468 CHORAL MUSIC WORKSHOP (2)
Offered summers only. May be repeated for credit.

Music

469 INSTITUTE FOR PIANO TEACHERS (2)

Focuses on piano pedagogy, musicianship, repertoire recital preparation and teaching materials with particular emphasis on the elementary and intermediate areas of piano advancement. Offered summers only.

469a PIANO PEDAGOGY (3)

Open to all piano students and private teachers. A study of the basic concepts involved in piano pedagogy with special emphasis on beginning study as well as advanced pedagogy involving technique, style and interpretation. Summers only.

470 BRASS SYMPOSIUM (3)

A concentrated one-week symposium dealing with brass pedagogy, teaching materials, and analysis of performance problems. Demonstration and discussion of the fundamentals of tone production, intonation, technical advancement and teaching materials will be conducted by nationally recognized performers as well as by members of Western's faculty. Offered summers only. May be repeated for credit.

470a WOODWIND SYMPOSIUM (2)

A concentrated one-week symposium dealing with woodwind pedagogy, teaching materials and analysis of performance problems. Demonstrations and discussion of tone production fundamentals, intonation problems, technical advancement and reed adjustment. Sessions covering all woodwind instruments will be conducted by noted guest consultants and teaching and ensemble materials will be covered. Offered summers only. May be repeated for credit.

470b PERCUSSION SYMPOSIUM (2)

A concentrated one-week symposium dealing with percussion pedagogy, teaching and ensemble materials and analysis of performance problems. Demonstration and discussion of percussion performance techniques. Sessions covering pitched and non-pitched instruments will be conducted by a noted guest consultant. Offered summers only. May be repeated for credit.

490 SENIOR THESIS (3)

Prereq: admission to program; permission of instructor. S/U grading only.

GRADUATE COURSES

The following courses are offered for graduate credit for persons enrolled in the department's graduate program. For course descriptions and other information about the graduate program, see the current Graduate Catalog.

500 SPECIAL PROJECTS (1-6)

Individual conference.

501 INSTRUMENTAL CONDUCTING AND REHEARSAL TECHNIQUES (3)

502 CHORAL CONDUCTING AND LITERATURE (3)

503 INTRODUCTION TO GRADUATE STUDY OF MUSIC (4)

511 INDIVIDUAL INSTRUCTION — ADVANCED ORGAN (3)

512 INDIVIDUAL INSTRUCTION — ADVANCED PIANO (3)

513 INDIVIDUAL INSTRUCTION — ADVANCED STRINGS (3)

514 INDIVIDUAL INSTRUCTION — ADVANCED ORCHESTRAL WINDS AND PERCUSSION (3)

515 INDIVIDUAL INSTRUCTION — ADVANCED VOICE (3)

516, 517, 518 REPERTOIRE LITERATURE CLASS (1 ea)

521 TEACHING COMPREHENSIVE MUSICIANSHIP IN SECONDARY SCHOOLS (4)

531 ARRANGING (3)

534 COMPOSITION (4)

535 COMPOSITION (4)

536 COMPOSITION (4)

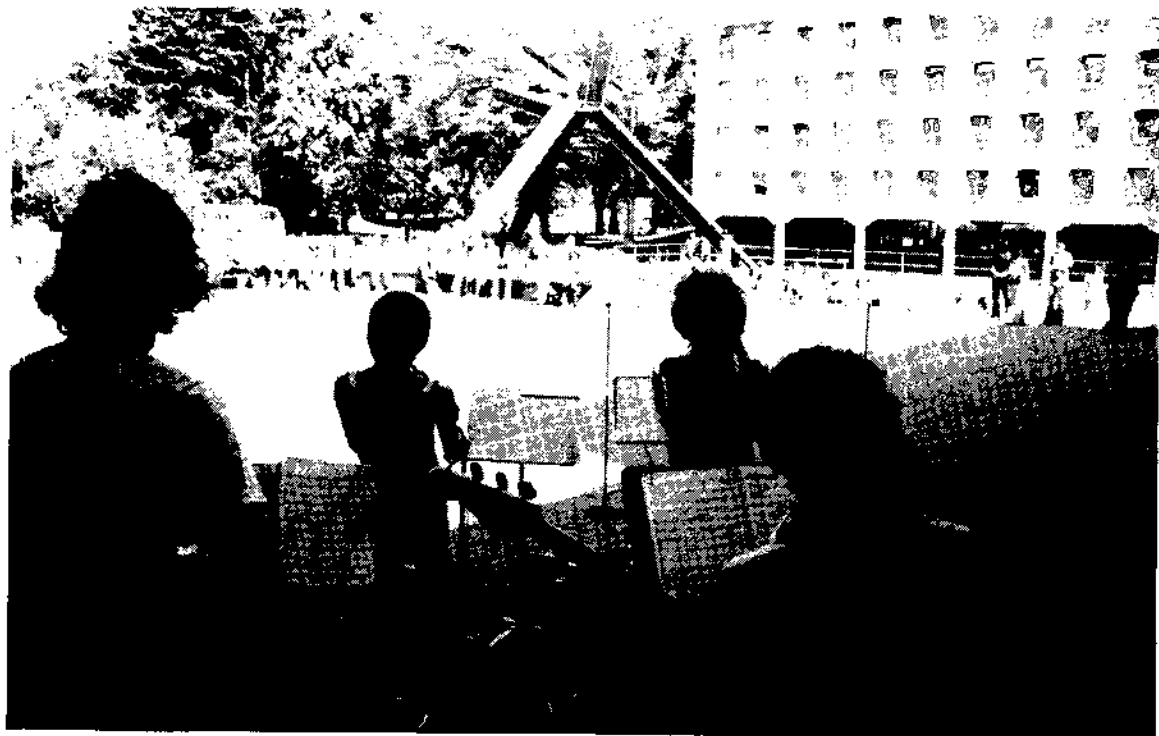
541, 542, 543, 544 HISTORY/ANALYSIS (4 ea)

545 SEMINAR IN THE HISTORY OF MUSIC (4)

552 SUPERVISION OF ELEMENTARY SCHOOL MUSIC (3)

555 CURRICULUM FOR PERFORMANCE GROUPS (3)

690 THESIS (4-6)





OFFICE ADMINISTRATION & BUSINESS EDUCATION

College of Business and Economics

The Department of Office Administration and Business Education is concerned with the development of programs in two major areas.

The office administration program prepares students to assume responsible supervisory and management positions in the offices of business, industry and government. A knowledge of the skills of office workers, as well as a knowledge of the concepts of office organization and management, and of the changing trends in office operations are included in the coursework in this major. The Bachelor of Science degree is awarded upon successful completion of the program.

Major course requirements are designed to provide a healthy balance in the management tools and include work in office administration, business administration, accounting, economics and computer science. Sev-

eral elective options are available, dependent upon the student's interest.

The business teacher education program has the responsibility for the preparation of competent business education teachers to meet the demand from secondary and post-secondary schools.

This program consists of a major in business education, with a strong emphasis on methods of teaching each of the business subjects, and a minor in business administration and economics.

Refer to the Graduate Catalog for details of the Master of Education degree in business education which is also available at Western.

OFFICE ADMINISTRATION AND BUSINESS EDUCATION FACULTY

HUBERT N. THORESON (1971) Chairman, Associate Professor. BS, Valley City State College; MEd, EdD, University of North Dakota.
LOIS E. PETERSEN (1974) Associate Professor. BA, Wartburg College; MEd, Oregon State University; EdD, University of North Dakota.

BACHELOR OF ARTS

Minor—Business Education 25 credits

- Courses to be selected under departmental advisement

BACHELOR OF SCIENCE

Major—Office Administration 104-109 credits

- Off Admin 117*, 215, 222, 223, 224, 241, 242, 243, 301, 310, 412
- Acctg 251, 252
- BA 301, 303, 308 (or Econ 381), 322, 330
- Econ 201, 202, 311, 325 or 425
- Comp Sci 107 or 110 or 210
- Electives: 21 credits under departmental advisement

Minor—Office Administration 25 credits

- Off Admin 215, 242
- Additional courses selected under departmental advisement

BACHELOR OF ARTS IN EDUCATION

Major—Business Education Secondary 53-62 credits

- Off Admin 120*, 121*, 215, 222, 223, 241, 242, 243, 301
- Business Education 319, 421, 422, 423, 450, 490
- Econ 201
- BA 201
- Electives under departmental advisement

This major must be accompanied by the College of Business and Economics minor. This minor shall include Acctg 251 and 252, BA 271, and 13 additional credits under departmental advisement. The professional education sequence is also required.

*Courses may be waived if student demonstrates acceptable proficiency in that area.

GRADUATE STUDY

For the program in business education leading to the Master of Education degree, see the *Graduate Bulletin*.

COURSES IN OFFICE ADMINISTRATION

- 116 BASIC TYPEWRITING (3)
Development of the basic techniques of typewriting. Emphasis will be on the use of the typewriter as a communication tool.
- 117 INTERMEDIATE TYPEWRITING (3)
Prereq: Off Admin 116 or equivalent. Continued development of skills and techniques with emphasis on the application of skill to a variety of communication activities.
- 120 BEGINNING SHORTHAND (5)
Prereq: Off Admin 116 or equivalent. Mastery of Gregg shorthand theory with development of reading skill and an introduction to recording and transcribing skills.
- 121 INTERMEDIATE SHORTHAND (4)
Prereq: Off Admin 120 or equivalent. Continued development of theory and of reading skill with increased emphasis on recording and transcribing functions.
- 150 BASIC ACCOUNTING PROCEDURES (4)
Theory and practice of bookkeeping and accounting, with emphasis on both cash and accrual systems.
- 215 ADVANCED TYPEWRITING (4)
Prereq: Off Admin 117 or equivalent. Advanced skill development with application to various communication tasks, such as rough drafts, tabulations, reports, business and legal forms. Completion of in-basket projects and a unit in power typewriting is required.
- 222 ADVANCED SHORTHAND (4)
Prereq: Off Admin 121 or equivalent. Continued development of reading skills with increased attention on development of accurate transcription ability and development of a comprehensive business vocabulary.
- 223 SHORTHAND TRANSCRIPTION (4)
Prereq: Off Admin 222 or equivalent. Emphasis on transcription skills with increased attention to production ability.
- 224 OFFICE PROCEDURES (3)
Prereq: Off Admin 117 or equivalent. Development of skills and procedures for performing office duties.
- 241 BUSINESS MACHINES (3)
Development of proficiency in the operation of electronic business machines.
- 242 MACHINE TRANSCRIPTION (2)
Prereq: Off Admin 117 or equivalent. Development of the nontranscription skills and skill in producing written communications from recorded media.
- 243 INTRODUCTION TO DATA PROCESSING (3)
Prereq: Off Admin 117 or equivalent. Introduction to modern business data processing practices and equipment. Emphasis on the technology and concepts of data processing systems. The impact of computerized data processing on business and society.
- 301 BUSINESS COMMUNICATIONS (4)
Prereq: Eng 101 or the equivalent. Business writing principles, organizational plans for different types of communications. Solutions for case problem situations must be submitted in typewritten form.

310 RECORDS MANAGEMENT (3)

Organization and management of office records systems, development of skills in the use of records and the managerial aspects of records management. Case problem approach is used.

400 DIRECTED INDEPENDENT STUDY (1-6)

Prereq: senior standing and departmental permission. Individual instruction.

412 OFFICE ADMINISTRATION AND MANAGEMENT (4)

Prereq: Off Admin 224, 310. Emphasis on organizing and planning office services; planning and implementing efficient work flow; staffing, training, orienting and promoting office personnel; controlling office administrative operations; and the business information processing systems.

490 INTERNSHIP IN OFFICE ADMINISTRATION (4-12)

Prereq: Off Admin 412. Practical application of skills and theories learned in the classroom. Additionally, "hands-on" experience can be offered which cannot be a part of classroom instruction. Seminars will be required on a regular basis.

COURSES IN BUSINESS EDUCATION

319 BUSINESS EDUCATION IN THE SECONDARY SCHOOL (3)

Prereq: junior standing. Curriculum planning with consideration of philosophy, scope and objectives.

400 DIRECTED INDEPENDENT STUDY (1-6)

Prereq: senior standing and permission of instructor. Individual instruction.

417a WORD PROCESSING FOR TEACHERS (3-4)

(Four credits with internship.) Prereq: departmental permission. Primarily for teachers interested in teaching the word processing concept. The concept will be defined, and teaching strategies, techniques and materials will be reviewed. Summer workshop.

421 METHODS OF TEACHING BOOKKEEPING AND BASIC BUSINESS SUBJECTS (4)

Prereq: Acctg 251, 252. Objectives, methods, materials and evaluation procedures for teaching in these areas.

422 METHODS OF TEACHING TYPEWRITING (4)

Prereq: completion of advanced course in typewriting and departmental permission. Methods, materials and objectives involved in developing typewriting skill, with emphasis on psychological principles of motor skill development.

423 METHODS OF TEACHING SHORTHAND AND TRANSCRIPTION (4)

Prereq: completion of advanced shorthand and departmental permission. Preparation for teaching shorthand and transcription with emphasis on methodologies, objectives, materials and equipment. Student teaching demonstrations.

450 COORDINATION OF VOCATIONAL PROGRAMS (3)

Prereq: Bus Ed 319 or equivalent. Objectives, content and techniques applicable to administration of work-experience programs in vocational education.

490 PRINCIPLES OF VOCATIONAL EDUCATION (2)

Prereq: Bus Ed 319 or a similar principles course in the major concentration. The historical and philosophical development of vocational education in the common schools in the U.S. The effect of vocational education philosophies and legislation upon school curricula. The treatment will cross disciplinary lines and meet state certification requirements.

GRADUATE COURSES

The following courses are offered for graduate credit for persons enrolled in the department's graduate program. For course descriptions and other information about the graduate program, see the current Graduate Catalog.

500 SPECIAL PROJECTS (1-6)

Individual conference.

501 SPECIAL PROJECTS IN BUSINESS EDUCATION (2-3)

502 IMPROVEMENT OF INSTRUCTION IN SHORTHAND AND TRANSCRIPTION (3)

503 PRINCIPLES AND PRACTICES IN BUSINESS EDUCATION (3)

504 ORGANIZATION AND ADMINISTRATION OF VOCATIONAL PROGRAMS IN BUSINESS EDUCATION (3)

545 EVALUATION AND MEASUREMENT IN BUSINESS EDUCATION (3)

571 IMPROVEMENT OF INSTRUCTION IN TYPEWRITING (3)

572 IMPROVEMENT OF INSTRUCTION IN BOOKKEEPING AND ACCOUNTING (3)

573 IMPROVEMENT OF INSTRUCTION IN THE BASIC BUSINESS SUBJECTS (3)

574 IMPROVEMENT OF INSTRUCTION IN DATA PROCESSING (3)

690 THESIS (6)





PHILOSOPHY

College of Arts and Sciences

The Department of Philosophy offers a wide range of courses in most of the traditional areas of philosophical concern. These may be combined into programs leading to a major or minor in philosophy, or in many cases may be taken to satisfy general education requirements of the University.

Work in philosophy also fits well into many pre-professional programs. For example, for purposes of preparation for law school it is highly desirable; indeed some law schools historically have listed it as the preferred undergraduate major. It is also a preferred major for jobs in government, business, and so on, which require a liberal arts background.

Philosophy is among the oldest of intellectual disciplines. Many areas of study now separate from philosophy, for example, the

various sciences, may be regarded as offspring of philosophy which have come of age. Nevertheless, the central philosophical questions remain as vital as ever.

Historically, philosophy has been regarded by many as the most basic of intellectual disciplines; it is the firm conviction of the faculty of the Department of Philosophy that it is among the most relevant. Among the questions dealt with in one philosophy course or another are "What is knowledge?" "What is truth?" "Can we gain knowledge?" "Can we know the truth?" "Are there such things as right and wrong?" "Does God exist?" "What is the nature of the distinction between minds and bodies?" "Are persons machines?" and the like. The department believes that consideration of these and related questions is fundamental to being educated and as such should be of interest to all students; moreover the department believes that many stu-

dents are sufficiently able and mature intellectually to pursue answers to them with profit, and the faculty invites interested students to join them in this pursuit.

PHILOSOPHY FACULTY

- HUGH FLEETWOOD (1962) Chairman. Associate Professor. AB, MA, PhD, The University of Michigan.
- STANLEY M. DAUGÉRT (1962) Professor. AB, MA, PhD, Columbia University.
- CORA DIAMOND (1980) Associate Professor. BA, Swarthmore College; BPhil, Oxford University.
- THOMAS E. DOWNING (1968) Assistant Professor. AB, Wayne State University; PhD, Stanford University.
- PHILLIP MONTAGUE (1966) Professor. BS, Loyola University; PhD, Stanford University.
- PAUL J. OLSGAMP (1975) Professor of Philosophy and President of the University. BA, MA, University of Western Ontario; PhD, University of Rochester.
- *RICHARD L. PURTILL (1962) Professor. BA, MA, PhD, University of Chicago.

BACHELOR OF ARTS

Major 50 credits

- Phil 102, 111, 112
- Phil 202
- Phil 303, 304, 306, 310
- One course from Phil 305, 307, 308
- Phil 404, 410, 420, 425
- Electives under departmental advisement

Minor 25 credits

- Phil 102, 111, 112, 202, 310
- Electives under departmental advisement

TEACHER EDUCATION

Minor 25 credits

- Phil 102, 111, 112, 202, 310
- Electives under departmental advisement

DEPARTMENTAL HONORS

A philosophy major who wishes to graduate "with honors" must meet the general requirements for all honors students. In addition, he must take advanced courses in philosophy beyond the major. He must achieve a grade average of 3.3 in philosophy courses.

COURSES IN PHILOSOPHY

- 102 INTRODUCTION TO LOGIC (3)
Introduction to the techniques of formal reasoning. Acceptable general education alternative to Math 151 for students with three years of high school math.

- 107 LOGICAL THINKING (3)
An aid to speaking and writing so as to reflect clear, critical and responsive thinking, covering definition, classification, fallacies and techniques of good argument.
The following three courses are all introductory philosophy courses. They are not sequential and none of them presupposes any of the others.

- 111 INTRODUCTION TO PHILOSOPHY: PHILOSOPHICAL PROBLEMS (3)
Great recurrent philosophical problems and some of the answers which have been developed; reading and discussion of selected writings.
- 112 INTRODUCTION TO PHILOSOPHY: MORAL PHILOSOPHY (3)
Nature of moral problems and judgments; emphasis upon meaning of such concepts as "goodness," "rightness," "evil," "duty," and "happiness."
- 113 INTRODUCTION TO PHILOSOPHY: PHILOSOPHY OF RELIGION (3)
Nature of religion, especially theism. Nature and existence of God, problem of evil. Selected subjects from the following: role of faith and reason, religious experience and religious language, immortality, free will.

- 202 INTERMEDIATE LOGIC (4)
Prereq: Phil 102. Systems of logic and their application to philosophical problems.

- 207 PHILOSOPHY AND FANTASY (3)
Examination of some philosophical themes in the imaginative writing of C. S. Lewis, J.R.R. Tolkien and others.

- 215 INTRODUCTION TO EXISTENTIALISM (3)
Major philosophers of the existential school, philosophical problems and answers as seen by existentialism.

- 300 DIRECTED INDEPENDENT STUDY (1-6)
Conference Course Permit required from instructor before registering.

- 301 MORAL PROBLEMS IN BIOMEDICINE (3)
Prereq: one philosophy or one biology course. An investigation of moral problems that arise in connection with medical practice and research in the life sciences. Some of the more prominent of these concern genetic engineering, euthanasia, etc.

- 302 ADVANCED LOGIC (4)
Further development of the tools and techniques of logic; applications in mathematics, science, and philosophy.

- 303 PHILOSOPHY OF LANGUAGE (3)
Prereq: Phil 202. The nature of symbols; notions of synonymy, meaning, and reference; semantical and syntactical analysis applied to natural and artificial languages.

- 304 HISTORY OF PHILOSOPHY: ANCIENT TO EARLY MIDDLE AGES (4)
Prereq: one course in philosophy. Great philosophical thinkers from the early Greeks to the early Middle Ages; special attention to Plato and Aristotle.

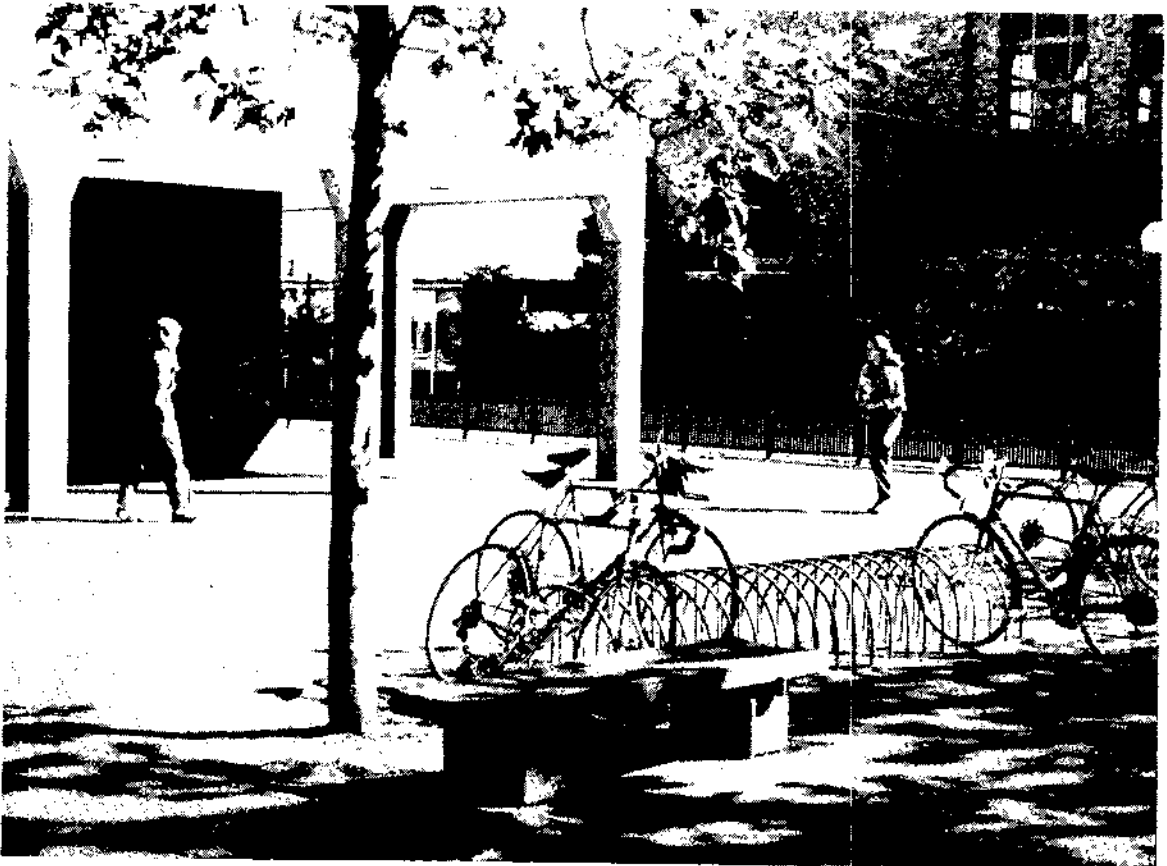
- 305 HISTORY OF PHILOSOPHY: MIDDLE AGES TO RENAISSANCE (4)
Prereq: one course in philosophy. Great philosophical thinkers from the 12th to the 17th centuries, including St. Thomas Aquinas, St. Bonaventure, Duns Scotus, William of Occam, Roger and Francis Bacon.

- 306 HISTORY OF PHILOSOPHY: RENAISSANCE TO THE AGE OF REASON (4)
Prereq: one course in philosophy. Great philosophical thinkers including Descartes and the rationalists, Locke and the empiricists.

*On Sabbatical Leave Fall 1979 & Spring 1980

Philosophy

- 307 HISTORY OF PHILOSOPHY: THE NINETEENTH AND TWENTIETH CENTURIES (4)**
Prereq: one course in philosophy. Kantian and post-Kantian philosophy with some attention to other significant movements such as utilitarianism, early existentialism, and pragmatism.
- 308 AMERICAN PHILOSOPHY (3)**
Prereq: one course in philosophy. Main currents in American philosophical thought from Jonathan Edwards to the present.
- 310 THEORY OF KNOWLEDGE (3)**
Prereq: Phil 202 and one course numbered above 200. The attempt to understand the possibility, nature, origins and limits of knowledge: problems and concepts.
- 320 SPECIAL TOPICS IN CONTEMPORARY MORAL ISSUES (3)**
Prereq: upper-class standing. A detailed, critical examination of the concepts, claims, assumptions and values of some areas of great current moral importance, e.g., nuclear deterrence, abortion, distribution and use of limited national resources, cloning, etc.
- 330 SOCIETY, LAW AND MORALITY (3)**
Concepts and principles involved in analysis and appraisal of social institutions with attention to freedom, rights, justice, and the relation between laws and morality.
- 350 ORIENTAL PHILOSOPHY AND RELIGION (3)**
Prereq: upper-division standing. Major philosophical and religious traditions of the Orient.
- 400 DIRECTED INDEPENDENT STUDY (1-6)**
Conference Course Permit required from instructor before registering.
- 404 SEMINAR IN PHILOSOPHY (3)**
Prereq: permission of instructor. Concentration upon the thought of an individual philosopher, a particular problem, or a movement. Course may be repeated.
- 405 PHILOSOPHY OF ART AND CRITICISM (3)**
Philosophical study of beauty and of the creation, appreciation, and criticism of works of art.
- 410 METAPHYSICS (3)**
Prereq: Phil 202 and one additional course numbered above 200. Philosophical issues surrounding such notions as particular and universal, space, time, existence, substance and attribute; views of contemporary and traditional philosophers.
- 411 PHILOSOPHY OF SCIENCE (3)**
Prereq: permission of instructor. Varying theories as to the nature, presuppositions, limitations and interrelations of the sciences.
- 420 ETHICAL THEORY (3)**
Prereq: Phil 112. Critical analysis of writings of several major theorists in ethics — ancient, modern, and contemporary — and their treatment of ethical problems.
- 425 PHILOSOPHY OF MIND (3)**
Prereq: Phil 202 and one additional course numbered above 200. The nature of mind and the meaning of such concepts as intelligence, attention, will, emotion, and feeling and imagination.
- 460 PHILOSOPHY OF HISTORY (3)**
Prereq: seven credits in philosophy. The idea of history: concepts and categories allied to it — process, permanence and change, cause, time.





PHYSICAL EDUCATION

College of Arts and Sciences

For students planning a professional career in physical education, health education or leisure studies,* several major and minor concentrations are offered which may lead to rewarding careers with either educational agencies or in private enterprise.

The Arts and Sciences major in physical education offers career opportunities with options in coaching, sports writing, dance, pre-physical therapy, and business sports.

The Department of Physical Education offers a wide variety of activities for those general students interested in the development of life-time sports skills and/or the promotion of personal fitness and physical development. In addition to team sports and individual and dual activities, classes are offered in several outdoor pursuits; including skiing, mountaineering, sailing, horsemanship, ice skating, hiking and alpine travel.

All students are eligible to participate in intramural sports, dance, and swimming programs. An extensive intercollegiate athletic program is available for both men and women students.

PHYSICAL EDUCATION FACULTY

MARGARET H. AITKEN (1946) Chairman.
Professor. BA, University of Washington; MA, EdD, Teachers College, Columbia University.

EVELYN E. AMES (1964) Associate Professor. BS, University of Nevada; MS, Washington State University; PhD, University of Maryland.

*See *Interdepartmental Programs*.

Physical Education

- M. CHAPPELLE ARNETT (1960) Professor. BS, Centenary College; MS, Purdue University; EdD, University of Missouri.
- ROY CLUMPNER (1975) Associate Professor. BS, University of Wisconsin, Lacrosse; MA, San Jose State University; PhD, University of Alberta.
- LYNDA M. GOODRICH (1973) Assistant Professor. BA in Ed, MA, Western Washington State College.
- KATHLEEN KNUTZEN (1977) Assistant Professor. BA, MA, Western Washington State College.
- BOYDE LONG (1966) Associate Professor. BS, MA, University of New Mexico.
- JAMES R. LOUNSBERRY (1959) Associate Professor. BA in Ed, Central Washington State College; MS, EdD, University of Washington.
- JAMES E. MOORE (1977) Assistant Professor. BA, University of Oregon; MEd, PhD, Oregon State University.
- CHARLES RANDALL, JR. (1962) Associate Professor. BA, Eastern Washington State College; MA, Washington State University.
- RONALD D. RIGGINS (1977) Assistant Professor. BA, Laverne College; MS Recreation, Indiana University.
- RALPH A. VERNACCHIA (1973) Associate Professor. BA, Montclair State College; MS, Ohio University; PhD, The University of Utah.
- DON W. WISEMAN (1962) Associate Professor. BA, Idaho State University; MS, Washington State University.
- EVELYN D. WISEMAN (1970) Associate Professor. Teacher Training—Homerton College, Cambridge, England; Dip in Ed, University of Birmingham; MEd, Western Washington State College.

BACHELOR OF ARTS IN EDUCATION

Physical Education Majors

Physical education major programs are available for men and women students. Options within the program offer opportunities for students to prepare for secondary, elementary, or for K-12 programs. Students majoring in physical education are required to take PE 200, Introduction to Physical Education, the first quarter they enter the major.

The physical education options designated as Option I: K-12 Specialist; Option II: Secondary; Option III: Elementary, have similar requirements and courses to be selected from four core areas. Core areas are as follows: Core A: Professional Activities; Core B: Scientific Foundations; Core C: Professional — Curriculum, Methods, Practicum; Core D: Professional — Developmental.

Students should first select an option as a major; then in each of the four core areas, a number of credits to be taken in each core are indicated. Students select, *under advisement*, courses which they will take from each of the four areas. *Selection of courses must be arranged with a departmental adviser.* All students are encouraged to complete a minor to be granted academic competency in another teaching area.

Physical Education Majors: Options I, II, III

Physical Education 200 and Health Education 252 or 352 required.

- Option I: K-12 Specialist; minimum 61 credits (supporting course: Biology 348)
- Option II: Secondary, minimum 51 credits (supporting course: Biology 348)
- Option III: Elementary, minimum 46 credits (supporting course: Biology 348)

Core Areas

Core A: Professional Activities

- 14 credits in at least 10 courses must be taken in Core A and one course must be from each of the following areas: team sports, individual and dual sports, dance, aquatics, gymnastics. In addition, major students (Options I, II) must show advanced proficiency, two credits, in intercollegiate activities, performance activities and/or officiating. It is recommended that students take additional credits in outdoor pursuits (PE 157, 158, or 159, 160, 161, or 167, 170, 171)
- Professional Activities Courses: PE 203, 208, 209, 211, 223, 232, 234, 236, 238, 241, 242, 244, 245, 247, 250, 251, 254, 256
- Options I and II: 14 credits and a minimum of 10 different professional activity courses
- Option : III: 8 credits and a minimum of six different professional activity courses

Competency above the beginning level must be established before taking courses from the professional sequence. Beginning courses in the above areas cannot be applied to the major and minor requirements.

Core B: Scientific Foundations

- Courses: PE 301, 302, 303, 307, 407, 485
- Options: I, II, III: 17 credits

Core C: Professional — Curriculum, Methods, Practicum

- Courses: PE 306, 313, 326, 401, 402, 411, 481, 482, 492
- Option I: 15-17 credits
- Option II: 8 credits
- Option III: 14-17 credits

Core D: Professional — Developmental

- Courses: PE 304, 308, 309, 310, 403, 404, 410, 490
- H Ed 252 or 352
- Option I: 12 credits
- Option II: 8 credits
- Option III: 5 credits

Teaching Competence

Recommendation for teaching competence for physical education normally requires a completion of a major or an augmented minor (30 credit hours) with a minimum grade average of 2.5. Participation in intramural and/or club sport activities is encouraged for all majors and minors during four quarters of the first two years.

Minor—Physical Education

Secondary 27 credits

(For teaching competency, 30 credits.)

- PE 200
 - 12 credits from the professional activity sequence
 - 10-12 credits selected from PE 301, 302, 303, 404, 407, 485
 - PE 304 or H Ed 252 or 352
- Biol 348-349 recommended. Concentrated study in one sport area is recommended with additional participation in activity classes and intercollegiate teams in other sports.

Minor — Physical Education

Elementary 25 credits

(For teaching competency, 30 credits)

- 8 credits: PE 209, 211, 244, 251, 256
 - 8 credits: PE 301, 302, 303, 307, 485
 - 7-9 credits: PE 306, 326, 313, 403
 - H Ed 252 or 352
 - 2-4 credits under advisement
- Biol 348-349 recommended

Minor — Athletic Coaching (Men & Women)

30 credits

- 7-9 credits selected from PE 380-387
- 4 credits selected from PE 341-347
- PE 208, 304
- 6 credits in PE 491
- 8 credits selected from PE 301, 302, 303, 307, 309, 310, 406, 410, 485

Biol 348-349 recommended. Concentrated study in one sport area is recommended with additional participation in activity classes and intercollegiate teams in other sports.

Completion of the athletic coaching minor does not meet requirements for teaching competency in physical education.

Minor — Health Science 30 credits

- H Ed 349, 350, 352, 447, 450, 460

- Home Econ 250
 - Biol 348
 - 4 credits under departmental advisement
- Biol 349 is recommended.

The school health education major (student-faculty designed) provides training for students who are interested in teaching health education in school settings. Specific procedures for designing the major are available from the School of Education (students must fulfill requirements for teacher certification). Program adviser: Dr. Evelyn Ames.

Minor — Educational Dance 25 credits

- PE 122, 209, 223, 326
- 16 credits under departmental advisement

Minors must plan, under departmental advisement, to take additional course work to attain teaching competency.

BACHELOR OF ARTS**Major — Physical Education 90-100 credits**

The Arts and Sciences physical education major provides concentrated study of the concepts and skill of human movement, a study of man engaging in motor performance in his daily life and in other motor performances yielding aesthetic values or serving as an expression of his physical and competitive nature. The major is career oriented to pre-physical therapy, research and graduate study, recreational leadership or professional roles of coaching or writing in sports.

The major requires demonstrated competency in a number of professional activities, a background knowledge in the scientific foundations of human movement and the cultural implications of sport in society, and an elective core selected as to the individual's professional goals.

93-104 credits, selected as follows:

- PE 200
- Professional activities and skill competencies: select 18 credits from PE 100- and 200-level courses; departmental advisement is required in this selection
- Scientific foundations of human movements: select 25 credits from PE 301, 302, 303, 307, 402, 485, 490; Biol 348, 349
- Socio-cultural aspects of sports and physical education: 12 credits in PE 308, 309, 310, 407

Physical Education

- PE 304
- PE 491 (6 credits)
- H Ed 252 or 352
- Specialization area: select 24-35 credits from one of the following specializations:
 - Coaching of Sports: PE 341-347; PE 380-387; PE 406, 410
 - Journalism: complete the journalism minor, see Journalism Department section of General Catalog
 - Dance: complete dance minor
 - Leisure Studies Option: Completion of leisure studies minor, see Interdepartmental section of General Catalog
 - Pre-Physical Therapy: see requirements listed in the Professional Transfer Programs section of General Catalog
 - Business Administration: complete the business administration minor, see Business Administration section of General Catalog

Minor — Physical Education 30 credits

- PE 200
- 8-10 credits from professional activities PE 203-256
- 8-10 credits from scientific foundations: PE 301, 302, 303, 307, 402, 485, 490
- 8-10 credits from socio-cultural aspects: PE 308, 309, 310, 407, 491
- PE 491
- H Ed 252 or 352

Minor — Athletic Coaching

(Men & Women) 30 credits

- 7-9 credits selected from PE 380-387
- 4 credits selected from PE 341-347
- PE 208, 304
- 6 credits in PE 491
- 8 credits selected from PE 301, 302, 303, 307, 309, 310, 406, 410, 485

Biol 348-349 recommended. Concentrated study in one sport is recommended with additional participation in activity classes and intercollegiate teams in other sports.

Major Concentration — Leisure Studies

See Interdepartmental Programs section for detailed requirements.

Minor — Leisure Studies

See Interdepartmental Programs section for detailed requirements.

BACHELOR OF SCIENCE

Major — Community Health 110 credits

Academic Adviser: Dr. Eveyln Ames

The community health education major provides training for students who are interested in health education careers in public, voluntary and private health agencies and in industry.

- H Ed 349, 350, 352, 407, 447, 450, 451, 460
- Home Econ 250
- Chem 115, 251
- Biol 101, 345, 348, 349, 370
- Psych 201, 313, 314
- Soc 202, 340
- Huxley 350a
- PE 303
- Electives (3 credits)

Minor — Health Science 25 credits

- H Ed 349, 350, 352, 447, 450
- Home Econ 250
- 2 credits selected under advisement
- Biol 348
- Biol 349 recommended

GRADUATE STUDY

For concentrations in physical education leading to the Master of Education degree, see *Graduate Bulletin*.

ACTIVITIES COURSES

Activities courses, with the exception of varsity sports and those so noted, may not be repeated for credit.

Beginning courses, or equivalent, are prerequisite to intermediate courses, which are in turn prerequisite to advanced courses in any given activity.

101-109 DEVELOPMENTAL (1 ea)

- 102 Conditioning
- 103 Jogging
(repeatable to a maximum of 3 credits)
- 108 Weight Training
(repeatable to a maximum of 3 credits)

111-119 AQUATICS (1 ea)

- 112 Beginning Swimming
(For non-swimmers.)
- 113 Intermediate Swimming
Prereq: PE 112 or ability to swim twenty-five yards and support self in deep water.
- 114 Advanced Swimming
Prereq: PE 113 or ability to swim 100 yards with one stroke and to use a variety of other strokes.
- 118 Scuba Diving (2 credits)
Prereq: student must pass swim test. (The student pays cost of basic equipment.)
- 119 Advanced Scuba (2)
Prereq: PE 118 or equivalent.

120-129 DANCE (1 ea)

(See Theatre/Dance Department for additional dance offerings.)

- 120 Beginning Social Dance
- 122 Beginning Folk and Square Dance
- 123 Intermediate Folk and Square Dance

130-139 DUAL SPORTS (1 ea)

- 130 Beginning Handball
 - 131 Beginning Squash
 - 132 Beginning Badminton
 - 133 Intermediate Badminton
 - 134 Beginning Fencing
 - 136 Beginning Tennis
 - 137 Intermediate Tennis
 - 138 Beginning Wrestling
 - 139 Beginning Racquetball
- The student furnishes equipment for PE 130, 131, 132, 133, 136, 137, 139.

140-149 TEAM SPORTS (1 ea)

- 141 Field Hockey
- 142 Basketball
- 143 Softball
- 144 Soccer
- 145 Volleyball
- 148 Lacrosse
- 149 Rugby

150-173 INDIVIDUAL SPORTS (1 or 2 ea)

- 150 Archery
- 151 Gymnastics
- 152 Beginning Bowling
- 153 Intermediate Gymnastics
Prereq: PE 151 or equivalent.
- 154 Golf
- 156 Track and Field
- 157 Beginning Skiing
- 158 Intermediate Skiing
- 159 Advanced Skiing
- 160 Sailing and Canoeing
Prereq: swimming test.
- 161 Mountain Climbing (2)
- 162 Basic Horsemanship
- 163 English or Western Equitation
Prereq: PE 162.
- 166 Ice Skating
- 167 Bicycling (1)
- 168 Karate (1)
- 170 Hiking and Alpine Travel (2)
- 171 Kayaking (2)
- 172 Crew (1)
- 173 Rifle (1)

The student enrolling in 152, 157, 158, 159, 160, 161, 162, 163, 166, 170, 171 and 173 pays cost of transportation and individual instruction. Students in 157, 158, 159, 161, 165, 166, 167 also furnish own equipment.

180-193 INTERCOLLEGIATE SPORTS (2 ea)

- 180m Intercollegiate Football
- 180w Intercollegiate Field Hockey
- 181m,w Intercollegiate Basketball
- 182m Intercollegiate Baseball
- 183m,w Intercollegiate Track and Field
- 184m Intercollegiate Wrestling
- 185m Intercollegiate Golf
- 186m,w Intercollegiate Tennis
- 189m Intercollegiate Cross Country
- 190m Intercollegiate Crew
- 192w Intercollegiate Volleyball
- 193 Intercollegiate Soccer (2)

199 SPORTS CLINIC (2)

Participation in a week workshop in one of the following sports: basketball, gymnastics, track and field, volleyball, or wrestling. Repeatable for a maximum of six credits.

PROFESSIONAL COURSES

200 INTRODUCTION TO PHYSICAL EDUCATION (2)

The course is to furnish students with a basic knowledge and understanding of the philosophical, historical, psychological, sociological and scientific foundations of physical education. The major areas to be treated in addition to the latter are: career orientation, professional organizations, research area, relationship between physical education and athletics, physical fitness and skill competency testing.

203-256 PROFESSIONAL ACTIVITIES

Selectively required of majors and/or minors in physical education. Prereq: competency in skills and knowledge of the sport.

- 203 Aquatics (or demonstrate advanced competence) (1)
- 206 Weight Training and Body Conditioning (2)
- 209 Recreational Dance (2)
- 211 Educational Gymnastics (2)
- 223 Modern Dance (2)
- 232 Badminton (1)
- 234 Fencing (1)
- 236 Tennis (2)
- 238 Wrestling (2)
- 241 Field Hockey (1)
- 242 Basketball (2)
- 244 Soccer (2)
- 245 Volleyball (2)
- 247 Football Techniques (2)
- 250 Archery (1)
- 251 Gymnastics (3)
- 254 Golf (1)
- 256 Track and Field (2)

216 ADVANCED LIFESA VING AND WATER SAFETY (2)

Prereq: advanced level in swimming proficiency test. Instruction leading to qualification for the American Red Cross Lifesaving Certificate.

217 WATER SAFETY INSTRUCTORS' COURSE (2)

Prereq: current American Red Cross Advanced Lifesaving Certificate. Stroke analysis and methods of teaching lifesaving and aquatics skills; instruction leading to qualification as an American Red Cross Water Safety Instructor.

280 SPORTS CONDITIONING (1)

A program of conditioning established in consultation with the instructor to meet specific athletic needs of the student.

300 DIRECTED INDEPENDENT STUDY (1-6)

Conference Course Permit required from instructor before registering.

301 BIOMECHANICS (4)

Prereq: Math 121 or 151. Application of basic mechanical principles to movement, including sports, aquatics and rhythmic activities. Emphasis is placed on motion fundamentals, kinetics, kinematics, aerodynamics, hydrodynamics, equilibrium and external forces, rebound and spin, two-dimensional analysis, and the body as a machine; laboratory work is included.

302 KINESIOLOGY (5)

Prereq: Biol 348 or equivalent. Important muscles of the body; origin, insertion, and action; principles of human movement; performance analysis of basic locomotor movements, daily living activities, and sports skills; laboratory work included.

303 PHYSIOLOGY OF EXERCISE (5)

Prereq: Biol 348. Nature of neuromuscular activity, circulation and respiration adjustment during exercise, metabolic and environmental aspects, fatigue and training, fitness and health; includes laboratory experiments.

Physical Education

304 ATHLETIC INJURIES AND TRAINING (3)

Prereq: Biol 346. Care and prevention of athletic injuries; procedures for building physical stamina; experience in taping procedures. Laboratory fee.

305 PHYSICAL EDUCATION FOR ELEMENTARY SCHOOL (3)

Prereq: Psych 352. Physical activities in dance, games and agility for elementary age. Methods of teaching and developmental characteristics of children.

307 MOTOR LEARNING (3)

Prereq: 10 credits in PE professional sequence. Introduction to motor learning; presentation and discussion of the learning and retention processes as they relate to physical activities; a synthesis of current research findings concerned with learning gross motor skills; emphasis on practical experiences related to teaching methodology and coaching techniques.

308 INTERNATIONAL PHYSICAL EDUCATION AND SPORT (3)

Prereq: PE 200. An analysis of various physical education and sport programs throughout the world, with an emphasis on socialist countries, Western European countries, and Canada.

309 PSYCHOLOGY OF SPORT (3)

A study of psychological principles and states which are present in sporting activities both at recreational and highly competitive levels in our society. Particular emphasis is placed on evaluation and assessment of personality, sport as a stress seeking domain, emotional states, motivation, aggression, relationship of motor and intellectual performance, and personality theory and dynamics as they relate to sport.

310 SOCIOLOGY OF SPORT (3)

A study of the sociological implications of sport in contemporary American society. Particular interest is given to political, religious, and economic aspects of sport and society as well as such additionally related areas as social mobility, discrimination, and female participation in sporting activities.

313 PHYSICAL EDUCATION LABORATORY EXPERIENCE WITH CHILDREN (1-3)

Prereq: PE 306.

326 DANCE FOR CHILDREN (3)

Creative movement activities in dance, drama and physical activity. Suitable for classroom teachers and physical education majors.

341-347 SPORTS OFFICIATING (2 ea)

Officiating techniques for individual and team sports.

- 341 Football
- 341w Field Hockey
- 342m Basketball
- 342w Basketball
- 343 Track and Field
- 344 Tennis
- 345 Volleyball
- 346 Gymnastics
- 347 Wrestling

380-387 COACHING SPORTS (2-3 ea)

Practical and theoretical aspects of coaching the sport with special emphasis on advanced skill development and current methodology and resource material being utilized.

- 380 Football (3)
- 381 Basketball (3)
- 382 Baseball (2)
- 383 Track (3)
- 384 Wrestling (2)
- 385 Volleyball (2)
- 386 Gymnastics (2)
- 387 Tennis (2)



400 DIRECTED INDEPENDENT STUDY (1-6)

Conference Course Permit required from instructor before registering.

401 METHODS SEMINAR AND PROFESSIONAL PRACTICUM (5)

Prereq: junior status and completion of 20 hours in the major program. Seminar, observation, and practical experience in teaching physical education in secondary schools.

402 CORRECTIVE PHYSICAL EDUCATION (3)

Prereq: Biol 348 or equivalent; PE 302. Implications of growth patterns, coordinations and postural deviations relating to the physical education program; conditioning techniques, corrective procedures.

403 PHYSICAL EDUCATION PROGRAM FOR THE ELEMENTARY SCHOOL (3)

Prereq: Psych 352, PE 326. Criteria for selecting activities; selection and maintenance of facilities and equipment; evaluative procedures and techniques; administrative policies.

404 ORGANIZATION AND ADMINISTRATION OF PHYSICAL EDUCATION FOR SECONDARY SCHOOL (3)

Prereq: PE 307. Criteria for the selection of program activities, the organization of classes, personnel policies, purchase and care of equipment.

406 THE ADMINISTRATION OF ATHLETICS (3)

Prereq: senior status. Organization and administration of policies and procedures for interschool athletic programs with special emphasis on management of contests, financing, care and maintenance of facilities and equipment.

407 HISTORY AND PHILOSOPHY OF PHYSICAL EDUCATION (3)

Prereq: PE major or minor; senior status. Philosophical and historical considerations of physical education with emphasis on social, cultural and aesthetic aspects of sports and dance.

410 INTRAMURAL AND INTERSCHOOL PROGRAMS (2)

Program content and planning for athletic events in secondary schools.

411 INDIVIDUALIZED INSTRUCTION FOR SECONDARY PHYSICAL EDUCATION (2)

Prereq: professional activity sequence equivalent. Utilization of inquiry, problem-solving and direct teaching methods.

445 CURRENT TRENDS IN PHYSICAL EDUCATION (2-6)

Prereq: teaching experience. Seminars or workshops for the study of current physical education topics. May be repeated with different topics.

445a Physical Education for the Elementary School (3)
445f Coaching Clinic for Women (2)

Prereq: senior or graduate status.

445m Track & Field Coaching Clinic for Men and Women (2)
Analysis and in-depth study of techniques and training methods in track and field events. Utilization of event films, seminars, lectures and practical experience to explore and study each track and field event. Coaching psychology is also covered.

445p Sports Medicine Programs for the Male and Female Athlete (2)

Prereq: PE 304. A workshop for teachers and coaches on athletic conditioning for prevention of injuries common to sports participation. Guest orthopedists, physical therapists and athletic trainers will present their views followed by discussion and demonstration.

445q Coaching Clinic in Soccer (2)

Prereq: senior or graduate status.

445r Sports Psychology Workshop (2)

This workshop is designed for coaches, physical education teachers and administrators. Topics and laboratory experiences will include the various aspects of psycho-social principles which lead to improved performance effectiveness of athletes as well as the quality of the learning experience for the student. The proposed topics are application of psychometric techniques to evaluate individual athletes; hypnosis and sport; case study evaluative techniques; group dynamics; positive image psychology and goal-setting techniques; and seminar situations which allow participants to explore such concepts.

445e Implementing Title IX, Co-educational Physical Education (2)

A workshop designed to assist physical education teachers develop coeducational activities and programs.

480 TEACHING PHYSICAL EDUCATION IN ELEMENTARY SCHOOL: INSTRUCTIONAL MODULES PROVIDING FOR EQUAL OPPORTUNITIES (1-4)

Prereq: PE 211 or 306 or equivalent and teaching experience. Utilizing of self-instructional materials, group seminars and conferences for development of teacher competency in elementary school physical education; incorporate a wide variety of strategies and activities in providing equal opportunities for all children and provide for compliance with provision of Title IX.

481 MOVEMENT EDUCATION (3)

Prereq: PE 211 or 306. History, philosophy and rationale for a movement education approach in the teaching of physical skills. A study of the potential application and influence of movement education in current physical education curricula. Uses and abuses of existing movement education programs. Principles of movement education for the development of future physical education curricula.

482 GAMES AND SPORTS: A MOVEMENT EDUCATION APPROACH FOR ELEMENTARY AND MIDDLE SCHOOLS (3)

Prereq: PE 306 or equivalent. Developing problem-solving strategies, modified games/sports, creative games in cooperative and competitive activities. Use of learning centers/station.

485 HUMAN GROWTH AND MOTOR DEVELOPMENT (3)

Growth characteristics and sequence of motor development to maturity; implications for motor performance.

490 MEASUREMENT AND EVALUATION IN PHYSICAL EDUCATION (3)

Application of the theory of measurement, evaluation, and appropriate statistical processes to physical education programs; practical experiences involving test selection, administration and evaluation and interpretation of results in public school and college physical education programs.

491 FIELD EXPERIENCE IN PHYSICAL EDUCATION ACTIVITIES (3)

Prereq: senior standing and permission of department. Practical experience in local public schools and voluntary agencies in conducting activity programs. Course may be repeated once.

492 SEMINAR AND PRACTICUM IN PHYSICAL EDUCATION (2)

Prereq: upper-division status, permission of department. Seminar and individualized practicum in teaching physical education activities. The course may be repeated.

495 PHYSICAL EDUCATION FOR THE MENTALLY RETARDED (3)

Prereq: senior or graduate status. The characteristics and needs of the mentally retarded child as they relate to physical education; adaptation of methods, materials and techniques.

496 MOVEMENT EDUCATION FOR THE EXCEPTIONAL CHILD (3)

Prereq: permission of instructor. Use of movement experiences for child-centered education for exceptional children; methods, activities in gymnastics, games and sports, body competencies and creative movement.

GRADUATE COURSES

The following courses are offered for graduate credit for persons enrolled in the department's graduate program. For course descriptions and other information about the graduate program, see the current Graduate Catalog.

500 SPECIAL PROJECTS (1-6)

Individual conference.

501 SEMINAR: PROFESSIONAL LITERATURE (3)

503 PHYSICAL EDUCATION EQUIPMENT AND FACILITIES (3)

504 CURRICULUM IN PHYSICAL EDUCATION (4)

506 RESEARCH DESIGN IN PHYSICAL EDUCATION (4)

507 MOTOR LEARNING: ADVANCED (3)

531 SEMINAR: COMPARATIVE PHYSICAL EDUCATION (3)

534 SEMINAR: SUPERVISION OF INSTRUCTION IN PHYSICAL EDUCATION (3)

540 SEMINAR: APPLIED EXERCISE PHYSIOLOGY AND DESIGN OF PHYSICAL ACTIVITY PROGRAMS (3)

541 SEMINAR: SPORTS PSYCHOLOGY (3)

542 SEMINAR: SOCIOLOGY OF SPORT (3)

543 SEMINAR: BIOMECHANICS (3)

545 SEMINAR: PERCEPTUAL-MOTOR DEVELOPMENT: IMPLICATIONS FOR PROGRAM (3)

690 THESIS (1-6)

COURSES IN HEALTH EDUCATION

150 CONSUMER HEALTH (2)

Analysis, selection, and evaluation of health products and services; appraisal of health information, misconceptions, superstitions; consumer protection agencies.

151 SOCIETY AND DRUGS (2)

Classification, psychopharmacology, use and misuse of mood and behavior modifying drugs; research; public law, and use and misuse of over-the-counter drugs.

152 SOCIETY AND SEX (2)

Sociological, psychological, and biological aspects of human sexuality.

Physical Education

- 201 INTRODUCTION TO HEALTH PROFESSIONS (2)**
For students interested in health-oriented disciplines. Professional philosophies, educational requirements and occupational opportunities.
- 252 FIRST AID AND PERSONAL SAFETY (2)**
Aid for common injuries and illnesses based on the American Red Cross Standard First Aid and Personal Safety course. ARC certificate issued on completion of course requirements.
- 300 DIRECTED INDEPENDENT STUDY (1-6)**
Conference Course Permit required from instructor before registering.
- 349 CONTEMPORARY HEALTH ISSUES I (3)**
Prereq: junior status; HED 150, 151 and 152 recommended. Topics covered: overweight/obesity and weight control, consumer health, human sexuality and licit and illicit drugs.
- 350 CONTEMPORARY HEALTH ISSUES II (3)**
Prereq: junior status. Topics covered: stress-relationship to wellness/illness; chronic/degenerative diseases; communicable diseases; respiratory, allergies and internal disorders; high-level wellness.
- 351 BASIC FIRST AID AND CARDIO-PULMONARY RESUSCITATION (1)**
First aid using a multi-media program including units on cardio-pulmonary resuscitation. Off campus only.
- 352 ADVANCED FIRST AID AND EMERGENCY CARE (3)**
The development of first aid skills required of persons who are responsible for providing emergency care as part of job and/or recreation. ARC certificates are issued on completion of course requirements.
- 400 DIRECTED INDEPENDENT STUDY (1-6)**
Conference Course Permit required from instructor before registering.
- 406 HEALTH OF THE YOUNG CHILD (3)**
Prereq: junior status. Health needs of children; concepts of appraisal and referral; utilization of school/community health services; healthful school environment.
- 407 HISTORICAL PERSPECTIVES OF HEALTH EDUCATION (3)**
Prereq: junior status, health science major or minor, HED 349, 350 and 447 or permission of instructor. Analyze definitions of health; evaluate philosophical approaches to health education; determine rationale behind different concepts of health education; identify factors which contribute to formation of health education concepts; identify significant movements and events which have contributed to progress in the field of health education. Normally offered alternate years.
- 445 CURRENT TRENDS IN HEALTH EDUCATION (1-3)**
Prereq: teaching experience or experience in health-related professions. Seminars or workshops for the study of current health education topics. May be repeated with different topics.
- 447 COMMUNITY HEALTH (3)**
Prereq: 10 credits in biology, health education, home economics, or Huxley. Analysis of health-care delivery systems; community, national and world health issues; models of health behavior; development of community health programs; direct involvement with health-related agencies.
- 450 METHODS AND MATERIALS IN HEALTH SCIENCE (4)**
Prereq: HED 349 and 350 or permission of instructor. Basic principles and application of the process of health education in school and/or community health settings. Identification, examination, development and evaluation of resource materials.
- 451 FIELD EXPERIENCE IN COMMUNITY HEALTH (16)**
Prereq: HED 349, 350, 447 and health science major (community health). Practicum in health-related community agencies. (S/U grading.)
- 452 FIRST AID INSTRUCTOR'S COURSE (2)**
Prereq: current ARC certificate. Instructional methods, skills, resource materials for teaching first aid. ARC certificates issued on completion of requirements.
- 460 HEALTH EDUCATION CURRICULUM DESIGN (3)**
Prereq: senior status. Identification and application of concepts of curriculum design in school and community health education. Analysis of existing curriculum. Students will prepare, utilize and critique materials.
- 470 SCHOOL HEALTH PROGRAM (3)**
Prereq: senior status teaching experience, or permission of instructor. Analysis of the philosophical, organizational, and legal aspects of the school health program.

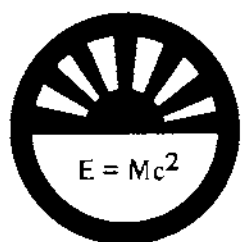
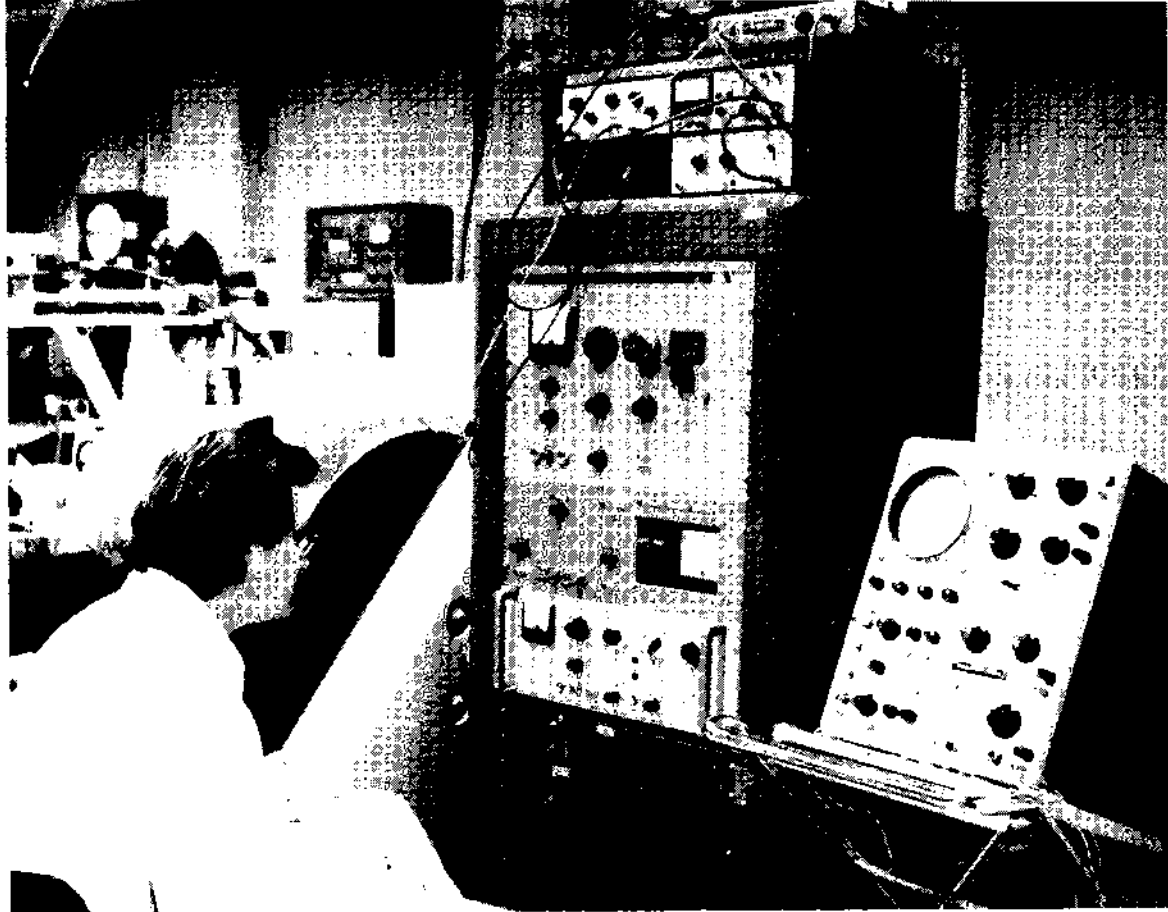
GRADUATE COURSES

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500 SPECIAL PROJECTS (1-5)

Individual conference.





PHYSICS & ASTRONOMY

College of Arts and Sciences

The undergraduate major provides a broad coverage of basic physical topics and principles and combines both lecture and laboratory work. Students may choose from one of a number of programs which allow different relative emphasis on physics and supporting mathematics, computer science or other science courses. Our strong astronomy program will be of particular interest to many students. Combined with the general educational program, students are well prepared for a varied career choice, e.g. high school teaching, graduate study and research-development work in governmental and industrial laboratories. Admission requirements are flexible enough to accommodate students who are beginning university-level work in mathematics and physics as well as those who can be granted advanced placement and credit for service-related experience or accelerated high school science and mathematics

programs. Similarly, community college students with technical and academic credit in general physics and calculus can enter these programs without undue loss of credit and time.

The department has always given first priority to instruction and has acquired facilities, faculty and technical staff to support a strong curriculum including master's degree programs. Students have opportunity to participate in senior and graduate research projects in experimental nuclear and solid state physics, environmental pollution and in studies in theoretical physics.

The department provides an extensive program of student employment in laboratory instruction and technical work which provides valuable experience and financial support and promotes close association of faculty and students.

PHYSICS AND ASTRONOMY FACULTY

- W. LOUIS BARRETT (1968) Chairman. Associate Professor. BS, University of Idaho; MS, PhD, University of Washington.
- RICHARD A. ATNEOSEN (1968) Associate Professor. BS, MS, University of Minnesota; PhD, Indiana University.
- WILLARD A. BROWN (1956) Professor. BS, University of Washington; MAT, Washington State University; EdD, University of Florida.
- MELVIN DAVIDSON (1967) Professor of Physics and Director of the Computer Center. AB, Whitman College; PhD, Rensselaer Polytechnic Institute.
- WILLIAM J. DITTRICH (1951) Associate Professor. BS, MS, University of Washington.
- RICHARD H. LINDSAY (1961) Professor. BS, University of Portland; MA, Stanford University; PhD, Washington State University.
- RAYMOND R. MCLEOD (1961) Professor. BA, MA, University of British Columbia; PhD, Purdue University.
- ALEX MAKSYMOWICZ (1969) Associate Professor. BS, Massachusetts Institute of Technology; PhD, University of California, Berkeley.
- ROBERT J. QUIGLEY (1970) Associate Professor. BS, MS, California Institute of Technology; MA, PhD, University of California, Riverside.
- AJIT S. RUPAAL (1964) Professor. BSc, MSc, Panjab University; PhD, University of British Columbia.
- LESLIE E. SPANEL (1968) Associate Professor. BS, University of Missouri, Rolla; PhD, Iowa State University, Ames.
- DONALD L. SPRAGUE (1965) Associate Professor. BS, MS, PhD, University of Washington.
- *RICHARD D. VAWTER (1968) Associate Professor. BS, Texas Technological University; MS, State University of Iowa; PhD, State University of New York.
- J. JOSEPH VEIT (1963) Professor. BSc, University of London; MSc, University of Birmingham; PhD, University of London.

BACHELOR OF ARTS IN EDUCATION

Recommendation for Teaching Competency

Students are certified for academic competency in physics upon completion of the physics minor or equivalent. Consultation with approval by the department chairman is required.

Employability will be enhanced if teaching competency in physical science or chemistry is also obtained.

Major — Physics

Secondary

45 credits plus Supporting Courses

- Physics 231
- Physics 235, 331, 332, 335 or 355, 381, 382, 384, 385, 398 (one credit)
- Phys Sci 492 or Physics 492
- Electives under departmental advisement, 11 credits
- Supporting courses: 15 credits in mathematics including calculus

*On Sabbatical Leave 1979-80

Minor — Physics

27 credits plus Supporting Courses

- Physics 231 (or 131)
- Physics 331, 332 (or Physics 132, 133)
- Physics 381 and 384, Physics 235
- Phys Sci 492 or Physics 492
- Electives, 3 credits (or 6 credits if Physics 131, 132, 133 is taken)
- Supporting courses: 14 credits in mathematics including calculus

Major Concentration — Physics/Mathematics

70 credits

This concentration provides depth leading to recommendation for teaching competence in both areas; it satisfies requirements for both a major and a minor.

- Math 121 and Physics 231
- 20 credits in physics under departmental advisement
- 20 credits in mathematics under departmental advisement
- 20 additional credits including methods courses in one or both of these fields

Major Concentration — Chemistry/Physics

See Chemistry Department section of catalog for details.

BACHELOR OF ARTS

Major — Physics

53 credits plus Supporting Courses

- Physics 231
- Physics 331, 332, 355, 371, 381, 382, 383, 384, 385, 386, 391, 392
- Either Physics 407 or Gen Sci 405
- Upper-division electives, 6 credits, recommended are statistical mechanics, mechanics and optics
- Supporting courses: 35 credits in mathematics, including Math 121, 124, 125, 126, 224, 301 (or 201-202), 331, 332

Also recommended: reading knowledge of a foreign language and 10 credits in chemistry.

MINOR — PHYSICS

25 credits plus Supporting Courses

- Physics 231
- Physics 331, 332
- Physics 371 and either of 355 or 471; or Physics 381, 382, 384 and 385; or Physics 391 and 392
- Supporting courses: 18 credits in mathematics including Math 125

Minor — Astronomy
28 credits plus Supporting Courses

- Physics 231 (or 131)
- Physics 331, 332 (or 132, 133)
- Astronomy 315, 316, 317
- Physics 381

Major — Astronomy Emphasis
64 credits plus Supporting Courses

This concentration provides emphasis in astronomy and depth in physics courses that are relevant to astronomy.

- Physics 231
- Physics 331, 332, 335, 355, 381, 382, 383, 384, 385, 386, 407, 435, 441
- Astronomy 315, 316, 317, 416
- Upper-division electives: 6 credits recommended are statistical mechanics (462), quantum mechanics (391-392) and relativity theory (489)
- Supporting courses: 30 credits in mathematics and computer science including Math 121, 124, 125, 126, 301 (or 201-202), 331, 332
- Chem 121, 122

Major Concentration — Physics-Mathematics
110 credits

This combined concentration provides depth in both fields and satisfies the requirements for both a major and a minor.

- Math 121 and Physics 231
- 100 credits in mathematics and physics under advisement.

Recommended courses include Physics 331, 332, 371, 381, 382, 383, 384, 385, 386, 391, 392 and other upper-division electives; Computer Science 210; Math 125, 126, 301 (or 201, 202) 331, 332, and upper-division electives. Courses will normally be distributed equally between mathematics and physics, depending somewhat on the student's high school background. Ten to fifteen credits in related courses may be included.

Major Concentration — Physics-Mathematics Honors Program
110 credits

This combined major satisfies requirements for a major and a minor. It is open to superior students; a grade average of 3.0 is required for admission to and continuation in this program. Apply for admission jointly to the departments of mathematics and physics during the second year of university study in lower-division calculus and general physics.

- Math 121, 124, 125, 126, 224, 301, 312, 331, 332, 430, 431
- Computer Science 210
- 8 credits from approved 300 and 400 level mathematics courses (at least 4 credits in the latter)
- Physics 231, 331, 332, 371, 381, 382, 383, 384, 385, 386, 391
- 15 credits in upper-division physics courses, including Physics 392, 441, 442 or Physics 485, 486, 489
- Supporting courses: 5 credits under advisement

BACHELOR OF SCIENCE

Major 110 credits

- Physics 231
- Physics 331, 332, 335, 355, 371, 381, 382, 383, 384, 385, 386, 391, 392, 407, 462
- Math 124, 125, 126, 224, 301 (or 201 and 202), 331, 332
- Upper-division electives: 15 credits selected from 356 and 400-level courses excluding 492
- Supporting courses: 8 credits in computer science, chemistry, geology, or biology selected under advisement.

DEPARTMENTAL HONORS

Physics majors who wish to graduate "with honors" should consult the department chairman for special requirements.

GRADUATE STUDY

For concentrations in physics and in physical science leading to the Master of Education and the Master of Science degrees, see *Graduate Bulletin*.

COURSES IN PHYSICS

Laboratory instruction is included in Physics 101, 132, 133, 231, 235, 331, 332, 335, 355, 356, 435, 455.

101 PHYSICS FOR THE LIBERAL ARTS (4)

A survey of our physical universe for non-science students. Various sections emphasize special topics such as household physics and environmental physics.

111a,b,c. SPECIAL TOPICS IN PHYSICS AND PROBLEMS OF SOCIETY (2)

Selected topics in scientific subjects that are particularly important to our contemporary technological society.

123 RELATIVITY FOR NON-SCIENTISTS (2)

A study of Einstein's special and general theories of relativity — designed for the non-mathematical college student. Topics include spacetime events, time dilation, Lorentz contraction, twin paradox, tachyons, time travel, the gravitational red shift and curved space. The impact of the ideas of relativity on modern culture and on other fields will be discussed.

- 131 PRINCIPLES OF PHYSICS I (5)
Prereq: high school algebra and geometry or equivalent; concurrent enrollment in college-level algebra recommended. Description of motion, energy and pressure. Especially suited for earth, biological science students and those in the pre-medical program.
- 132 PRINCIPLES OF PHYSICS II (5)
Prereq: Physics 131. Heat and thermodynamics. Principles of electricity and magnetism. Laboratory introduces elementary electronics and measuring instruments.
- 133 PRINCIPLES OF PHYSICS III (5)
Prereq: Physics 132. Relativity, light and optical instruments, atomic and nuclear physics.
- 201 THE SCIENCE OF HIGH FIDELITY (3)
Introduction to high fidelity audio components. Basic principles applied to the recording and reproduction of music, from the original source to the final sound. Operation and evaluation of tape recorders, turntables, phono-cartridges, amplifiers, loudspeakers, etc. Laboratory.
- 202 MUSICAL ACOUSTICS (3)
A non-mathematical introduction to the nature of sound. Particular attention will be given to the musical and physical aspects of musical instruments; physical and subjective characteristics of sound, synthesis and analysis of musical sounds, musical scales and room acoustics. Laboratory.
- 205 LASER LIGHT AND HOLOGRAPHY (3)
A non-mathematical introduction to lasers, laser light and holography. Practical work in laboratory.
- 231 GENERAL PHYSICS WITH CALCULUS (5)
Prereq: Math 124 (concurrent registration with department approval). Kinematics and dynamics of particles and rigid bodies.
- 235 GEOMETRICAL OPTICS (2)
Prereq: high school algebra and trigonometry. Reflection and refraction at plane and spherical surfaces; thin lenses and their aberrations; optical instruments; lecture and laboratory.
- 300 DIRECTED INDEPENDENT STUDY (1-6)
Conference Course Permit required from instructor before registering.
- 301 PHYSICS AND ENVIRONMENTAL PROBLEMS (3)
Prereq: general education science program. To acquaint the student with some of the specific details of contemporary problems in the area of nuclear energy, air and noise pollution and to show how the study of physics is relevant to the solution of these problems. Normally offered alternate years.
- 302 AIR QUALITY CONTROL INTERNSHIP (1-5)
Prereq: permission of department. Part-time internship with the Northwest Air Pollution Authority. Priority given to seniors; where the number of applicants exceeds the available intern positions, competitive selection will be made. Requests for internships should be filed with the department one quarter in advance of registration for this course.
- 311 RADIOLOGICAL PHYSICS (3)
Prereq: Physics 133 and Math 127. A course designed to provide the student with a working knowledge of radiation and its physical and biological effects. Radiation hazards to man and the environment from a variety of radiation sources will be discussed as well as the development of radiation protection standards and procedures. Normally offered alternate years.
- 321 ATMOSPHERIC PHYSICS (3)
Prereq: one year of college physics. A study of the structure, energetics and motion of the atmosphere especially as these processes relate to the diffusion and transport of air pollutants. Normally offered alternate years.
- 331 WAVES AND THERMODYNAMICS (5)
Prereq: Physics 231 and Math 125. Mechanical and acoustical waves; kinetic theory; classical thermodynamics.
- 332 ELECTRICITY AND MAGNETISM (5)
Prereq: Physics 331 and Math 126. Laws of electrostatics; d.c. circuits; magnetic fields of steady currents; magnetic induction, induced electromagnetic forces; magnetic properties of matter.
- 335 PHYSICAL OPTICS (4)
Prereq: one year college physics and Math 125. Interference and interferometers, Fraunhofer and Fresnel diffraction; laser light and holography; polarization. Laboratory. Normally offered alternate years.
- 355 FUNDAMENTALS OF ELECTRONICS (3)
Prereq: Physics 332 or concurrent (133 with permission of instructor). Solid state diodes and transistors, bipolar junction and FET transistors and transistor amplifiers. Laboratory. Normally offered alternate years.
- 356 ELECTRONIC CIRCUITS (3)
Prereq: Math 125, Physics 355. Multistage amplifiers, feedback and feedback oscillators, modulation and demodulation; laboratory. Normally offered alternate years.
- 361 THERMODYNAMICS (3)
Prereq: Physics 332 and Math 126. Kinetic theory and the laws of thermodynamics. Normally offered alternate years.
- 371 ELECTRIC AND MAGNETIC FIELDS (4)
Prereq: Physics 332 and Math 224. Integral and differential representation of electric and magnetic field laws; Maxwell's equations and propagation of electromagnetic waves in free space; alternating current and complex representation of alternating current and voltage; R-C, R-L, R-L-C circuits; power factor in A.C. circuits; and response to R-L and R-C circuits to applied step voltage. Normally offered alternate years.
- 380 MILESTONES IN MODERN PHYSICS (3)
Prereq: one college-level physics course. Important discoveries in modern physics will be discussed by reviewing original works in selected areas. Areas to be selected from include special relativity; discovery of nuclei, electrons, x-rays, elementary particles; atomic and nuclear models; Schrodinger wave equation and the uncertainty principle; fission and fusion. Not intended for physics majors. (Summer only.)
- 381, 382, 383 MODERN PHYSICS (4 ea)
Prereq: Physics 132 and Math 126; or Physics 332. (May be taken concurrently — permission of department required.) Concurrent enrollment in Physics 384-5-6 sequence required for physics majors and minors, recommended for others; to be taken in sequence. Theory of relativity; basic interactions of elementary particles; quantum properties of waves and particles; atomic models; quantum mechanics applied to atomic structure; multi-electron atoms; molecular physics, structure and property of solids; structure, properties, and decay of atomic nuclei; basic nuclear reactions.
- 384, 385, 386 MODERN PHYSICS LABORATORY (1 ea)
Prereq: Physics 381-2-3 sequence (or concurrent enrollment). Experiments in modern physics.
- 391 QUANTUM MECHANICS I (4)
Prereq: Physics 381, Math 331 (may be taken concurrently). Basic principles and postulates of quantum mechanics; solution of Schrodinger equation for one-dimensional systems, simple harmonic oscillator, and hydrogen atom. Normally offered alternate years.

- 392 **QUANTUM MECHANICS II (3)**
Prereq: Physics 391, Math 332 (may be taken concurrently). Stationary state and time-dependent perturbations; electron spin and identical particles; applications. Normally offered alternate years.
- 398 **LABORATORY DEVELOPMENT (1 ea quarter)**
Laboratory programs and instructional methods in general physics laboratories. Limited to maximum of three credits.
- 400 **DIRECTED INDEPENDENT STUDY (1-6)**
Conference Course Permit required from instructor before registering.
- 407 **HISTORY AND PHILOSOPHY OF PHYSICS (3)**
Prereq: one year college physics. Topics in the history and philosophy of physics; the relation of physics to other sciences, technology and society. Normally offered alternate years.
- 431 **INTRODUCTION TO SOLID STATE PHYSICS (4)**
Prereq: Physics 382. Phonons and lattice vibrations; free electron theory of metals; electrical conductivity; thermal properties; energy band theory; diamagnetism and paramagnetism. Normally offered alternate years.
- 435 **MODERN OPTICS (3)**
Prereq: Physics 381. Selected topics from contemporary optics, such as coherence theory with applications to F.T. spectroscopy and stellar interferometry; special filtering lasers and laser light, holography, nonlinear optics. Laboratory. Normally offered alternate years.
- 441, 442 **CLASSICAL DYNAMICS (3 ea)**
Prereq: Physics 332 and a course in differential equations. Lagrangian mechanics, perturbation techniques for dynamical systems, theory of oscillations, central forces and scattering theory. Normally offered alternate years.
- 451 **ELEMENTS OF NUCLEAR PHYSICS (3)**
Prereq: Physics 371, 383; Math 331. Basic nuclear properties, nuclear models; interaction of radiation with matter; radioactive decay; elementary nuclear reactions. Normally offered alternate years.
- 455 **PULSE AND DIGITAL ELECTRONICS (3)**
Prereq: knowledge of elementary electronics and permission of instructor. Applied digital electronics, practical applications leading to an understanding of truth tables, gates, counters, decoders, multiplexers, LED displays, flip flops, RAMS, and ROMS.
- 462 **THERMAL PHYSICS (3)**
Prereq: Physics 382. Laws of thermodynamics, macroscopic properties of matter; Maxwell, Fermi and Bose statistics; applications to gases, solids and astrophysics. Normally offered alternate years.
- 471 **ELECTROMAGNETIC THEORY (3)**
Prereq: Physics 371 and Math 331. Potential theory. Maxwell's field equations in dielectric and conducting media, propagation of electromagnetic waves in dielectric and conducting media; reflection and refraction at a boundary between two media, rectangular wave guide. Relativistic electromagnetics. Normally offered alternate years.
- 485, 486 **MATHEMATICAL METHODS OF PHYSICS (3 ea)**
Prereq: 20 credits in physics; Math 331 and linear algebra. Physical applications of linear vector spaces and operators with emphasis on Fourier transform; Green's functions, and other special functions (Legendre, Bessel, gamma, erf, etc.). Physics 485 — Introduction to and physical applications of group theory, probability theory and numerical analysis. Normally offered alternate years.
- 489 **RELATIVITY THEORY (3)**
Prereq: 24 credits in physics including Physics 381; Math 332. Special relativity is reviewed including the Lorentz-Einstein transformation of Maxwell's equations. Tensor analysis and Riemannian geometry is entered into sufficiently to sketch the four major Einstein predictions: (1) advance of the perihelion of planetary orbits; (2) the bending of light in a gravitational field; (3) the Einstein red shift; (4) retardation of light in a gravitational field. Normally offered alternate years.
- 492 **HIGH SCHOOL PHYSICS PROGRAMS (3)**
Prereq: general physics; Physics 381 (or concurrent). Materials and methods of curricula such as PSSC and HPP.
- 498 **RESEARCH PROJECTS IN PHYSICS (6)**
Prereq: permission of instructor. Investigation of a problem in physics under the sponsorship and supervision of the physics faculty; project must extend over a minimum of two quarters.

GRADUATE COURSES

The following courses are offered for graduate credit for persons enrolled in the department's graduate program. For course descriptions and other information about the graduate program, see the current Graduate Catalog.

- 500 **SPECIAL PROJECTS (1-6)**
Individual conference.
- 531, 532 **SOLID STATE PHYSICS (3 ea)**
- 541 **HAMILTONIAN DYNAMICS (3)**
- 542 **SPECIAL TOPICS IN MECHANICS (3)**
- 551, 552 **NUCLEAR THEORY (3 ea)**
- 571 **ELECTRODYNAMICS (3)**
- 572 **SPECIAL TOPICS IN ELECTROMAGNETIC THEORY (3)**
- 581 **QUANTUM THEORY (3)**
- 582 **SPECIAL TOPICS IN QUANTUM THEORY (3)**
- 598 **GRADUATE SEMINAR (1-3)**
- 690 **RESEARCH (3-12)**
- 699 **SPECIAL PROBLEMS IN ADVANCED PHYSICS (3-6)**

COURSES IN ASTRONOMY

- 103 **ASTRONOMY FOR THE LIBERAL ARTS (4)**
A survey of astronomy including the solar system, stellar evolution, galactic structure and cosmology. Not recommended for science majors.
- 105 **THE EVOLVING UNIVERSE (4)**
Prereq: Astronomy 103 or equivalent. Investigates such questions as: How did the universe begin — or did it? How is the universe evolving — or is it? How will the universe end — or will it? Discusses curved space, black holes, the Big Bang and the expanding universe.
- 190 **ASTRONOMY AND RELATIVITY THEORY WORKSHOP FOR HIGH SCHOOL STUDENTS (5)**
Prereq: intended for, but not restricted to, students who have completed the junior year of high school; high school students must submit a letter of recommendation from a high school science or mathematics teacher. Not open to students with previous college-level credit in physics or astronomy. S/U grading. (Summer only.)
- 300 **DIRECTED INDEPENDENT STUDY (1-6)**
Conference Course Permit required from instructor before registering.

Physics/Astronomy

315 SOLAR SYSTEM ASTRONOMY (4)

Prereq: Physics 131 or 231 or equivalent. Our solar system from its origins to the present. The motions of the planets, satellites and minor members of the system with special emphasis on the earth and moon. Current observational techniques applied to determine the physical properties, geology and atmospheres of planets and satellites. Implications regarding the origin of the solar system.

316 STELLAR ASTRONOMY (4)

Prereq: Physics 131 or 231 or equivalent. Study of the structure, evolution and motion of the stellar systems such as binary stars, nebula, planetary star systems, star clusters, and galaxies. Other topics will include neutron stars, black holes, pulsars, quasars, supernova and cosmic rays.

333 EXTRATERRESTRIAL LIFE (3)

Prerequisite: three credits of college physics or astronomy. Life in and beyond the solar system; interstellar intelligence and communication; radio search for extraterrestrial life; life detection experiments; problems of interstellar travel.

402 DIRECTED INDEPENDENT STUDY (1-6)

Conference Course Permit required from instructor before registering.

404 TELESCOPE DESIGN AND CONSTRUCTION (1-3)

Prereq: Astronomy 103 and upper-division standing. Design and construction of a telescope including optical design and lens grinding.

415 GALAXIES (3)

Prereq: Astronomy 316. Radio signals from space, molecules between the stars; exploding galaxies; quasars and pulsars; structure of galaxies.

416 ASTROPHYSICS (3)

Prereq: Physics 381, 382, 383 and two quarters of calculus. Application of physics to stellar systems. Topics include: radiation theory; atomic spectra and chemical abundances in stellar atmospheres; nuclear fusion in stellar interiors; evolution of stars; nuclear synthesis in stars during stable and explosive stages.

498 SEMINAR ON CURRENT TOPICS IN ASTRONOMY (1-3)

Prereq: three credits in college astronomy at 200 level or higher. Investigation and discussion of current topics in astronomy.





POLITICAL SCIENCE

College of Arts and Sciences

THE DISCIPLINE

Whether we like it or not, government affects every part of our lives — what taxes we pay, what news we may hear, what wars (if any) we fight, the quality of the food we eat, water we drink, air we breathe — ultimately, whether we live or die. Many other questions which at times may loom large in our lives are decided by government — whether workers may organize into unions, whether marijuana smokers will go to jail, whether abortion is a crime.

It should not come as a surprise to learn that political science is one of the oldest fields of academic inquiry. The systematic investigation of government was going on in ancient Greece long before many of the other fields we today call “science” got their start. This is only logical, since the form of government

determines whether there even will be free inquiry, and the political process determines whether resources will be set aside for the study of molecules and atoms. Even the purest mathematician and the most theoretical physicist must know something about how government operates and how it influences them if they are to have any hope of influencing it.

Courses in political science attract many kinds of students, including those who want to become specialists in the art and science of government; perhaps even those who want to run for governor 20 years from now. It also attracts those who seek immediate post-graduate employment in the vast field of public and private organizations dealing with government. And it attracts those who wish to learn to become competent and efficient citizens.

THE DEPARTMENT

The Department of Political Science is one of unusual breadth of interest, approaches to the study of political science, academic backgrounds, ideological orientations and fields of specialized interests. An examination of the course descriptions will illustrate that there are few areas of human concern in regard to political systems which are not treated.

The specialized interests of departmental members are so broad as to limit detail here. Some are particularly interested in relations among nations, including war and peace, espionage and international organizations. Others are specialists in a particular area, such as East Asia, Africa, North America or Europe. Still others are especially interested in the study of political parties, interest groups, government administration, problems of poverty and minorities in relation to government, legislative systems, and the judiciary, with emphasis on decisions of the Supreme Court of the United States. The Presidency is closely examined, as are state and local legislative bodies, executives, courts and political processes. Environmental politics and administrations are also considered. Political theory receives detailed study, both in several historical periods and in its contemporary and empirical aspects.

SPECIAL PROGRAMS

The department has several special programs of which students should be aware. It is an integral part of the Canadian-American studies program, which presently offers a minor. It is equally involved in the East Asian studies program, which provides a minor. Other special programs include the pre-law program, public policy and administration, social studies education program, and those related to the law enforcement assistance program, having particular concern in training persons in the area of law enforcement and criminal justice. For several years, also, the department has been closely involved with the Washington State Legislature, having a number of legislative internships which allow a student to work closely with a legislator during the yearly sessions. There are also summer administrative internships which the department may assist students in obtaining. Students may also intern in governmental offices in Whatcom County.

TO WHAT CAREERS MAY POLITICAL SCIENCE LEAD?

So you complete a political science major.

What can you do with your major in vocational terms? Run for President? Obviously. Such former political science majors as Woodrow Wilson and John F. Kennedy have made it. Others, like Hubert Humphrey, have tried and obtained at least the Vice-Presidency. Still others, perhaps now in Congress, are among those to be considered in the future. At a less exalted level, one may contest for many offices in state and local, as well as national, government.

For those who prefer not to hold elective office (or who do not succeed), there are tens of thousands, indeed millions, of jobs at all levels of the United States' many political systems. Whether an appointive administrative post or in elective office, there are many possible avenues of employment and career satisfaction for those in political science. Many students go on to law school, where their pre-law program in political science is often a strong factor in their success.

Research and executive positions are found in a variety of organizations interested in influencing or improving government. For example, organizations representing various industries, farmers groups, or war veterans; labor organizations; taxpayers' associations and chambers of commerce; "good government" leagues, the National Municipal League, and the National Civil Service League; leagues of municipalities or other units of local government; the Council of State Governments; and citizen-supported or university-sponsored bureaus of governmental research.

Beyond these aspirations, there are possibilities for graduate study in political science, leading to a Master of Arts degree at Western or elsewhere, and a Ph.D. in those institutions offering that degree. A career in teaching at levels including junior and senior high school, or teaching and research at the university level, are all possible for those who have had extensive exposure to political science.

Many political science graduates go into business. They enter into international companies such as American Express or are employed by various air lines. They enter banks, insurance companies, real estate agencies, industries and other enterprises closely involved with government. Others enter related governmental fields such as planning, personnel, budgeting and research. Some become city managers. A very few have reached into the White House itself, as perhaps a liaison officer to the Congress for higher education, or into the Office of Management and Budget in the executive office of the President. It should be noted that a

professional political scientist, Dr. Henry Kissinger, earned the stature of perhaps the second most powerful figure in the United States government. Many others high in the federal, state, and local bureaucracies come from a major and perhaps graduate study in political science.

POLITICAL SCIENCE FACULTY

- RALPH E. MINER (1970) Chairman. Associate Professor. BA, San Jose State College; MA, PhD, University of Oregon.
- DONALD K. ALPER (1971) Assistant Professor. BA, MA, California State University, Long Beach; PhD, University of British Columbia.
- DAVID E. CLARKE (1966) Associate Professor. BA, MA, Trinity (Cambridge); PhD, Stanford University.
- JAMES W. DAVIS (1974) Professor and Dean of the College of Arts and Sciences. BA/Ed, Valley City State; MA, PhD, University of Minnesota.
- MAURICE H. FOISY (1970) Associate Professor. BA, Gonzaga University; MA, Georgetown University; PhD, University of Oregon.
- CHARLES J. FOX (1977) Visiting Assistant Professor. BA, University of California, Santa Barbara; PhD, Claremont Graduate School.
- SIEGRUN F. FOX (1977) Visiting Assistant Professor. BA, MA, University of Technology, Munich; PhD, Claremont Graduate School.
- JOHN J. HEBAL (1962) Associate Professor. PhB, University of Wisconsin; MA, University of Alabama; PhD, University of Minnesota.
- EUGENE J. HOGAN (1969) Assistant Professor. BA, Gonzaga University; MA, Georgetown University; PhD, University of Oregon.
- ELLIS S. KRAUSS (1970) Associate Professor. AB, Brooklyn College of the City University of New York; MA, PhD, Stanford University.
- GERARD F. RUTAN (1969) Professor. BA, MA, University of Montana; PhD, University of North Carolina at Chapel Hill.
- HENRY G. SCHWARZ (1969) Professor of Political Science and History. BA, MA, PhD, University of Wisconsin.
- JOHN J. WUEST (1960) Professor. BS, MS, University of Southern California; PhD, University of California, Los Angeles.
- *DAVID W. ZIEGLER (1967) Associate Professor. BA, Oberlin College; MA, PhD, Harvard University.

The department's faculty and staff are most open to questions about the program and its career potential. Persons seeking more information should visit the department in Arntzen Hall, or telephone (206) 676-3468. Written inquiries should be directed to the Department of Political Science, Western Washington University, Bellingham, Washington 98225.

BACHELOR OF ARTS

Major 65 credits

- Pol Sci 250

*Sabbatical Leave, Spring 1980.

- Additional credits selected from not fewer than four of the areas listed below; at least 20 credits in one area; at least 10 credits in another area. No course may be counted in more than one area.

Comparative Politics: Pol Sci 291, 301-309, 343, 365 or 366; 372, 401, 402, 406, 416, 417a, 417b, 417c, 417d, 417h, 430, 431, 432

Politics and Government: Pol Sci 340, 343, 345, 346, 353, 365 or 366, 417a, 417e, 423, 426, 427, 429, 440, 441, 443, 445b, 449, 450, 454, 455, 480, 481, 490

Public Policy and Administration: Pol Sci 320, 345, 346, 353, 365 or 366, 414, 415, 417g, 420, 421, 422, 423, 424, 425, 426, 427, 429, 444a,b, 454, 481

Public Law: Pol Sci 311, 313, 365 or 366, 410, 411, 414, 415, 416

Political Theory: Pol Sci 360, 365, 366, 417f, 424, 460, 461, 462, 463, 464, 465, 467, 480, 481

International Relations: Pol Sci 270, 305, 365 or 366, 376, 411, 417a, 417b, 417c, 417d, 445a, 470, 476

Minor 25 credits

- Pol Sci 250
 Remaining credits from at least 2 areas

Minor — Canadian and Canadian-American Studies 30 credits

Program Adviser: Dr. Gerard Rutan

See Interdepartmental Programs section for specification and description of Canadian Studies minor. A Canadian Studies major may be taken as a joint major with political science.

Minor — East Asian Studies 30 credits

Program Adviser: Dr. Henry Schwarz

This may be added to the major for a major concentration.

See Interdepartmental Programs section for specifications.

Major-Minor Concentration — Public Policy and Administration 99 credits, minimum

Program Adviser: Dr. Charles J. Fox

Students majoring in political science having a particular interest in governmental adminis-

Political Science

tration may choose a concentration in public policy and administration as an alternative to the 65-credit major. This option entails a major program with preparation relevant to problems and techniques of policy and administration in public agencies.

The total course requirement of 99-119 credits, depending upon course options selected, satisfies both a major and a minor in political science.

- English 101 (subject to waiver, see General University Requirements), and 301 or 302 or 401
- Speech 204 or 488
- Anth 201 or Soc 202
- Psych 201, and 320 or 315
- Econ 201
- Math 250 :Math 103 or qualifying exam a prerequisite)
- Acctg 251, 252, 356
- Pol Sci 250, 313 or 410, 320, 353, 365, 423, 424, 427, 429 or 465, and 463
- Plus *one* course from each of the following groups:
 - (1) BA 322 (BA 301 a prerequisite), Pol Sci 417g or 422
 - (2) Pol Sci 345, 346, 420, 421, 467, or Huxley 430, or one course from the Ethnic Studies program.
 - (3) Pol Sci 414, 425, 426, Econ 410 (Econ 202 or permission of instructor required), or 442 (Econ 202 or permission of instructor required)
 - (4) Pol Sci 440, 441, 443, 444a

Students choosing the public policy and administration concentration are encouraged to complete Math 156 as an elective within their total programs.

Modifications in the above program can be made through the public policy and administration adviser for those individual students having previous credit or work experience in areas covered by the listed courses.

Legislative internships are awarded on a competitive basis. See Pol Sci 443 catalog description.

Where possible, students choosing the public policy and administration concentration will serve in administrative internships in federal, state, or local government agencies. Credit toward the concentration for such internships is limited to a maximum of 10 credits with 5 of these in lieu of 5 credits from certain political science 300-400 courses. These arrangements must be made one quarter in advance on an individual basis through the public policy and administration adviser in the Political Science Department. See Pol Sci 444a,b catalog description.

BACHELOR OF ARTS IN EDUCATION

Program Adviser: Dr. Siegrun F. Fox

The Political Science Department participates in four programs for the student who is preparing to teach at the elementary and secondary levels. This participation is designed to help the student achieve the following objectives:

- (1) To learn the basic concepts of political science.
- (2) To know, to evaluate, and to be able to utilize current political science curricula.
- (3) To relate political issues to social studies education.

Those preparing for secondary school teaching may take either the political science-social studies major-minor concentration or a major approved by the School of Education plus the minor in political science, East Asian Studies, or Canadian American Studies. The minor is optional and intended for students who wish to broaden their teaching competency. (See also Program I Secondary Teaching under Education section.) Those preparing for elementary school teaching may take the political science courses which satisfy the academic study in-depth requirement for the elementary teacher professional concentration.

Major-Minor Concentration — Political Science-Social Studies

94 credits

See Interdepartmental Programs section for specifications.

Minor — Political Science 35 credits

- Pol Sci 101, 250, 270, 481
- Electives under departmental advisement to total 12 credits
- Soc St Ed 426

(Completion of this minor with a minimum 2.5 grade point leads to a teaching competency recommendation in political science.)

Minor — East Asian Studies 30 credits

See Interdepartmental Programs section for specifications.

Minor — Canadian and Canadian American Studies 30 credits

See Interdepartmental Programs section for specifications.

DEPARTMENTAL HONORS

In addition to the general requirements for all honors students, a political science major who wishes to graduate "with honors" must complete: Political Science 496 with the advice of the departmental honors adviser and two years of foreign language (or a satisfactory reading knowledge of a foreign language). He/she must also submit a senior thesis and have a grade average of 3.5 in upper-division political science courses.

INTERNSHIPS

Students are encouraged to obtain internships in state, local, or national government agencies, political parties, and interest groups. Credit may be obtained by prior arrangement. The academic relevance and adequacy must be determined by the department through a written evaluative report.

GRADUATE STUDY

For concentrations in political science and public policy and administration leading to the Master of Arts degree, see *Graduate Bulletin*.

COURSES IN POLITICAL SCIENCE

- 101 GOVERNMENT AND POLITICS IN THE MODERN WORLD (5)
Introduction to concepts of politics; types of governments, and political problems in the world today.
- 170 A CITIZEN'S GUIDE TO FOREIGN POLICY (5)
Issues and trends in international politics; United States foreign policy and how it is made; public influence on policy; sources of information on current events.
- 237, 337, 437 FOREIGN STUDY (2-5)
Prereq: Pol Sci 101 or equivalent. A study of political science topics particularly appropriate to the location of the course offering. These courses are offered only through the WWU Study Abroad program. Contact Foreign Study Office, Old Main 400, for information.
- 250 THE AMERICAN POLITICAL SYSTEM (5)
Consideration of the system and process of American politics and government with primary focus on the national level.
- 270 INTRODUCTION TO INTERNATIONAL POLITICS (5)
Interaction of states and other factors in the international system in terms of basic relationships of war and peace.
- 291 INTRODUCTION TO COMPARATIVE POLITICS (5)
Basic structures, functions, and socio-cultural environments of foreign political systems; methods of comparative study.
- 301 BRITISH MODEL PARLIAMENTARY SYSTEMS (5)
Prereq: Pol Sci 101 or 250 (or Lib St 200 with permission of instructor) or 291. Introduction to parliamentary political systems; analysis of selected structures; examination and comparison of selected parliamentary polities.
- 302 WESTERN EUROPE (5)
Prereq: Pol Sci 101 or 291. Governments and politics of selected western European states.
- 303 SOVIET UNION AND EASTERN EUROPE (5)
Prereq: Pol Sci 101 or 291. The political system of the Soviet Union and other communist states in Eastern Europe.
- 304 LATIN AMERICA (5)
Prereq: Pol Sci 101 or 291. Political, socio-economic and cultural problems of Latin America.
- 305 INTERNATIONAL POLITICS IN THE MIDDLE EAST (3)
Prereq: Pol Sci 101 or 170 or 270. The interplay of Zionism and Arab nationalism; the individual and collective responses of the Arab states to the creation of Israel.
- 307 EAST ASIA (5)
Prereq: Pol Sci 101 or 291. Survey course covering China, Japan, and Korea since the mid nineteenth century.
- 308 SUB-SAHARAN AFRICAN POLITICAL SYSTEMS (5)
Prereq: Pol Sci 101 or 291. Politics of independent black African states with emphasis on nation-building and economic development; governments of white dominated southern portion. Not offered every year.
- 309 SOUTHEAST ASIA (5)
Prereq: Pol Sci 101 or 291. Selected political systems.
- 311 JURISPRUDENCE (5)
Prereq: Pol Sci 250 (or Lib St 200 with permission of instructor). An introduction to the origins of the legal and juridical systems found in the Western world; emphasis upon jurisprudential development, philosophies, and legal structures. Examination of legal reasoning, terminology, and concepts.
- 313 AMERICAN CONSTITUTIONAL LAW (5)
Prereq: Pol Sci 250 and upper-division standing. Significant Supreme Court decisions in interpreting major parts of the Constitution. Emphasis on the development of constitutional law in the areas of separation of powers, federal division of powers, and individual civil rights.
- 320 PUBLIC ADMINISTRATION (5)
Prereq: Pol Sci 250 (or Lib St 200 with permission of instructor), or one course from Psych 201 or 340, Econ 201, or BA 101. Consideration of contemporary concepts of organizational structure and behavior, administrative processes and procedures, and individual behavior in complex public organizations.
- 340 POLITICAL PARTIES (5)
Prereq: Pol Sci 250 (or Lib St 200 with permission of instructor). The origin, development, structure, organization, and activities of political parties. Various party theories are presented and discussed in the light of current political conditions and changing patterns of political participation and political leadership.
- 343 POLITICAL COMMUNICATION (5)
Prereq: Pol Sci 101 or 250 (or Lib St 200 with permission of instructor). Channels of communication in politics as they affect policy-making, political and electoral behavior, and political development; the role of face to face communication, communication within and between political organizations, the media, political polling, and political propaganda in the political process.
- 345 WOMEN AND POLITICS (3)
Prereq: Pol Sci 101 or 250 (or Lib St 200 with permission of instructor). Exploration of the history and current ideas of women's organizations. Investigation of the changing role of women in American politics including legal status, economic position, and political behavior. Not offered every year.

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- 346 POVERTY, MINORITIES, AND GOVERNMENT (5)**
Prereq: Pol Sci 250 (or Lib St 200 with permission of instructor). Federal, state, and local programs affecting minorities and the poor especially in large city ghettos; some emphasis on Washington State.
- 353 STATE AND LOCAL POLITICAL SYSTEMS (5)**
Prereq: Pol Sci 250 (or Lib St 200 with permission of instructor). Sub-national levels of government and intergovernmental relations; developing and administering policies for problems of race, population, pollution, crime, poverty, housing, resource depletion.
- 360 INTRODUCTION TO POLITICAL THEORY (5)**
Prereq: Pol Sci 101 or 250 (or Lib St 200 with permission of instructor). Origin and evolution of major concepts of political theory.
- 365 POLITICAL INQUIRY (5)**
Prereq: Pol Sci 101 or 250 (or Lib St 200 with permission of instructor). Introduction to methods of political analysis with emphasis upon the contribution of science and philosophy to political knowledge and political action. Techniques for identifying and defining problems for analysis.
- 366 RESEARCH IN POLITICS (5)**
Prereq: Pol Sci 101 or 250 (or Lib St 200 with permission of instructor). Fundamentals of research design, including basic methods for the collection and analysis of political data.
- 372 POLITICAL CHANGE: AN INTRODUCTION TO POLITICAL DEVELOPMENT (5)**
Prereq: Pol Sci 101. Basic concepts such as modernization, social mobilization, institutionalization examined in a few selected countries.
- 376 AMERICAN FOREIGN POLICY (5)**
Prereq: Pol Sci 250 or 270. Background organization of American foreign policy; the conduct of diplomatic relations with other states; current issues and problems in foreign affairs.
- 400 DIRECTED INDEPENDENT STUDY (1-6)**
Conference Course Permit required from instructor before registering.
- 401 LEFTIST PARTIES AND MOVEMENTS (3)**
Prereq: Pol Sci 291. The comparative study of leftist parties and protest movements in the politics of industrialized democracies with parliamentary systems, especially Italy, France, and Japan.
- 402 REGIONAL EUROPEAN SOCIETY AND POLITICS (3)**
Prereq: Pol Sci 101 or 291. Government and society in selected countries from the Scandinavian, Alpine, Benelux and Iberian European regions.
- 406 CANADA (5)**
Prereq: Pol Sci 250 (or Lib St 200 with permission of instructor) or 291. Canadian social and political systems; governmental structures and functions; social, political, economic problems and foreign relations.
- 410 LAW AND SOCIETY (5)**
Prereq: Pol Sci 250 (or Lib St 200 with permission of instructor). A comparative study and analysis of public policy on outstanding contemporary socio-political issues.
- 411 INTERNATIONAL LAW (5)**
Prereq: Pol Sci 270. Origin, principles, and problems. Not offered every year.
- 413 LAW AND PUBLIC ADMINISTRATION (5)**
Prereq: Pol Sci 313 and 320. Consideration of the relationships between the law, organizational behavior, and the public administrative process. Consideration of law in relation to agency mission, agency interests, and strategies of program implementation. Not offered every year.
- 414 THE REGULATORY PROCESS (3)**
Prereq: Pol Sci 320. Administrative regulation in relation to the political process. Not offered every year.
- 415 CRIMINAL JUSTICE SYSTEMS (3)**
Prereq: permission of instructor. Introduction to the study and practice of law, with particular reference to the formulation of criminal law, law enforcement, judicial administration, and the administration of penal and corrective policy in the United States.
- 416 COMPARATIVE LEGAL CULTURES (3)**
Prereq: Pol Sci 311 or 313. Contemporary foreign legal cultures/systems, e.g., in Great Britain (common law tradition), France (continental European civil law tradition), USSR (socialist law), compared/contrasted with the U.S. legal culture/system, etc.; and specific or functionally selected aspects of them and trans-national legal problems.
- 417 SEMINARS IN SPECIAL PROBLEMS (2-3)**
- 417a State Policy, Espionage, and Intelligence Utilization (3) Prereq: permission of instructor
 - 417b Seminar in International Politics (3) Prereq: Pol Sci 270.
 - 417c Contemporary Latin American Issues (3) Prereq: Pol Sci 304.
 - 417d Selected Problems in East Asian Politics (3) Prereq: Pol Sci 307.
 - 417e Electoral Politics Workshop (2)
 - 417f Political and Social Simulations (3)
 - 417g Modern Bureaucratic Politics (3) Prereq: Pol Sci 320
 - 417h Contemporary Canadian Politics (3) (Not offered every year.)
- 420 ENVIRONMENTAL POLITICS AND ADMINISTRATION (5)**
Prereq: Pol Sci 320. Problems in air and water pollution, forest policies, food supply, minerals, recreation and wilderness areas, and power. Not offered every year.
- 421 METROPOLITAN AREA GOVERNMENT (5)**
Prereq: Pol Sci 353. Decision-making structures of central city and suburban political systems; regional interaction, federal-state-local relations; problems related to minorities, poverty, and growth.
- 422 STAFFING THE PUBLIC BUREAUCRACY (5)**
Prereq: Pol Sci 320. Comparative analysis of public personnel systems in selected countries, with special attention to the United States; general principles of public administration and specialized aspects such as recruitment, training, and employee morale. Not offered every year.
- 423 THE AMERICAN PRESIDENCY (3)**
Prereq: Pol Sci 250 (or Lib St 200 with permission of instructor). The growth of presidential power; the institutionalized presidency, and styles of presidential leadership. The president as party leader, policy initiator, chief executive, commander-in-chief, and head of foreign relations.
- 424 THEORY OF PUBLIC ORGANIZATIONS (5)**
Prereq: Pol Sci 320. Consideration of organization theory as related to public organizations and the political system.
- 425 THE BUDGETARY PROCESS (5)**
Prereq: Pol Sci 320. Consideration of public budgeting as both a political and administrative process.
- 426 POLITICS AND PUBLIC FINANCE (5)**
Prereq: Pol Sci 250 or Lib St 200 with permission. Consideration of the American political system as it relates to the development and maintenance of the structure of taxation and the distribution of governmental benefits.

427 POLICY-MAKING AND POLICY ANALYSIS (5)

Prereq: Pol Sci 250 (or Lib St 200 with permission of instructor). Consideration of the relationships between political, economic and social inputs into policy-making systems and the nature and consequences of policy outputs for various groups and sectors of the polity. Particular attention is paid to the possibility and problems of objective analysis conducted from within the boundaries of the subject political system.

429 ADMINISTRATION AND DEMOCRACY (5)

Prereq: Pol Sci 320. Relationships of various administrative forms, processes, and behaviors to varying theoretical conceptions and empirical descriptions of democracy. Not offered every year.

430 MODERN CHINESE POLITICS (5)

Prereq: Pol Sci 307. Governments and political movements in the twentieth century.

431 MODERN JAPANESE POLITICS (5)

Prereq: Pol Sci 291 or 307. Politics and government since the Meiji Restoration. Japan as a case study of political development; political, socio-economic, and cultural problems in contemporary Japan.

432 MODERN KOREAN POLITICS (3)

Prereq: Pol Sci 307. The development of modern Korean political systems from the 19th century to the present. The contemporary political systems of both North and South Korea will be considered. Not offered every year.

440 STATE LEGISLATURES (5)

Prereq: Pol Sci 353. Interaction of elected executives, legislators, administrators, political parties, pressure groups, the press, and public in the legislative process at the state level, with some emphasis on Washington State.

441 CONGRESS: PEOPLE AND POLITICS (5)

Prereq: Pol Sci 250 (or Lib St 200 with permission of instructor). The politics and policies of the National Congress in the internal organization of the U.S. Senate and House of Representatives and in their external relations with the President, the bureaucracy, interest groups, and the voters. Not offered every year.

443 LEGISLATIVE INTERNSHIP (5-15)

Prereq: permission of department. Internship in the Washington State Legislature during winter quarter; assignment is primarily as research assistant to a legislator. Enrollment limited to the number of internships allocated by the Legislature. Open only to juniors and seniors, competitively selected.

444a,b ADMINISTRATIVE INTERNSHIP (5, 5)

Prereq: two courses in public administration area and permission of department. Part-time internships in administrative agencies of the federal, state, and local governments. Priority given to seniors. Where the number of applicants exceeds the available intern positions, competitive selections will be made. Requests for internships should be filed with the department one quarter in advance of registration for this course.

445a CURRENT TRENDS IN INTERNATIONAL POLITICS (3)

Prereq: Pol Sci 101 or 250 (or Lib St 200 with permission of instructor) or equivalent. Current events in the light of long term trends in world politics; attention to sources of information and scholarly as well as journalistic interpretations of events.

445b CURRENT PROBLEMS IN AMERICAN GOVERNMENT AND POLITICS (3)

Prereq: upper-division standing. Discussion and assessment of current changes in the laws, institutions, policies and political processes of American government. Issues and problems, drawn from scholarly journals, journals of opinion, magazines, and newspapers, will provide focus. This course will study current changes and contemporary issues and problems from both a scholarly and journalistic perspective.

448 LEGISLATIVE PROCESSES (3)

Prereq: Pol Sci 353. A seminar focused on activities of special interest groups, agencies of state government, and the Executive Branch as they contribute to and affect state legislative processes. Particular attention given to budgeting, program planning, partisan issues, and the activities of public agencies seeking legislative action and financial support. Emphasis will be upon Washington State's bicameral system and the legislative systems of other states as appropriate.

449 POLITICS AND SOCIAL CHANGE (3)

Prereq: upper-division standing. Selected controversies in contemporary American society and the phenomena of related political activities. It is assumed that changes in social values will appear as abrasions to the established political order. Emphasis given to agencies of national and state government affected by the responses of the political system(s) to the pressures of groups manifesting varying social and economic values.

450 POLITICS, CAMPAIGNS AND ELECTIONS (5)

Prereq: Pol Sci 250. Voters and voting behavior; candidates and campaign strategy; the resources of politics — workers, money, and mass media. Not offered every year.

454 POLITICS OF HOUSING (5)

Prereq: Pol Sci 250 or Lib St 200. The role of government in housing and historic preservation; public policy formulation and administration, interface with the private sector; availability of affordable housing; public housing, urban renewal, historic preservation, displacement, and New Towns; Canadian, European, and other examples. Not offered every year.

455 COMMUNITY POWER STRUCTURES (5)

Prereq: Pol Sci 353. Interrelation of formal and informal decision-making structures at metropolitan and regional levels and below; power structure and "elite" literature. Not offered every year.

460 POLITICAL THEORY: ANCIENT AND MEDIEVAL (3)

Prereq: Lib St 121 or Pol Sci 360. Origin and evolution of major concepts in Western political thought from Pericles to Machiavelli. Not offered every year.

461 POLITICAL THEORY: RENAISSANCE AND MODERN (3)

Prereq: Lib St 122 or Pol Sci 360. Origin and evolution of major concepts in Western political thought from Machiavelli to Edmund Burke. Not offered every year.

462 POLITICAL IDEOLOGY (3)

Prereq: Lib St 123 or Hist 107 or Pol Sci 360. Origin and evolution of ideology. Liberalism, conservatism, socialism, anarchism, Marxism, fascism, national socialism, and their contemporary variants.

463 AMERICAN POLITICAL THOUGHT (5)

Prereq: History 203, 204, or equivalent, or Pol Sci 101 and/or 250 (or Lib St 200 with permission of instructor). Major concepts in American political thought from the Colonial period to the present.

464 CONTEMPORARY POLITICAL THEORY (5)

Prereq: Pol Sci 360. Recent developments in formal theory, including contributions from behaviorism, modern political economy, holistic or system theories, and normative theory.

465 THEORIES OF DEMOCRACY (3)

Prereq: Pol Sci 360. Survey and analysis of theories of democracy, from ancient to modern. Normative and empirical theories with emphasis on contemporary theory and research findings. Not offered every year.

Political Science

467 POLITICS, TRANSFORMATION AND ENVIRONMENT (4)

Prereq: Pol Sci 101 or 250. Incompatibility between the growth-oriented goals of contemporary political cultures and environmentally derived "steady-state" imperatives. Alienation and environmental degradation as the dual result of the "conquest of nature" ideology. The politics of transformation and value-change. (Also offered as Huxley 467.)

470 NATIONAL DEFENSE POLICY (5)

Prereq: Pol Sci 270. Causes of military competition; weapons and strategy; defense spending; arms control, disarmament, and other alternatives to arms races.

476 CHINA, JAPAN AND THE U.S.: WAR AND PEACE IN EAST ASIA (5)

Prereq: Pol Sci 270 or 307. Background, contemporary problems, and future alternatives in American-East Asian relations. Emphasis on role of cultural images, foreign policy decision-making, diplomatic and economic relations in bringing about conflict or alliance.

460 POLITICS, GOVERNMENT, AND RELIGION (3)

Prereq: permission of instructor. Relationships between political activity and government structures on the one hand, and religious perceptions and organizations on the other; problem areas in relationships between politics, government, and religion; role of religion (perceptions and organizations); in modern political life and governmental structures. Not offered every year.

481 POLITICAL SOCIALIZATION (5)

The content, process, and function of political socialization at individual, institutional and societal levels.

482 TEACHING POLITICS AND GOVERNMENT (5)

Prereq: 15 credit hours in political science and Soc Sci Ed 425 or 426 or teaching experience. The course surveys and evaluates current and proposed political science curricula in the elementary and secondary schools. Teaching materials are evaluated in terms of stated objectives and influence upon student political orientations and behavior. Also covered is current research on the influence of the school upon student political socialization. This course is intended for experienced and pre-service teachers. Not offered every year.

483a,b SIMULATION AND GAMES WORKSHOP IN POLITICS (2 ea)

Prereq: junior or senior status. Games and simulations of political processes related to social studies teaching at the middle school and high school levels. (a) Simulation introduction and administration. (b) Simulation evaluation and construction.

490 SENIOR SEMINAR IN AMERICAN GOVERNMENT AND POLITICS (5)

Prereq: senior standing, political science majors only, except with permission. Advanced analysis and evaluation of American politics and government. Emphasizes contemporary theory and approaches in the literature.

496a,b,c HONORS TUTORIAL (2-5 ea)

GRADUATE COURSES

The following courses are offered for graduate credit for persons enrolled in the department's graduate program. For course descriptions and other information about the graduate program, see the current Graduate Catalog.

500 SPECIAL PROJECTS (1-6)

Individual conference.

501 POLITICAL SCIENCE AS A DISCIPLINE (5)

502 RESEARCH TECHNIQUES IN POLITICAL SCIENCE (5)

503 PUBLIC POLICY AND ADMINISTRATION (5)

505 SEMINAR IN COMPARATIVE GOVERNMENT AND POLITICS (5)

510 SEMINAR IN AMERICAN PUBLIC LAW (5)

520 SEMINAR IN PUBLIC ORGANIZATIONAL THEORY (3)

521 SEMINAR IN PUBLIC POLICY ANALYSIS (3)

523 SEMINAR IN POLITICS AND PUBLIC FINANCE (3)

525 SEMINAR IN MODERN POLITICAL ECONOMY (3)

530 SEMINAR IN MODERN CHINESE POLITICS (3)

531 SEMINAR IN MODERN JAPANESE POLITICS (3)

540 SEMINAR IN THE POLITICAL PROCESS (5)

550 SEMINAR IN STATE AND LOCAL GOVERNMENT (3)

560 SEMINAR IN POLITICAL THEORY (3)

690 THESIS (6-9)





PSYCHOLOGY

College of Arts and Sciences

For much of the recorded history of serious inquiry about the nature of things, scholars have repeatedly called for the study of man himself. Yet the study of psychology as the scientific investigation of man's behavior and experience is, in this decade, rounding out only its first century of existence. As a new field of inquiry, psychology offers an unusually large number of unexplored and dynamic frontiers for those who are seriously interested in understanding man's adjustments and maladjustments to his complex environment.

Although psychologists are now found in a vast number of different areas of employment, they are basically distributed into two broad categories: research and applied psychology. Psychologists may now be found in the communications media, aerospace industry, computer technology, social service, environmental protection, mental hospitals

and mental health clinics, population control, vocational guidance clinics, public schools, foreign service, engineering design, advertising, personnel work and many more. The largest numbers will be found in the practice of counseling and psychotherapy and in the colleges and universities doing teaching and research.

Active participation by students in this rapidly-expanding branch of knowledge is a major goal of the programs of undergraduate study of psychology at Western. This participation takes a number of different forms but among the most significant of these are:

- Formal classwork and seminars
- Individual research which begins after the first course and early in the student's university career
- Work on individual projects jointly with faculty members
- Participation in selected off-campus

field experiences which cannot be duplicated in classroom or laboratory

With a faculty of more than 30 men and women, all of whom hold the doctoral degree, the department is able to offer a general program and advanced study in most of the specialized areas of psychology. A core program in general psychology is offered to insure that all students will experience a sound basic background that will provide effective preparation for advanced study as well as a meaningful basis for a liberal education. Since the number of required courses is relatively small, students can complete the major from a variety of course offerings under advisement. Planned concentrations have been designed to guide students who wish to complete their requirements beyond the core program by following a prescribed program of studies in the following areas: Mental Health Services, Child Development, Social Psychology, Industrial Psychology, Biopsychology, Humanistic Psychology. These concentrations are described following the description of the core requirements. Additional concentrations can be designed in cooperation with the student's adviser.

Recognizing that active learning experiences are most beneficial to the student, the department encourages students to become personally involved in research projects of their own design or in the many on-going research interests of the faculty. The core curriculum includes experiences which develop the student's ability to participate effectively in a wide variety of research activities.

In addition to its undergraduate offerings the department offers the M.S. degree in General Psychology, with concentration available in School Psychology. In cooperation with the Department of Education, the M.Ed. degree is offered in School Counseling. Complete descriptions of these programs are included in the Graduate Bulletin.

PSYCHOLOGY FACULTY

- PETER J. ELICH (1961) Chairman.
Professor. BA, University of Washington; MEd, Western Washington State College; PhD, University of Oregon.
- HENRY L. ADAMS (1957) Professor. BA, MA, University of Kentucky; PhD, University of Illinois.
- DON F. BLOOD (1951) Professor of Psychology and Director of Testing. BA in Ed, Central Washington State College; MA, PhD, State University of Iowa.
- WILLIAM C. BUDD (1953) Professor. BA, Hamline University; BS, MA, PhD, University of Minnesota.
- STEPHEN L. CARMEAN (1964) Professor. BA, MA, PhD, University of Illinois.
- LOWELL T. CROW (1968) Professor. BS, MA, University of South Carolina; PhD, University of Illinois.

- GEORGE T. CVETKOVICH (1969) Professor. BA, Youngstown State University; MA, Akron State University; PhD, Kansas State University.
- CAROL J. DIERS (1963) Professor. BA, BA in Ed, Western Washington State College; MA, University of British Columbia; PhD, University of Washington.
- FREDERICK W. GROTE, JR. (1970) Associate Professor. AB, Dartmouth College; PhD, University of North Carolina.
- ELVET G. JONES (1957) Professor. BA, MA, University of British Columbia; PhD, University of Minnesota.
- B. L. KINTZ (1965) Professor. AB, MA, PhD, University of Iowa.
- RONALD A. KLEINKNECHT (1970) Professor. BA, MS, PhD, Washington State University.
- LOUIS G. LIPPMAN (1966) Professor. BA, Stanford University; MA, PhD, Michigan State University.
- MARCIA Z. LIPPMAN (1969) Associate Professor. BA, MA, Michigan State University; PhD, University of British Columbia.
- WALTER J. LONNER (1968) Professor. BA, MA, University of Montana; PhD, University of Minnesota.
- WILLIAM R. MACKAY (1962) Associate Professor. AB, Brown University; MA, EdD, University of California, Berkeley.
- ROBERT D. MARX (1970) Associate Professor. AB, University of Michigan; PhD, University of Illinois.
- EVELYN P. MASON (1959) Professor. BA, Mills College; MA, PhD, Washington University.
- ROBERT D. MEADE (1965) Professor. BA, Indiana University; MA, PhD, University of Pennsylvania.
- HAYDEN L. MEES (1970) Professor. AB, University of California; MS, PhD, University of Washington.
- LAURENCE P. MILLER (1968) Associate Professor. BA, University of California, Los Angeles; MA, San Fernando Valley State College; PhD, The Ohio State University.
- FRANK A. NUGENT (1961) Professor. BS, New Jersey State Teachers College; MA, Columbia University; PhD, University of California, Berkeley.
- DAVID M. PANEK (1965) Associate Professor. BA, Beloit College; MS, University of Wisconsin; PhD, Washington State University.
- NORVAL L. PIELSTICK (1973) Associate Professor. BA, Linfield College; MA, Washington State University; PhD, University of Illinois.
- MERLE M. PRIM (1969) Associate Professor. BA, University of Washington; MS, San Diego State College; PhD, Washington State University.
- EARL R. REES (1970) Associate Professor. BA, Southern Illinois University; MA, PhD, Brown University.
- RONALD W. SHAFFER (1970) Associate Professor. BA, California State College, Los Angeles; MA, PhD, University of New Mexico.
- CHRISTOPHER J. TAYLOR (1968) Professor. AB, Wittenberg University; MS, PhD, Ohio University.
- SAUNDRA J. TAYLOR (1968) Associate Professor. BA, DePauw University; MA, Bowling Green State University; PhD, Ohio University.
- RICHARD W. THOMFSON (1967) Professor. BA, MA, PhD, Michigan State University.
- *ROBERT M. THORNDIKE (1970) Professor. BA, Wesleyan University; PhD, University of Minnesota.
- VERNON O. TYLER, JR. (1965) Associate Professor. BS, University of Washington; MA, University of Iowa; PhD, University of Nebraska.
- JAMES W. WILKINS, JR. (1967) Associate Professor. AB, MA, Kent State University; PhD, Michigan State University.
- PAUL WOODRING (1939) Distinguished Service Professor Emeritus of the University. BSEd, Bowling Green State University; MA, PhD, Ohio State University. Honorary degrees: LHD, Kalamazoo College; PhD, Coe College; LittD, Ripon College; LHD, Bowling Green State University; LLD, University of Portland.

*On Sabbatical Leave 1979-80

BACHELOR OF ARTS**Major** 60 credits*Required Courses*

- Psych 201, 306, 307
- Two courses from Psych 311-316
- Two courses from Psych 321-326
- One course from Psych 401-403
- One course from Psych 404-406
- One course from Psych 411-412
- In addition to the required courses, an additional 15 elective credits in psychology are required. Consult your adviser in psychology for assistance in selecting your elective courses.

Elective Concentrations

The core program of required courses is designed to insure a solid background in general psychology. The requirements for the B.A. in psychology can be met by the 45 credit core program and any 15 credits in psychology. Several concentrations of elective courses have been developed to guide students in the selection of their elective credits.

General: Advisers — C. Diers and P. Elich
Students who wish to maximize breadth of study in psychology are advised to select their electives according to the following program.

- At least one course from each of the following pairs: Psych 311, 312; 313, 314; 315, 316; 321, 322; 323, 324; 325, 326
- Two courses from each of the following groups: Psych 401-403; 405, 407

Mental Health Services: Advisers — R. Marx and D. Panek

- Core program to include: Psych 313, 314, and one course from 311, 312, 315, 316
- Psych 402, 432, 433
- Two quarters of Psych 449

Child Development: Adviser — F. Grote

- Core program plus three courses from Psych 457-461

Social Psychology: Adviser — G. Cvetkovich

- Core program to include Psych 315, 403
- Two of the following: Psych 335, 440, 441
See Sociology for related course offerings.

Industrial Psychology: Adviser — C. Taylor

- Core program to include Psych 311, 315, 321, and 322 (312 and 313 recommended)
- Psych 320 and 420

Biopsychology: Advisers — R. Thompson, L. Crow and M. Prim

- Core program to include: Psych 312, 316, 325, 326, 403, 406
- Electives from Psych 321-324, 335; Biol 310, 312, 366, 370, 424, 460, 465, 467, 490

Students who are planning to pursue graduate study in psychology are advised to take a supporting sequence of 15 credits (beyond the 101 survey course) in biology, chemistry, mathematics or physics.

Minor 24 credits

- Psych 201
- One course from Psych 311-316
- One course from Psych 321-326
- Electives under advisement (Psych 305, 306, 307 are recommended)

BACHELOR OF ARTS IN EDUCATION**Major** Elementary

Prospective elementary teachers are advised to take the Arts and Sciences concentration in Child Development.

Minor 20 credits

- Psych 201
- 15 credits in psychology other than the required professional educational psychology courses; recommended courses include 306, 307

DEPARTMENTAL HONORS

In addition to the general requirements for all honors students, a psychology major who wishes to graduate "with honors" will develop a program of studies with the departmental honors adviser, complete Psychology 425 and prepare a thesis which he will defend before a faculty committee.

GRADUATE STUDY

For concentrations in psychology leading to the Master of Education, the Master of Arts, or the Master of Science degrees, see *Graduate Bulletin*.

COURSES IN PSYCHOLOGY

Courses in educational psychology include Psych 316, 351, 352, 353, 371, 372, 451. With the exception of Psych 316 and 353, these courses are not applicable to the arts and sciences major or minor.

Also see Liberal Studies 105.

Psychology

- 100 INTRODUCTION TO COLLEGE LEARNING (1)**
Basic skills in effective study habits. Major topics are: time management and motivation, reading improvement, classroom notetaking, studying a textbook, writing papers, using the library, studying for exams, taking exams. Emphasis is on practical application. S/U grading.
- 201 INTRODUCTION TO PSYCHOLOGY (5)**
Examination of basic psychological processes utilizing results of research investigations; participation in at least two experiments or equivalent activities.
- 219 PSYCHOLOGY OF SEX ROLES (4)**
This course will examine major personality theories and their philosophical assumptions; historical perspective and empirical findings about sex roles, culturally and cross-culturally. The course will focus on the psychological ramifications of sex role development for men and women.
- 220 HUMAN ADJUSTMENT (3)**
Prereq: Psych 201. Psychological perspectives on the experiences and problems human individuals encounter in daily living, self-understanding in terms of love, work, interpersonal relations, meaning and values, stages, and content of the course of human life experience from birth to death.
- 245 CURRENT ISSUES FOR COUNSELOR AIDES (3)**
Prereq: permission of instructor. Designed for counselor aides employed in schools and tribal education programs. Identification of the responsibilities and roles of counselor aides. Students will identify the responsibilities and roles which are a part of their work as counselor aides.
- 246 FIELD EXPERIENCES FOR COUNSELOR AIDES (3)**
Prereq: permission of instructor. Designed for counselor aides employed in schools and tribal education programs which offer services to Indian students and community members. Aides will learn how to develop work schedules, plans for referrals, and planning meetings with parents, students and school staff.
- 300 DIRECTED INDEPENDENT STUDY (1-6)**
Conference Course Permit required from instructor before registering.
- 305 ADVANCED GENERAL PSYCHOLOGY (5)**
Prereq: Psych 201. An integrative course covering broad philosophical issues in psychology as well as more specific issues of contents and methodologies in psychology. Specific content areas include psychophysics, perception, learning and memory, cognitive processes, motivation, and analyses of decision making and problem solving.
- 306 EXPERIMENTAL PSYCHOLOGY AND STATISTICS I (5)**
Prereq: Psych 201. Introduction to experimental methodology in psychology and statistical treatment of results. Lectures and laboratory.
- 307 EXPERIMENTAL PSYCHOLOGY AND STATISTICS II (5)**
Prereq: Psych 306. Design and conduct of psychological research investigations and statistical treatment of results; individual research project; lectures and laboratory.
- 311 PSYCHOLOGICAL TESTS AND MEASUREMENT (5)**
Prereq: Psych 201. Philosophy, history and development of psychological measurement. Reliability, validity, standardization and norms. A study of representative tests of intelligence, special abilities, personality, interests and values. Students will review non-restricted instruments of various types in small groups.
- 312 PSYCHOLOGY OF INDIVIDUAL DIFFERENCES (5)**
Prereq: Psych 201. Research strategies, correlational procedures and inferential processes. The nature-nurture question. Elements of genetics, heredity and behavior genetics. Dimensions of differences in intelligence by race, social class, age and sex. The effect of cultural influences on intelligence.
- 313 PERSONALITY (5)**
Prereq: Psych 201. An examination of the three major approaches to personality development: psychodynamic, behavioral and humanistic. Historical and philosophical development; research issues; and current applications.
- 314 ABNORMAL PSYCHOLOGY (5)**
Prereq: Psych 201. Human behavior patterns culturally labeled as abnormalities, or as mental illness; their etiology, incidence, treatment, and social attitudes toward such patterns. Presents an historical review of the concepts used to explain such behavior and a review of the research relating to the treatment of psychoses and neuroses.
- 315 SOCIAL PSYCHOLOGY (5)**
Prereq: Psych 201. Socialization (moral development, racial, ethnic and class differences), attitudes and attitude change, conformity, interpersonal attraction. Theories and methods of social psychology stressing applicability of social psychological research and knowledge to contemporary social problems.
- 316 DEVELOPMENTAL PSYCHOLOGY (5)**
Prereq: Psych 201 or Lib St 105. Basic principles of development. Topics include behavior genetics, early experience, language, cognition, personality, and social development.
- 317 HUMAN SEXUALITY (5)**
Prereq: Psych 201. Developmental aspects of sexuality, physiology and anatomy of sex, human sexual behavior, sex roles and stereotypes, sexism, homosexuality, treatment of sexual problems, research in sexuality. A research or term paper required.
- 318 PSYCHOLOGY AND CULTURE (3)**
Prereq: Psych 201. Cultural and ecological factors and their effect on perception, thinking, language, intelligence, sexuality, and other psychological variables. An examination of the "universality" of traditional Euro-American psychological theories.
- 320 INDUSTRIAL PSYCHOLOGY (4)**
Prereq: Psych 201 or Lib St 105. Application of psychological principles to industrial problems of personnel selection and appraisal, human relations, marketing, training, and engineering psychology.
- 321 LEARNING (5)**
Prereq: Psych 201. A survey of the major principles of learning, with special emphasis upon the sources of, evidence for, and theoretical implications of these principles. May be substituted for Psych 351 for teacher certification.
- 322 MOTIVATION (5)**
Prereq: Psych 201. Theoretical and empirical study of human and subhuman motivational process. Topics covered range from basic physiological drives to achievement motivation and conformity. Emphasis on both biological and social sources of motivation.
- 323 SENSORY PROCESSES (5)**
Prereq: Psych 201. The mechanisms by which man and lower animals process information through various sensory modalities. The adaptive significance of sensory processes.
- 324 PERCEPTION (5)**
Prereq: Psych 201. Classical and contemporary descriptions of human perceptual behavior are discussed together with specific perceptual phenomena such as perceptual constancies, perception of intersensory stimuli, creativity, and levels of awareness. Examples are drawn from music, art, verbal and nonverbal communication.
- 325 COMPARATIVE PSYCHOLOGY (5)**
Prereq: Psych 201. Phylogenetic comparison of animal behavior, learning, motivation and sensory processes in selected species of animals.

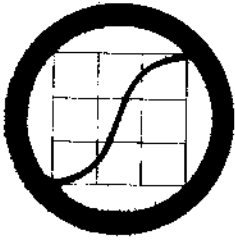
- 326 PHYSIOLOGICAL PSYCHOLOGY (5)**
Prereq: Psych 201. The biological foundations of behavior.
- 330 CONSUMER PSYCHOLOGY (3)**
Prereq: Psych 201. Psychological factors useful to suppliers, and users, of goods and services: perception, attitudes, emotions, motivation, decision-making and communication relevant to product design, packaging, advertising, merchandising and customer service.
- 335 SOCIAL BEHAVIOR IN ANIMALS (3)**
Prereq: Psych 201. Comparison of social organization and behavior patterns in various species; aggression, population control, communication systems; evolution of behavior. Normally offered alternate years.
- 342 THINKING AND IMAGINATION (3)**
Prereq: Psych 201. Discussions and/or demonstrations of logical and intuitive thinking, creativity, symbolism and fantasy. Consideration of the relationships of patterns of thinking and brain activity and of the implications of differences in cognitive style.
- 344 ALTERED STATES OF CONSCIOUSNESS (3)**
Prereq: Psych 201. Research and theory concerned with various "states" of consciousness; sleeping and dreaming, hypnosis, effects of psychoactive drugs, meditation and lateralization of function in the cerebral hemispheres.
- 346 PSYCHOLOGY OF RELIGION (3)**
Prereq: Psych 201 or Lib St 105. A study of certain major works in the psychology of religion. Works by James, Freud and Jung will be included.
- 347 HUMANISTIC PSYCHOLOGY (5)**
Prereq: Psych 313. Course will review the personality theories, practices and research generated by the contemporary humanistic view of man. Some work of such leaders in this third force in psychology as Adler, Allport, May, Maslow, Rogers, Frankl and Fromm.
- 349 PSYCHOLOGY IN LITERATURE (3)**
Prereq: Psych 201. Approximately ten literary works with an especial psychological content will be examined primarily through class discussion. A majority of the books will be twentieth century American and European novels. Novels will be selected because of their literary description of various psychological phenomena. Each will be analyzed in terms of appropriate psychological theories and concepts.
- 351 PSYCHOLOGY OF HUMAN LEARNING AND INSTRUCTION (3)**
Prereq: Lib St 105 or Psych 201; not open to those with credit in 321. Application of psychological principles of learning to classroom teaching.
- 352 CHILD DEVELOPMENT AND EDUCATION (3)**
Prereq: Psych 351 (may be taken concurrently). Basic principles of development, with special attention to the pre-school and elementary school age child.
- 353 ADOLESCENT PSYCHOLOGY (4)**
Prereq: Psych 351 or 201. Basic principles of development with special attention to the secondary school age child; implications for educational practices.
- 355 PSYCHOLOGY OF CHILD REARING (3)**
Prereq: Psych 201. Models of early experience; bonding and attachment; day care; discipline; parental influence on social and cognitive development; child abuse; cultural variations.
- 357 ADULT DEVELOPMENT AND AGING (4)**
Prereq: Psych 201. Development during adulthood, aging and the life-span perspective on development; biology and aging; perception, learning, and memory; intelligence and problem-solving ability; personality and aging—crisis and challenge at different life stages; careers; psychopathology; and death and dying.
- 371 EVALUATION IN THE SECONDARY SCHOOL (3)**
Evaluation of student achievement in secondary school with particular emphasis upon teacher-made tests and application of statistical procedures to test results.
- 372 EVALUATION IN THE ELEMENTARY SCHOOL (2)**
Basic techniques for evaluation of student achievement, with particular emphasis on observational techniques and standardized tests appropriate to grades K-6.
- 396a,b,c HONORS TUTORIAL (2-5)**
- 400 DIRECTED INDEPENDENT STUDY (1-6)**
Conference Course Permit required from instructor before registering. S/U grading only.
- 401 SEMINAR IN INDIVIDUAL DIFFERENCES AND PSYCHOLOGICAL MEASUREMENT (3)**
Prereq: Psych 307 (may be taken concurrently), 311 or 312. Major issues and methods in the study of individual differences and measurement. Laboratory and research.
- 402 SEMINAR IN PERSONALITY AND ABNORMAL PSYCHOLOGY (3)**
Prereq: Psych 307 (may be taken concurrently), 313 or 314. Major issues and methods in the study of personality and abnormal psychology. Laboratory and research.
- 403 SEMINAR IN SOCIAL PSYCHOLOGY AND DEVELOPMENTAL PSYCHOLOGY (3)**
Prereq: Psych 307 (may be taken concurrently), 315 or 316. Major issues and methods in the study of social and developmental psychology. Laboratory and research.
- 404 SEMINAR IN LEARNING AND MOTIVATION (3)**
Prereq: Psych 307 (may be taken concurrently), 321 or 322. Major issues and methods in the study of learning and motivation. Laboratory and research.
- 405 SEMINAR IN PERCEPTION AND SENSORY PROCESSES (3)**
Prereq: Psych 307 (may be taken concurrently), 323 or 324. Major issues and methods in the study of perception and sensation. Laboratory and research.
- 406 SEMINAR IN COMPARATIVE AND PHYSIOLOGICAL PSYCHOLOGY (3)**
Prereq: Psych 307 (may be taken concurrently), 325 or 326. Major issues and methods in the study of comparative and physiological psychology. Laboratory and research.
- 411 SEMINAR IN HISTORY AND SYSTEMS OF PSYCHOLOGY (4)**
Prereq: senior status, permission of instructor. An historical perspective of the development of psychological systems and theories and the impact of these developments on contemporary psychology.
- 412 SEMINAR IN PSYCHOLOGICAL THEORY (4)**
Prereq: senior status, permission of instructor. A seminar examining the philosophical assumptions of science in general and psychology in particular.
- 418 SEMINAR IN HUMANISTIC PSYCHOLOGY (3)**
Prereq: Psych 307 (may be taken concurrently), Psych 347. Major issues and methods in the study of existential phenomenology, ontology and hermeneutics. Laboratory and research.

Psychology

- 420 **ADVANCED INDUSTRIAL PSYCHOLOGY (5)**
Prereq: Psych 306 and 320. Psychological theories, methodology and findings related to the problems of business and industry, lectures, and laboratory.
- 425 **HONORS SEMINAR (3)**
Prereq: permission of instructor. Intensive examination of selected problems in psychology.
- 431 **INTRODUCTION TO SCHOOL AND COMMUNITY COUNSELING (4)**
Prereq: 15 credits in psychology, junior status. Roles of counselors and other psychological specialists in an integrated program in schools and community. Ethical considerations. Survey of counseling theories and techniques, guidance, consultation and other outreach activities. Counseling minorities, issues in training, practice and licensing. Appropriate training and use of paraprofessionals. Research activities of counselors.
- 432 **INTERVIEWING THEORY AND PRACTICE (4)**
Prereq: permission of instructor will be granted upon determination that student has had either academic or practical experience which would familiarize him/her with varieties of human behavioral problems, differences in attitudes, and differences in emotional responses to the interaction with other people. This course will teach skills and underlying psychological principles which facilitate communication between individuals, particularly in the helping interview. Focus will be on developing awareness of one's own impact on others, listening skills, and a variety of interviewing techniques appropriate for a large number of interpersonal settings. Format includes demonstrations of techniques, practice using role playing feedback, and lecture on theoretical aspects of interviewing. Evaluation based on interviewing performance and examination of reading material.
- 433 **MENTAL HEALTH PRINCIPLES, PROGRAMS AND PROBLEMS (3)**
Prereq: Psych 432 (must be taken concurrently with or prior to 449). Survey and analysis of community problems and resources as they affect the psychological welfare of the individual. Selective review of current approaches, facilities and philosophies in community mental health as they reflect the shift toward greater assumption of treatment responsibilities by the community, more adequate safeguards for individual human rights, and the development of preventive treatment strategies.
- 440 **SOCIAL PSYCHOLOGY AND SOCIAL ISSUES (3)**
Prereq: Psych 306, 315. Recent empirical and theoretical work on human conflict, aggression and competition. Normally offered alternate years.
- 441 **CROSS-CULTURAL PSYCHOLOGY (3)**
Prereq: Psych 306 and permission of instructor. A seminar approach to selected theoretical and methodological problems and issues relating to cross-cultural research as a major method in psychology. Normally offered alternate years.
- 445 **CURRENT TRENDS IN PSYCHOLOGY (3)**
Prereq: 20 credits in psychology. Selected topics in psychology which vary from quarter to quarter. Consult time schedule and Department of Psychology for further information.
- 449 **FIELD EXPERIENCES IN PSYCHOLOGY (5)**
Prereq: 20 credits in psychology (Psych 433, or concurrent, required for students in mental health concentration). Topics included are mental health, child development, behavior problems of adolescence, and other relevant topics. Field work combined with readings and seminars. This course may be taken two times for credit only by students in the psychology mental health services concentration. All other students are limited to one quarter credit.
- 451 **SCHOOL MOTIVATION (5)**
Prereq: Psych 201 or 351. To acquaint teachers and prospective teachers with principles of human motivation as they apply to the school and learning environment. To develop skills in the teacher for promoting individual and group motivation.
- 452 **GUIDANCE STRATEGIES FOR TEACHERS (3)**
Prereq: permission of instructor. Primarily for the practicing teacher and the prospective teacher. Principles of interpersonal behavior, development of skills needed to interact effectively with students and fellow professionals, and to create productive healthy learning environment. Includes appropriate use of school counselor and other specialists as consultants and as referral sources, appropriate use of standardized tests and cumulative records, parent conference techniques, and group interaction in the class. The relationship of guidance activities to the curriculum will be explored.
- 455 **ADVANCED CHILD PSYCHOLOGY (3)**
Prereq: Psych 316 or 352 or equivalent. Selected topics in child development. Research and theory in child development and behavior.
- 457 **DEVELOPMENTAL PSYCHOLINGUISTICS (5)**
Prereq: Psych 306, 307 prerequisite or concurrent, one course from Psych 311-316, and one from Psych 321-326. Experimental findings and theoretical interpretations of the biological, psychological, and linguistic aspects of language; special attention to implications for a theory of language acquisition.
- 471 **STANDARDIZED TESTS (3)**
Prereq: Psych 371 or 311. Standardized group tests commonly used in the public schools; selection and administration of tests; interpretation of norms.
- 490 **MEASUREMENT IN PSYCHOLOGICAL RESEARCH (3)**
Prereq: permission of instructor. Fundamental properties of psychological research data are discussed, including the necessary and desirable qualities of data, procedures for evaluating the quality of data, techniques for gathering and scaling data prior to statistical analysis. S/U grading only. Not open to students with credit in Psych 311.
- 496a,b,c **HONORS TUTORIAL (2-5)**
- ### GRADUATE COURSES
- The following courses are offered for graduate credit for persons enrolled in the department's graduate program. For course descriptions and other information about the graduate program, see the current Graduate Catalog.
- 500 **SPECIAL PROJECTS (1-6)**
Individual conference. S/U grading.
- 501 **PSYCHOLOGICAL FOUNDATIONS (3 ea)**
501a Systems of Psychology
501b Pathology/Personality
501c Learning
501d Perception
501e Developmental
501f Physiological
- 502, 503 **RESEARCH DESIGN, PROGRAM EVALUATION AND STATISTICAL ANALYSIS (3 ea)**
- 504 **MULTIVARIATE ANALYSIS I (3)**
- 505 **MULTIVARIATE ANALYSIS II (3)**
- 506 **TOPICS IN QUANTITATIVE PSYCHOLOGY (1-6, repeatable to a maximum of 6 credits)**
- 510 **RESEARCH PRE-PRACTICUM (2)**
- 511 **INSTRUMENTATION FOR PSYCHOLOGICAL RESEARCH (2)**
- 512 **CONSTRUCTION OF PSYCHOLOGICAL MEASURING DEVICES (2)**

- 520 SEMINAR IN PERCEPTION (3)
- 521 SEMINAR IN LEARNING (3)
- 522 SEMINAR IN COMPARATIVE PSYCHOLOGY (3)
- 523 SEMINAR IN PHYSIOLOGICAL PSYCHOLOGY (3)
- 524 SEMINAR IN MOTIVATION (3)
- 525 SEMINAR IN CURRENT PHILOSOPHICAL ISSUES IN PSYCHOLOGY (3)
- 526 SEMINAR IN DEVELOPMENTAL PSYCHOLOGY (3)
- 527 SEMINAR IN PERSONALITY (3)
- 528 SEMINAR IN SOCIAL PSYCHOLOGY (3)
- 529 SEMINAR IN BEHAVIOR PATHOLOGY (3)
- 530 SEMINAR IN ADVANCED MEASUREMENT THEORY (3)
- 531 SEMINAR IN EDUCATIONAL PSYCHOLOGY (3)
- 551 INTRODUCTION TO PROFESSIONAL PSYCHOLOGY (3)
- 552 STRATEGIES OF BEHAVIOR CHANGE (3)
- 553 COUNSELING THEORIES (3)
- 555 PSYCHOLOGY OF OCCUPATIONS (4)
- 556 PROBLEMS AND ISSUES IN PSYCHOLOGICAL ASSESSMENT (4)
- 557 INDIVIDUAL APPRAISAL IN COUNSELING (4)
- 558 FAMILY COUNSELING (3)
- 559 PSYCHOLOGICAL ASSESSMENT (4)
- 561 SEMINAR IN COUNSELING AND SCHOOL PSYCHOLOGY (3)
- 562 PRACTICUM IN PSYCHOLOGICAL EVALUATION (4)
- 564 INDIVIDUAL COUNSELING TECHNIQUES (5)
- 565 GROUP PROCESSES IN COUNSELING (3)
- 570 PRACTICUM (1-10, not to exceed a total of 15)
- 580 SEMINAR IN COLLEGE TEACHING OF PSYCHOLOGY (3)
- 581 PRACTICUM IN COLLEGE TEACHING OF PSYCHOLOGY (1-12)
- 582 PRACTICUM IN RESEARCH IN PSYCHOLOGY (1-12)
- 648 PROFESSIONAL INTERNSHIP (1-6)
- 649 SEMINAR IN COUNSELOR SUPERVISION AND CONSULTATION (4)
- 653 ADVANCED SEMINAR IN COUNSELING THEORY (3)
- 655 ADVANCED SEMINAR IN VOCATIONAL COUNSELING (4)
- 661 ADVANCED SEMINAR IN PROFESSIONAL ISSUES IN COUNSELING PRACTICE (4)
- 670 INTERNSHIP (1-6)
- 690 THESIS (1-6)





SOCIOLOGY

College of Arts and Sciences

In common with the other branches of science, sociology is not simply a point of view but rather a method for discovery and a body of information specifically about social organization and behavior. Sociology begins with the simple assumption that organization and behavior are not random events. Its fundamental purpose is to discover the patterns which underlie social events and to describe these patterns in a parsimonious and concise manner.

The programs leading to degrees in sociology at Western are designed to provide the student with a strong academic and practical training. Through formal class work and seminars, the student is introduced to the method and theory of sociological inquiry. This preparation may be extended if the student chooses to become involved in one of many research projects in the department.

Working under faculty supervision, the student may choose to pursue more thoroughly such areas as demography, human ecology, social psychology, criminology, gerontology, or social welfare. Opportunities for field experience are also provided as a part of the student's training.

The department currently houses a number of facilities for sociological research. The Demographic Research Laboratory contains complete U.S. Census Bureau data, local surveys, collections of vital statistics and census maps. The department also maintains National Survey data for student research and training. There are two social psychology laboratories for the experimental study of social behavior. The department also houses a computer laboratory, funded by the National Science Foundation; it contains cathode ray terminals, a hard-copy terminal, a graphic display unit, and a hard-copy plotter.

Additionally, several members of the faculty are involved in field research, employing the local community and region as a laboratory.

With a faculty of eleven members, all holding the doctoral degree, the department is able to offer degree concentrations in general sociology, social psychology, demography/ecology, criminology, and aging. In addition, students interested in pre-professional training in social services will find an adviser and suggested curriculum in the department.

The department has programs leading to the B.A. and B.S. in sociology. The Bachelor of Arts degree is designed to provide students with a liberal arts education, with individual specialization in sociology under advisement. While employment prospects are difficult to identify with precision for a general liberal arts degree, it has been the case for most of this century that such degree holders remain more likely to be employed, to be employed throughout their lifetimes as market conditions change, and to report higher lifetime incomes and job satisfaction throughout their working life than any other general category in the labor force. The department offers career advising and information in sociology and encourages students to make use of these services. Former graduates holding the B.A. currently fill numerous positions in both the public and private sectors; many have pursued advanced studies in sociology and other related fields. The B.S. degree is designed to provide students with a theoretical and substantive background in sociology, together with accessory skills in mathematics and computer science.

SOCIOLOGY FACULTY

- E. R. MAHONEY (1970) Chairman.
Professor. BA, Chico State College; PhD, University of Oregon.
- DONALD J. CALL (1958) Associate Professor. BA, MA, PhD, University of Oregon.
- GEORGE F. DRAKE (1968) Associate Professor. BA, MA, University of California, Berkeley; PhD, University of Wisconsin.
- CHARLES GOSSMAN (1968) Associate Professor. BA, University of Puget Sound; MA, PhD, University of Washington.
- PHILIP L. KNOWLES (1976) Assistant Professor. BA, Western Washington State College; MA, PhD, University of Nevada, Reno.
- D. PETER MAZUR (1960) Professor of Sociology and Demography. BA, Stetson University; MA, University of Colorado; PhD, University of Washington.
- INGEBORG L. E. PAULUS (1971) Associate Professor. BA, MA, University of British Columbia; PhD, University of London.
- JOHN G. RICHARDSON (1974) Assistant Professor. BA, University of the Pacific, Stockton; MA, PhD, University of California, Davis.

- EDWIN ROSENBERG (1978) Assistant Professor. BA, Michigan State University; MA, PhD, University of Southern California, Los Angeles.
- CARL H. SIMPSON (1978) Assistant Professor. BA, PhD, Stanford University.
- C. EDWARD STEPHAN (1970) Professor. BA, San Francisco State College; PhD, University of Oregon.

BACHELOR OF ARTS

Major 70 credits

Elective Concentrations

The following concentrations are offered to assist students in selecting an undergraduate program which meets specific needs and interests while at the same time guaranteeing sufficient breadth to avoid over-specialization. Courses listed as being taught through other departments will count toward the 70-credit major in sociology; non-departmental courses must be approved by the department in order to count toward the major.

Students are advised to select the general sociology concentration unless they have a particular concentration interest.

Students should obtain a copy of the undergraduate "*Student Guide to Sociology*" available in the Sociology office.

Core Program

- Soc 202, 302, 310, 315

General Sociology: Adviser — Departmental administrative assistant

- Core program
 Soc 303, 330, 321
 Additional sociology electives to total 70 credits

Criminology: Advisers — Paulus, Call

- Core program
 Soc 351, 352, 353, 354, 452
 Soc 454 or Pol Sci 415
 Soc 465 or Psych 353
 Additional sociology electives to total 70 credits

Demography/Ecology: Advisers — Gossman, Mazur

- Core program
 Soc 321, 322, 323, 415, 421, 422
 Math 121, 220
 Comp Sci 110
 Geog 440
 Additional sociology or mathematics electives to total 70 credits

Gerontology: Adviser — Rosenberg

- Core program
 Soc 324, 333, 334, 336

Sociology

- Psych 357
- Additional sociology electives to total 70 credits

Social Psychology: Advisers — Mahoney, Knowles

- Core program
- Soc 330, 331, 430, 431, 432, 433
- Psych 403
- Additional sociology, psychology or mathematics electives to total 70 credits

Minor 25 credits

- Soc 202
- Soc 302
- Soc 321 or 330
- Electives under departmental advisement

BACHELOR OF SCIENCE

Major 90 credits

- Math 121, 220, 241, 341, 342
- Comp Sci 110, 211
- Soc 202, 302, 303, 310, 321, 330, 415, 421, 430, 492
- Additional credits under advisement in mathematics, computer science, sociology or cognate areas

DEPARTMENTAL HONORS

In addition to the general requirements for all honors students, a sociology major who wishes to graduate "with honors" must demonstrate a reading knowledge of a foreign language and submit a senior thesis.

COURSES IN SOCIOLOGY

202 INTRODUCTION TO SOCIOLOGY (5)

Basic problems and concepts in the study of society; social change and organization; human behavior in the family, education, religion, cities; social class, race, age, sex and the structure of society; sociology as science and as response to human problems.

251 SOCIOLOGY OF SOCIAL PROBLEMS (5)

Prereq: Soc 202 or equivalent. A survey of selected social problems, conditions and issues from the sociological perspective.

261 SOCIOLOGY OF SOCIAL WORK (5)

Prereq: Soc 202. The social work profession in modern society; professional and social scientific elements of social work; social work and social welfare.

300 DIRECTED INDEPENDENT STUDY (1-6)

Conference Course Permit required from instructor before registering.

302 HISTORY OF SOCIAL THOUGHT (5)

Prereq: Soc 202. The emergence of sociology; sociology as response to the Industrial Revolution and as an attempt to develop a scientific understanding of social organization, behavior and change; the development of social thought: Comte, Spencer, Marx, Durkheim and Weber.

303 CONTEMPORARY SOCIOLOGICAL THEORY (5)

Prereq: Soc 302. Major contemporary perspectives in sociology.

310 INTRODUCTION TO RESEARCH METHODS (5)

Prereq: Soc 202. The nature of scientific theory; the development of social research; the basic methods and techniques of data gathering, processing and analysis.

311 EVALUATING SOCIAL PROGRAMS (5)

Prereq: Soc 202. Methods of assessing the effectiveness of social programs.

313 SOCIAL PLANNING (5)

Prereq: Soc 202. Principles, problems and techniques of applying sociological knowledge to the planning process.

315 SOCIAL STATISTICS (5)

Prereq: Soc 202. Application of statistical reasoning and methods in sociological research.

321 INTRODUCTION TO DEMOGRAPHY (5)

Prereq: Soc 202. Provides a systematic introduction to the study of human populations. Designed for students interested in the subject regardless of their major discipline. Examines social, economic and biological factors associated with fertility, mortality and migrations.

322 SOCIAL ECOLOGY (5)

Prereq: Soc 202. Human social organization as response to changes in population, technology and environment; development of the field of social ecology from plant and animal ecology; research methods in social ecology.

323 URBAN SOCIETY (5)

Prereq: Soc 202. The city in history, the ecology of urban areas, social classes in the city, the city lifestyle, effects of crowding on human behavior, crime in cities, and other urban social problems; urban politics and urban planning.

324 DEMOGRAPHY OF AGING (5)

Prereq: Soc 202, 303. Basic demographic analysis of distribution of the elderly population in America; distribution of income, health care availability, places of residence, migration, marital status and living arrangements; causes of death among the older population. Past patterns studied and future patterns projected.

330 INTRODUCTION TO SOCIAL PSYCHOLOGY (5)

Prereq: Soc 202. A general introduction to the study of interpersonal behavior. Examination of the perception of others, attraction toward and liking of others, self evaluation, helping behavior, aggression, attitudes and their relationship to behavior, sexual behavior, types of interaction processes, childhood and adult socialization, deviance and conformity, personal space, environmental effects on behavior, sex role attitudes and behavior.

331 EXPERIMENTAL SOCIAL PSYCHOLOGY (5)

Prereq: Soc 202, 310, 315. The application of scientific methods to the study of social behavior using experimental designs primarily as derived from the analysis of variance. Lecture and laboratory.

333 AGING IN AMERICA I (5)

Prereq: Soc 202. Introduction to basic concepts, theories, and issues of aging. Social history of aging; perception, status and responsibilities of the elderly from prehistory to the present; development of gerontology and social theories of aging.

- 334 AGING IN AMERICA II (5)**
Prereq: Soc 202, 333. Effects of social problems on the older population in the United States; economic, political, legal, familial, occupational, medical and social-psychological factors; death and dying in America.
- 335 SOCIOLOGY OF MEDICINE, HEALTH AND ILLNESS (5)**
Prereq: Soc 202. How health, illness and disease in American society differ by age, sex, race, social class, and ethnicity; social-psychological factors in health and illness, interpersonal relationships among patients and health personnel; health care system in the United States and modern medical technology; death and dying.
- 336 COMPARATIVE STUDIES IN AGING (5)**
Prereq: Soc 202, 333. Social aspects of aging in different societies and periods in history; comparisons over time and between societies; particular emphasis on factors related to longevity.
- 337 SOCIOLOGY OF SEXUAL BEHAVIOR (5)**
Prereq: Soc 202. Sociological analysis of varying forms of sexual behavior and the place of sexual behavior in society and the world of the individual. Examination of patterns of heterosexual behavior over time and by age, sex, race, social class, residence, religion and values; the sexual revolution; sexual behavior as a business; socialization patterns leading to forms of sexual behavior; "deviant" sexual behaviors.
- 339 MONKEYS, APES AND MAN (2)**
Prereq: upper-division standing. Review current studies on the social behavior of non-human species, principally the behavior of man's closest relatives, the primates. (Offered summer 1979.)
- 340 COMMUNITY ORGANIZATION (5)**
Prereq: Soc 202. The study of the development, structure, and interrelationships of social systems that address the definition and solution of problems facing people within specified geographical areas.
- 351 SOCIOLOGY OF DEVIANT BEHAVIOR (5)**
Prereq: Soc 202. Examination of labeling and behavior processes in deviance. Analysis of labeling by both the public and formal agencies such as the police and courts; effects of labeling and the behavioral characteristics of deviant lifestyles.
- 352 CRIMINOLOGY (5)**
Prereq: Soc 202. Adult crime as defined within a legal context. The extent and meaning of crime as documented by available data. Various forms of crime, their relationship to specific sociological variables and explanations of their causation.
- 353 JUVENILE DELINQUENCY (5)**
Prereq: Soc 202. Juvenile delinquency as a socially created phenomenon distinct from adult criminality; the juvenile court; extent and correlates of delinquency; group and gang delinquency; explanations for juvenile misbehavior.
- 354 TREATMENT AND CORRECTIONS (5)**
Prereq: Soc 202. Analysis of the structure and processes of law enforcement and corrections. The police, courts and correctional institutions. Community-based corrections and probation and parole.
- 360 SOCIOLOGY OF THE FAMILY (5)**
Prereq: Soc 202. Analysis of the family as an institution and network of relationships in American life.
- 361 SOCIAL WORK AND GROUPS (5)**
Prereq: Soc 202. History, development, and current use of group social work; major strategies in group social work and the assumptions and outcomes of each.
- 362 POLITICAL SOCIOLOGY (5)**
Prereq: Soc 202. The social aspects of political phenomena with an emphasis on power and authority, conflict and change, political attitudes and ideologies.
- 363 SOCIOLOGY OF RELIGION (5)**
Prereq: Soc 202. Religion in society. Religion as a force for change or stability; the social causes of religious beliefs; religion and the search for meaning. An examination of the structure and organization of religious groups and a special emphasis on recent experimentation with Eastern and charismatic religions.
- 364 SOCIAL CLASS IN AMERICA (5)**
Prereq: Soc 202. Social causes and consequences of inequality in America. Social distribution of wealth, power, and status; emphasis on poverty and racial social inequality.
- 365 PUBLIC OPINION (5)**
Prereq: Soc 202. Factors involved in the formation of public opinion; the role of mass media of communication and propaganda in a contemporary society. Offered in alternate years.
- 366 SOCIOLOGY OF SPORTS AND LEISURE (5)**
Prereq: Soc 202. Social and chronological changes in American leisure activities; analytical models of work, non-work, and leisure activities. Contemporary American sport as a leisure activity and as a profession; parallels between sport and society; racism and sexism as issues in the sociology of sports.
- 367 SOCIOLOGY OF WORK AND OCCUPATIONS (5)**
Prereq: Soc 202. Sociological and social-psychological significance of work; factors affecting contemporary occupational structures; factors associated with typical career patterns and choices with particular attention to life cycle changes in occupational and work orientations; sex, race, ethnic and social class differences in occupational choice and involvement; the structural characteristics of selected occupational areas.
- 368 SEX ROLES AND SOCIAL STRUCTURE (5)**
Prereq: Soc 202. Socially constructed differences between the sexes; processes of socialization into sex roles; reactions to deviation from traditional sex role behavior; the connection between family structure and interaction and institutions in society with regard to sex role differentiation and socialization; the effect on life chances of sex socialization; sex typed behavior as a criterion for assuming "normal" adult status; sex roles and occupational entrance and structure; sex typing variations in the occupational structure of industrial societies; changes in sex role playing.
- 396a,b,c HONORS TUTORIAL (3-5 ea)**
- 400 DIRECTED INDEPENDENT STUDY (1-6)**
Conference Course Permit required from instructor before registering.
- 410 RESEARCH (3-5)**
Prereq: permission of instructor. Investigation of a problem through field or library research.
- 415 ADVANCED QUANTITATIVE METHODS (3)**
Prereq: Soc 315 or equivalent. Experimentation and tests of significance applied to research problems.
- 421 DEMOGRAPHIC ANALYSIS (3)**
Prereq: Soc 315, 321, or equivalents. Theory and method of population analysis; measures of mortality, fertility and migration; population forecasting techniques.
- 422 SEMINAR IN SOCIAL ECOLOGY (3)**
Prereq: Soc 322. Review of contemporary research in human ecology. Offered in alternate years.



- 430 **ADVANCED SOCIAL PSYCHOLOGY (3)**
 Prereq: Soc 330 or Psych 340, Soc 310, 315 or Psych 306. Designed for students with a continued interest in social psychology and set as an advanced sequel to Soc 330. Specific course content is determined by student's previous course work and interests in social psychology. Emphasis is placed on in-depth examination of selected topics of current research interest in social psychology with students gaining experience in design, methods, measurement and analysis in social psychological research.
- 431 **THEORIES IN SOCIAL PSYCHOLOGY (3)**
 Prereq: Soc 310, 315 (or Psych 306), Soc 330. A critical examination of selected theoretical orientations in social psychology, emphasizing related research literature as it bears upon evaluation of theories. Offered in alternate years.
- 432 **SOCIALIZATION (3)**
 Prereq: Soc 202, 330 (or Psych 315). A survey of the factors and conditions which facilitate or retard the development of social behavior over the life cycle.
- 433 **SMALL GROUP BEHAVIOR (3)**
 Prereq: Soc 202 and 330. Classical and current theory and research on small group interaction, with a focus on the structures and processes of consensus, cooperation-conflict, interdependency, leadership, and cohesion.
- 435 **SOCIAL MOVEMENTS AND COLLECTIVE BEHAVIOR (3)**
 Prereq: Soc 202 and 330. Study of processes whereby social movements are formed to attempt to bring about major social changes; organizational structure and social psychological dynamics of social movements; the consequences of social movements for society in general and for the members themselves. Offered in alternate years.
- 440 **SOCIOLOGY OF ORGANIZATIONS (3)**
 Prereq: Soc 302, 310, 315. Sociology of organizations is an introduction to the study of organizational systems. The structure and function of organizations, their environments, resources and goals will be analyzed as they interact with each other in a system of interrelated variables.
- 452 **SEMINAR IN CRIMINOLOGY (3)**
 Prereq: Soc 202 and two courses from Soc 352, 353, 354. An in-depth examination of selected areas in sociological criminology.
- 454 **SOCIOLOGY OF LAW (3)**
 Prereq: Soc 202. The interrelationship between law and society. The law as an aspect of social control and the law in action. Legislative and judicial law-making; substantive and procedural laws and their impact on defendants and plaintiffs.
- 455 **SOCIO-LEGAL CONCERNS OF WOMEN (3)**
 Prereq: Soc 202. This course, the content of which centers around 14 video tapes used as discussion topics, deals with legal problems of women. The topics include historical aspects of women's drive for equality and civil and criminal matters affecting women's daily lives. All topics are illustrated by the state laws of Washington.
- 465 **SOCIOLOGY OF ADOLESCENCE (3)**
 Prereq: Soc 202, 330 or equivalents. Age-sex status definition and role taking; institutional and processual aspects of maturation.
- 466 **SOCIOLOGY OF EDUCATION (3)**
 Prereq: Soc 202, 330 or equivalents. Institutional, organizational, and interpersonal aspects of schools and schooling; emphasis on research on educational issues.
- 467 **RACIAL AND CULTURAL MINORITIES (3)**
 Prereq: Soc 202. Sociological and socio-psychological aspects of minority group situations and minority relations with the larger society; emphasis on non-white subcultures in the United States.
- 490 **READING AND CONFERENCE (3-5)**
 Prereq: Conference Course Permit from instructor required before registering. The specific study topic will be determined by the instructor, in consultation with each student.
- 491 **FIELD EXPERIENCE PRACTICUM (15)**
 Prereq: junior status; completion of Soc 302, 310, 330; permission of sociology department advising committee. Participation observation in research and applications in human services agencies and organizations.
- 492 **SENIOR THESIS (5)**
 Prereq: Bachelor of Science major. Supervised independent research in partial completion of the requirements for the Bachelor of Science in sociology degree. The student will normally undertake such research upon completion of all other courses required for the degree.
- 494 **TEACHING-LEARNING PROCESSES IN INTRODUCTORY SOCIOLOGY (3)**
 Prereq: 25 credits in sociology and written permission required from instructor before registering. Practicum as discussion leaders in Soc 202.
- 496a,b,c **HONORS TUTORIAL (3-5 ea)**
- GRADUATE COURSES**
 The following courses are offered for graduate credit for persons enrolled in the department's graduate program. For course descriptions and other information about the graduate program, see the current Graduate Catalog.
- 500 **SPECIAL PROJECTS (1-6)**
 Individual conference.
- 501 **ADVANCED GENERAL SOCIOLOGY (2)**
- 502 **SEMINAR: HISTORY OF SOCIAL THOUGHT (3)**
- 503 **SEMINAR: CONTEMPORARY SOCIOLOGICAL THEORY (3)**
- 505 **COMPUTER APPLICATIONS AND DATA ANALYSIS (3)**
- 510 **SEMINAR IN METHODOLOGY (3)**
- 521 **SEMINAR: DEMOGRAPHY (3)**
- 530 **SEMINAR: SOCIAL PSYCHOLOGY (3)**
- 540 **COMPLEX ORGANIZATIONS (3)**
- 551 **SEMINAR: SOCIAL CONTROL AND DEVIANCE (3)**
- 566 **SOCIOLOGY OF HIGHER EDUCATION (3)**
- 690 **THESIS RESEARCH (3)**
- 691 **THESIS (3)**



SPEECH

College of Arts and Sciences

The Department of Speech offers majors in speech communication and broadcast communication and specialized majors in speech education. Four speech degrees are granted: the Bachelor of Arts, the Bachelor of Arts in Education, the Master of Arts, and the Master of Education. The Bachelor of Arts degree in speech can lead to placement in industry, government, or one of the professions. The Bachelor of Education degree gives certification for elementary or secondary school teaching. A master's degree is ordinarily the requirement for community college teaching and other professional work.

SPEECH COMMUNICATION

Concentrations in speech communication at the bachelor level are useful as bases for such professions as law or the ministry, or careers in advertising, personnel, sales, the diplomatic corps, and public relations. Speech

consultants are employed by labor unions, elected officials, and as communication specialists by various industries.

Undergraduates are offered a wide variety of communication opportunities: an extensive program of forensic activities in which students may participate regardless of their chosen major and a speakers' bureau, offering speaking experience before schools and community organizations.

BROADCAST COMMUNICATION

A major concentration in broadcast communication allows the student to develop specific skills which may be applied to future vocational opportunities in broadcasting and other fields which utilize mass communication media.

In radio and T.V. production classes students

Speech

participate in a regular series of radio and television broadcasts.

SPEECH EDUCATION

Speech graduates with the Bachelor of Arts in Education at the secondary level find that the most common assignment is one involving not only speech but English as well. The Department of Speech offers an interdisciplinary major in Speech/English to prepare for this type of assignment. As much of the elementary classroom activity involves communication skills, it is recommended that the prospective teacher select a speech program to accompany an elementary major or minor.

Programs leading to Master of Arts and Master of Education degrees are also available. See the *Graduate Bulletin*.

The Department of Speech offers broad opportunities for learning. Further information and guidance may be obtained by speaking with the department chairman, College Hall 209 or calling (206) 676-3891 or 676-3870.

SPEECH FACULTY

- LARRY S. RICHARDSON (1970) Chairman. Associate Professor. BA, Western Washington State College; MEd, Central Washington State College; MA, PhD, Washington State University (Speech Communication, Debate/Forensics).
- LAURENCE W. BREWSTER (1948) Professor. BA, Yankton College; MA, PhD, University of Iowa (Speech Communication, Speech Education).
- SENE R. CARLILE (1947) Professor. BA, BS, Fort Hays, Kansas State College; MA, Colorado State College; PhD, University of Wisconsin (Speech Communication, Speech Pathology/Audiology).
- PAUL E. HERBOLD (1952) Associate Professor. BA in Ed, Western Washington State College; MA, University of Washington; PhD, University of Minnesota (Speech Communication, Broadcast Communication).
- MARVIN L. OLMSTEAD (1969) Associate Professor. BS in Ed, Black Hills Teachers College; MA, Washington State University; PhD, University of Washington (Speech Communication).
- ALDEN C. SMITH (1966) Associate Professor. BS, Florida Southern College; MS, Syracuse University; PhD, University of Illinois (Broadcast Communication, Speech Communication).
- ARTHUR L. SOLOMON (1969) Professor. BA, Antioch College; MA, University of North Carolina; PhD, Stanford University (Speech Communication, Speech Pathology and Audiology, Interpersonal Communication).

BACHELOR OF ARTS

Major — Speech Communication 73 credits

- One of the following: Speech 100, 301, 302

- Speech 204, 205, 304, 309, 319, 340, 350, 407, 490
- 20 credits in speech under departmental advisement
- 17 credits in supporting courses taken outside the Speech Department under departmental advisement

(Program approval must be obtained during the quarter in which the major is declared. Any changes or deletions must be approved by the departmental adviser.)

Minor — Speech Communication 28 credits

- One of the following: Speech 100, 301, 302
- Speech 304, 309, 319, 340
- 12 credits in speech communication under departmental advisement

Major — Broadcast Communication

73 credits

- One of the following: Speech 100, 301, 302
- Speech 240, 304, 309 or 405, 340, 343, 449
- 30 credits from Speech 204, 241, 300, 309, 319, 341, 342, 345, 346, 350, 373, 400, 401, 404, 405, 407, 409, 441, 442, 443, 444, 445a, 481, taken under departmental advisement
- Journ 104 and 18 credits of additional supporting courses taken outside the Speech Department under departmental advisement

Minor — Broadcast Communication

30 credits

- One of the following: Speech 100, 301, 302
- Speech 240, 241, 304, 319, 340, 342, 343
- Journ 104
- Electives under departmental advisement.

BACHELOR OF ARTS IN EDUCATION

Major — General Classroom for Elementary Teachers 45 credits

- One of the following: Speech 100, 301, 302
- Speech 203, 304, 319
- Speech 373, 484
- Speech Path/Aud 351, 354
- Recommend Th/D 101, 350, 450
- Electives under departmental advisement.

Minor — General Classroom for Elementary Teachers 25 credits

- One of the following: Speech 100, 301, 302
- Speech 484
- One of the following communication skills courses taken under departmental advisement: Speech 203, 204, 304, 319
- Three courses from: Speech 350, 373, Speech Path/Aud 351, 354
- Recommend Th/D 101, 350, 450
- Electives under departmental advisement

Major — Secondary Teachers 60 credits

- One of the following: Speech 100, 301, 302
- Speech 202, 204, 304, 319, 350, 407, 485
- Completion of six courses, three from each of two of the following modules:
 - Broadcasting: Speech 240, 241, 340, 342, 343
 - Communication Theory: Speech 309, 404, 405, and 409
 - Forensics: Speech 205, 206 (4 credits), 406 (4 credits), 486
 - Th/D 101, 212, 322, 360, 370
 - Electives under departmental advisement

Minor — Secondary Teachers 30 credits

- One of the following: Speech 100, 301, 302
- Speech 202, 204, 205, 304, 319, 350, 485
- Recommend Th/D 212, 370
- Electives under departmental advisement

Interdisciplinary Speech/English Major Concentration 90 credits

(Satisfies both major and minor and leads to teaching competency in both Speech and English.)

Speech 45 credits

- One of the following: Speech 100, 301, 302
- Speech 204, 304, 319, 407, 485, 490
- Completion of six courses, three from each of two of the following modules:
 - Broadcasting: Speech 240, 241, 340, 342
 - Communication Theory: Speech 309, 350, 405
 - Forensics: Speech 205, 206 (4 credits), 486
 - Theatre: Th/D 101, 212, 360, 370
- Electives in speech under departmental advisement

English (see listings under English) 45 credits

GRADUATE STUDY

For concentrations in speech leading to the Master of Education or Master of Arts degree, see *Graduate Bulletin*.

COURSES IN SPEECH

For a listing of speech courses which satisfy the General University Requirements, see the College of Arts and Sciences section of this catalog.

- 100 **FUNDAMENTALS OF SPEECH** (3)
Functional approach to effective communication; application of principles to practical problems in speech. Teacher education sophomores (or above) are advised to take Speech 302. Transfer students and other upper-division students are advised to take Speech 301.
- 202 **PARLIAMENTARY PROCEDURE** (1)
Parliamentary principles and procedures.
- 203 **VOICE AND ARTICULATION IMPROVEMENT** (3)
Background on the speaking process; theory and practice designed to improve articulation, projection, and vocal quality. Grading will be S/U only.
- 204 **SMALL GROUP PROCESSES** (4)
Exploration of the dynamics of human interaction in small group settings. Group tasks include the development of problem-solving skills, utilizing topics of current interest.
- 205 **EXPOSITION, ARGUMENTATION AND PERSUASION** (4)
Theory and practice of principles of reasoned discourse as applied to public discussion of controversial issues.
- 206 **INTERCOLLEGIATE FORENSICS** (2)
Debate, extemporaneous, and impromptu speaking, and interpretive reading and other phases of forensics. A maximum of 6 credits may be earned.
- 207 **INTRODUCTION TO INTERPERSONAL COMMUNICATION** (3)
Basic theory and practice in the art of communicating in dyads and small groups with more ease, confidence and accuracy; enabling the student to overcome communication barriers, to assert ideas and feelings more readily, and to listen more actively in both academic and social settings.
- 240 **INTRODUCTION TO BROADCASTING** (3)
Theory and technique of basic broadcast procedures; use of recording and transmitting equipment; fundamentals of broadcast speech; contemporary broadcast facilities and practice.
- 241 **BROADCAST COMMUNICATION I** (3)
Prerequisite or concurrent: Speech 240 or permission. Laboratory practice in applying communication skills to broadcast media: gathering, preparation and delivery of radio news.
- 300 **DIRECTED INDEPENDENT STUDY** (1-6)
Conference Course Permit required from instructor before registering.
- 301 **SPEECH COMMUNICATION** (3)
An investigation and analysis of problems and questions raised when man is involved in the act of communication either as a speaker or listener. Recommended for upper-division and transfer students.

Speech

- 302 SPEECH FOR THE TEACHER (3)**
Open only to teacher education students without Speech 100. Communication principles and applications to assist prospective teachers in the development of their individual speech skills and to prepare them to meet the communication needs of their students.
- 304 PUBLIC SPEAKING (3)**
Prereq: Speech 100, 301 or 302. Theory and practice in the art of public discourse.
- 309 HUMAN COMMUNICATION I (4)**
Theories and processes of human communication; contributions of social sciences to communication theory, models and theories of intrapersonal and interpersonal communication.
- 319 ORAL INTERPRETATION (3)**
Art and techniques of oral interpretation as method of literary criticism and means of communicating total meaning of a literary work to an audience.
- 340 INTRODUCTION TO MASS COMMUNICATION MEDIA (3)**
Development of mass media; newspapers, films, radio and television; their contemporary role in society.
- 341 BROADCAST COMMUNICATION II (3)**
Prereq: Speech 241, 340. Laboratory practice in production of radio news and public service programs.
- 342 T/V PRODUCTION I (3)**
Prereq: Speech 340 and written permission of the broadcast adviser. Theory and technique of basic television production. Laboratory practice utilizing instructional media facilities. Also offered as Tech 342.
- 343 BROADCAST WRITING (3)**
Prereq: Speech 240 and Journ 104. The preparation of news, advertising and public service copy for radio and television.
- 345 THE ART OF FILM (3)**
Film as distinguished from but related to other art forms; film aesthetics; technology. Also offered as Theatre/Dance 301.
- 346 FILM GENRE (3)**
Distinctive elements of melodrama, comedy, serious drama, documentary or fantasy. Also offered as Theatre/Dance 302.
- 350 BASES OF SPEECH (4)**
Bases of verbal communication, physical, physiological and phonetic. Practice in phonetic transcription.
- 373 PHONETICS (3)**
Training in recognition and production of sounds of spoken English through use of the International Phonetic Alphabet.
- 400 DIRECTED INDEPENDENT STUDY (1-6)**
Conference Course Permit required from instructor before registering.
- 401 SPEECH WRITING (3)**
Prereq: Speech 304. Manuscript preparation for selected audiences; theory and practice.
- 404 SMALL GROUP LEADERSHIP (4)**
Prereq: Speech 204. Exploration of concepts of leadership of small groups in both formal and informal settings. Development of leadership skills.
- 405 PERSUASION (4)**
Study of principles that influence attitudes and opinions in persuasive situations.
- 406 ADVANCED FORENSICS AND DEBATE (2)**
Prereq: 6 credits in Speech 205 and/or Speech 206. Emphasis on intercollegiate debate with opportunity for experience in extempore, impromptu, and persuasive speaking. A maximum of six credits may be earned in Speech 406; a combined total of six credits from Speech 206 and Speech 406 may be applied to a major in speech.
- 407 INTERPERSONAL COMMUNICATION (4)**
Experiences and skill training in small group settings to promote interpersonal relationships and to overcome communication barriers. Grading will be S/U only.
- 407w WORKSHOP IN INTERPERSONAL COMMUNICATION (1-3)**
Prereq: upper-division standing or equivalent experience. For individuals engaged in the helping professions who wish to enhance their self understanding, self expression, and to improve communication and relationship skills relevant to all human interaction. Variable credit depending on the amount of contact hours. Grading will be S/U only.
- 409 HUMAN COMMUNICATION II (4)**
Prereq: Speech 309. Theories and processes of human communication, verbal and non-verbal; models and theories of message systems; investigation of group, organizational and mass communication, including the diffusion of innovation.
- 416 ADVANCED FORENSICS: ANALYSIS OF PUBLIC POLICY ISSUES (4)**
Prereq: experience debating a recent national resolution or as a high school or college debate teacher. Application of models from argumentation theory and field or fields pertaining to the national resolution. Presentation of research papers, seminars and public presentations involving guest faculty from appropriate disciplines.
- 419 ADVANCED ORAL INTERPRETATION (3)**
Prereq: Speech 319. Techniques in communicating effectively the intellectual and emotional meanings of prose, poetry and drama. Reading aloud of dramatic monologues and soliloquies; activities in Readers Theatre.
- 441 PRODUCING AND DIRECTING THE BROADCAST PROGRAM (4)**
Prereq: Speech 341, 342. Production and direction for radio and closed circuit instructional television; preparation and execution of scripts; studio practice with radio and television equipment.
- 442 TELEVISION NEWS PRODUCTION (2)**
Prereq: Speech 341, 342, Journ 104 and written permission of instructor. Development of broadcast communication skills. Practice in preparation and presentation of televised news. A maximum of 6 credits may be earned. (Concurrent enrollment in Journ 431, 432, or 433 recommended.)
- 443 T/V PRODUCTION II (3)**
Prereq: Speech 342 or Tech 342 and written permission of the broadcast adviser. Advanced theory and technique of television production. Laboratory experience utilizing instructional media facilities.
- 444 PRODUCING AND MODERATING TELEVISION DISCUSSION (3)**
Prereq: Speech 204 or 404. Theory and practice in planning and leading on-camera discussion. Topic determination, panelist selection, outline writing, pre-airing briefing, facilitation of participation, and criticism of videotaped playbacks.
- 445a NEW DEVELOPMENTS IN THE ART OF FILM (3)**
New developments in film as an art form. The course will cover the latest experiments in new methods of expression, as they would be defined by aesthetic principles. Also offered as Theatre/Dance 401.

449 FIELD INTERNSHIP IN MASS COMMUNICATION (1-6)

Prereq: junior standing and written permission of instructor. Supervised work in mass communication for a broadcast station, educational institution, or other appropriate governmental agency or private enterprise. Grading will be S/U only.

480 HISTORY AND CRITICISM OF AMERICAN PUBLIC ADDRESS: 1740-1890 (3)

Relationship of prominent speakers to American political, social and intellectual life; from Jonathan Edwards through Booker T. Washington. Normally offered in alternate years.

481 HISTORY AND CRITICISM OF AMERICAN PUBLIC ADDRESS: 1890-PRESENT (3)

Relationship of prominent speakers to American political, social, and intellectual life; William Jennings Bryan to contemporary speakers. Normally offered in alternate years.

482 HISTORY AND CRITICISM OF BRITISH PUBLIC ADDRESS (3)

Examination and analysis of representative speeches of selected British orators: 1700-present. Normally offered in alternate years.

483 HISTORY AND CRITICISM OF CANADIAN PUBLIC ADDRESS (3)

Critical examination of speakers and speeches concerned with significant issues — emphasizing those involving the U.S.A. — from 1800 to the present. Normally offered in alternate years.

484 SPEECH FOR THE ELEMENTARY TEACHER (3)

Methods of utilization of the speech arts in the elementary classroom.

485 TEACHING SPEECH IN THE SENIOR HIGH SCHOOL (3)

Prereq: 15 credits in speech. Materials and methods useful in teaching drama, interpretation, and public address.

486 DIRECTING THE FORENSICS PROGRAM (4)

Prereq: Speech 205 or 206 (taken for 4 credits). Conducting tournaments, criticizing debates and individual events, budgeting.

486a HIGH SCHOOL DEBATE COACH WORKSHOP (2)

Prereq: one year teaching experience or graduate student status. An intensive lecture, seminar and workshop program in pedagogy related to teaching of argumentation, debate and forensics. Purpose is improvement of instruction. (Summer only.)

487a DISCUSSION TECHNIQUES FOR TEACHERS AND ADMINISTRATORS (3)

Cultivation of attitudes and skills to aid teachers and administrators to engage in and lead discussions with greater competency. (Summer only.)

488 BUSINESS AND ORGANIZATIONAL COMMUNICATION (3)

Recommended for non-speech majors. Theory and practice in job interview, small group problem solving discussion, public discussion, and public speaking.

490 RHETORICAL THEORY AND PRACTICE — GREEK AND ROMAN (4)

Rhetorical principles and practices from the early Greek to the fall of the Roman Empire.

491 RHETORICAL THEORY AND PRACTICE — MEDIEVAL THROUGH MODERN (4)

Rhetorical principles and practices from the sixth to the twentieth centuries. Normally offered in alternate years.

492 THE RHETORIC OF SOCIAL MOVEMENTS (4)

Prereq: junior standing. Analysis of contemporary social movements from a rhetorical perspective. Critical methodologies developed by contemporary theorists applied to persuasive activities of specific movements. The subject of each individual class will be announced in the class schedule. Repeatable to 8 credits.

495 CAMPAIGN SPEAKING: ANALYSIS AND CRITICISM (3)

Intensive study of the speaking of political office seekers. When appropriate, emphasis will be upon those seeking the presidency; however, regional, state and local figures will also be studied. (Summer only.)

GRADUATE COURSES

The following courses are offered for graduate credit for persons enrolled in the department's graduate program. For course descriptions and other information about the graduate program, see the current Graduate Catalog.

500 SPECIAL PROJECTS (1-6)

Individual conference.

501 INTRODUCTION TO RESEARCH IN SPEECH (4)

502 BEHAVIORAL RESEARCH IN SPEECH (4)

505 SEMINAR IN PERSUASION (3)

507 SEMINAR IN INTERPERSONAL COMMUNICATION (4)

540 SEMINAR IN MASS COMMUNICATIONS (3)

573 ADVANCED PHONETICS (3)

585 INTERNSHIP IN THE TEACHING OF COLLEGE SPEECH (3)

586 HIGH SCHOOL DEBATE COACH SEMINAR (2-3)

588 SPEECH COMMUNICATION FOR EDUCATIONAL ADMINISTRATORS (3)

595 SEMINAR IN RHETORICAL CRITICISM (4)

690 THESIS (6-9)

691 WRITING SEMINAR: THE RESEARCH MONOGRAPH IN SPEECH (3)

693 INTERNSHIP IN SPEECH COMMUNICATION (3)

694 FIELD INTERNSHIP IN PUBLIC INFORMATION/MASS COMMUNICATION (6-12)





SPEECH PATHOLOGY & AUDIOLOGY

College of Arts and Sciences

THE DEPARTMENT

The Department of Speech Pathology and Audiology offers four different academic degrees: the Bachelor of Arts, the Bachelor of Arts in Education, the Master of Arts in Speech, and the Master of Education. The Bachelor of Arts is considered a preprofessional degree, qualifying the student for advanced preparation at the graduate or fifth-year level. The Bachelor of Arts in Education program often is combined with an elementary teaching minor or a special education minor, preparing the student for classroom teaching.

THE DISCIPLINE

Speech pathology and audiology are disciplines which have developed out of a concern for people with speech, language and hearing disorders. Preparation leading to a degree in

speech pathology and/or audiology includes a wide range of coursework and a variety of clinical practicum opportunities working with handicapped adults and children. Students intending to enter this profession, whether in the public schools or in clinics, centers or hospitals, are advised that clinical certification by the American Speech and Hearing Association requires the completion of the master's degree program or its equivalent. Students who plan to practice in the public schools should follow the certification program for the Communications Disorders Specialist through the WWU-BEA-BPS Consortium.

Those who intend to be classroom teachers at the elementary school level often find the speech pathology and audiology major (Bachelor of Arts in Education) or coursework in speech and language development helpful in understanding and working with children.

Such a program often combines the speech pathology and audiology major and an elementary minor; however, it does not lead to certification as a Communications Disorders Specialist. Certification as a CDS in the State of Washington is obtainable through consortium participation only.

Programs leading to Master of Arts and Master of Education degrees are also available. See the *Graduate Bulletin*.

For further information, contact the department chairman, College Hall 103, (206) 676-3881.

SPEECH PATHOLOGY/AUDIOLOGY FACULTY

- MICHAEL T. SEILO (1970) Chair; Associate Professor. BS, Northern Michigan University; MA, University of Arizona; PhD, Ohio University (Speech Pathology/Audiology).
- SENE R. CARLILE (1947) Professor. BA, BS, Fort Hays, Kansas State College; MA, Colorado State College; PhD, University of Wisconsin (Speech Communication, Speech Pathology/Audiology).
- CAROL C. McRANDLE (1975) Associate Professor. BS, University of Minnesota, Duluth; MS, PhD, Purdue University (Speech Pathology/Audiology).
- *SAMUEL B. POLEN (1972) Associate Professor. BS, Kent State University; MA, Ohio University; PhD, Ohio University (College of Communications, Speech Pathology/Audiology).
- ERHART A. SCHINSKE (1957) Professor. BA, Hamline University; MA, PhD, University of Minnesota (Speech Pathology/Audiology).
- ARTHUR L. SOLOMON (1969) Professor. BA, Antioch College; MA, University of North Carolina; PhD, Stanford University (Speech Communication, Speech Pathology/Audiology, Interpersonal Communication).
- LOREN L. WEBB (1965) Professor. BS, University of California, Berkeley; MA, University of Redlands; PhD, University of Washington (Speech Pathology/Audiology).

AFFILIATED CLINIC STAFF

- JOAN DACRES (1978) Clinical Supervisor, Speech Pathology. BA, Colorado State University; MSc, Colorado State University.
- LINDA C. FITZ (1977) Coordinator, Extern Programs. BA, Grinnell College; MA, PhD, Washington State University (Speech Pathology/Audiology, Elementary Education).
- JILL K. HUNT (1977) Clinical Supervisor, Speech Pathology. BA, Western Washington University; MA, Western Washington University.

BACHELOR OF ARTS

Major — Speech Pathology and Audiology
50 credits

- SPA 351, 352, 353, 354, 356, 361
- SPA 373, 452, 453, 454, 457, 458, 459, 461
- Electives under departmental advisement

Minor — Speech Pathology and Audiology
25 credits

(A minimum of 25 credits. More than 25 are recommended.)

- SPA 351, 354, 356, 361, 461
- Electives under departmental advisement

BACHELOR OF ARTS IN EDUCATION

Major — Speech Pathology & Audiology
45 credits

Minor in elementary education required.

- SPA 351, 352, 353, 354, 356, 361, 373, 452, 454, 455, 457, 461
- Electives under departmental advisement

The program leading to certification as a speech pathologist and/or audiologist in the public schools has been formulated by a consortium consisting of Western, the Bellevue Public Schools and the Bellevue Education Association. For details regarding academic, clinical and internship requirements, please consult area adviser.

The American Speech and Hearing Association recommendation for certification of speech therapists includes a minimum of 90 quarter hours of academic preparation. Such preparation would extend into the fifth year or graduate degree program. Consult the department for details.

Minor — Speech Pathology & Audiology
25 credits

(A minimum of 25 credits. More than 25 are recommended.)

- SPA 351, 354, 356, 361, 461
- Electives under departmental advisement

GRADUATE STUDY

For concentrations in speech pathology and audiology leading to the Master of Education or Master of Arts degree, see *Graduate Bulletin*.

*On Sabbatical Leave 1979-80

COURSES IN SPEECH PATHOLOGY AND AUDIOLOGY

- 351 **INTRODUCTION TO COMMUNICATION DISORDERS (3)**
Survey of speech disorders; identification, classification, and the fundamentals of therapy.
- 352 **ANATOMY AND PHYSIOLOGY OF SPEECH MECHANISMS (4)**
Structure and function of organs concerned with audition, cerebration, respiration, phonation, resonance, articulation.
- 353 **SPEECH SCIENCE (4)**
Prereq: SPA 352. Required for speech pathology and audiology majors. Acoustic properties of the speech signal and their relation to speech production and perception.
- 354 **SPEECH AND LANGUAGE DEVELOPMENT IN CHILDREN (3)**
Normal speech and language acquisition; its impact on the developing child; origins and growth of symbolic processes, developmental norms; factors influencing learning of language and speech.
- 356 **ARTICULATION DISORDERS AND THERAPY (3)**
Prereq: SPA 351, 352. Symptomatology, etiology, and therapy for articulation disorders.
- 361 **LANGUAGE LEARNING DISABILITIES IN CHILDREN (3)**
Prereq: SPA 351, 354. Etiologies of language learning disabilities in children; diagnosis and treatment procedures.
- 373 **PHONETICS (3)**
Training in recognition and production of sounds of spoken English through use of the International Phonetic Alphabet.
- 400 **DIRECTED INDEPENDENT STUDY (1-6)**
Conference Course Permit required from instructor before registering.
- 452 **DIAGNOSTIC METHODS IN SPEECH AND LANGUAGE DEVELOPMENT (4)**
Prereq: SPA 351, 352, 353, 354, 356, 373 or permission of instructor. Methods, procedures, techniques, and instruments; supervised practice; planning therapy.
- 453 **PRACTICUM IN DIAGNOSTIC METHODS (3)**
Prereq: SPA 452 and permission of instructor. Clinical practicum in the administration of diagnostic tools in speech and language pathology.
- 454 **INTRODUCTION TO STUTTERING: THEORY AND THERAPY (3)**
Prereq: SPA 351. Characteristics of stuttering behavior; current theories of etiology of stuttering; principles and practices of therapy; cluttering as a related disorder.
- 455 **SPEECH THERAPY IN THE PUBLIC SCHOOLS (3)**
Prereq: SPA 351. Role of the clinician in organizing and directing a speech therapy program.
- 456 **ORGANIC SPEECH DISORDERS (3)**
Prereq: SPA 456. Symptomatology, etiology, and therapy for cerebral palsy, cleft palate, aphasia, dysarthria, and laryngectomy.
- 457 **METHODS IN SPEECH THERAPY (5)**
Prereq: SPA 356. Directed observation and evaluation of the methods, materials and techniques used in treating speech and language cases.
- 458 **INTRODUCTION TO CLINICAL PRACTICE IN SPEECH THERAPY (2)**
Prereq: SPA 351, 352, 353, 354, 356, 373, 452, 457 or permission of instructor. Supervised clinical practicum in therapy for the more prevalent voice and articulation disorders.

- 459, 460 **CLINICAL PRACTICE IN SPEECH THERAPY (3 ea)**
Prereq: permission of instructor. Continuation of SPA 458.
- 461 **INTRODUCTION TO AUDIOLOGY (5)**
Structure and function of auditory mechanism; basic acoustics as related to determination of hearing level; psychophysics of audition; nature of hearing loss.
- 462 **AUDIOMETRIC TESTING (4)**
Prereq: SPA 461. Theory and application of pure tone and speech audiometry to evaluation of hearing function; implications for rehabilitation.
- 463 **AURAL REHABILITATION (4)**
Prereq: SPA 461. Auditory training, speech reading and language training for the aurally handicapped.
- 464 **HEARING AIDS (3)**
Prereq: SPA 462. Description of hearing aids, hearing aid evaluation and auditory training in the rehabilitation of the auditorily handicapped.
- 465 **SIGN LANGUAGE OF THE DEAF (2)**
Theory and practice in use of the manual language methods for communication with the deaf.
- 465a **INTERMEDIATE SIGNING (2)**
Prereq: SPA 465. An introduction to the philosophy of total communication and the basic idea of Amslan (sign language used by deaf people).
- 466 **MEDICAL AUDIOLOGY (3)**
Prereq: SPA 461, 462. The medical pathologies of the hearing mechanism and their auditory manifestations. Problems of diagnosis, referral and report writing.
- 467a,b,c **CLINICAL PRACTICE IN AURAL REHABILITATION (2 ea)**
Prereq: SPA 463. Supervised practice in the rehabilitation of the hard of hearing.
- 468 **CLINICAL PRACTICUM IN AUDIOLOGY (2)**
Prereq: SPA 461, 462. Supervised clinical practice in audiologic evaluation.
- 469, 470 **CLINICAL PRACTICUM IN AUDIOLOGY (2 ea)**
Prereq: SPA 468. Supervised clinical practice in audiologic evaluation.
- 471 **AUDITORY PROCESSING (3)**
Prereq: SPA 351, 352, 354 or permission of instructor. Basic understanding of speech and language development is necessary for comprehension of class material.
- 498 **SEMINAR IN SPEECH PATHOLOGY AND AUDIOLOGY (1)**
Prereq: SPA 458. Restricted to speech pathology and audiology majors only. Methods of instruction, human relations in the public school setting, self evaluation of candidates as potential speech pathologists and audiologists. Observation and field experiences. Repeatable for a maximum of three credits (S/U grading only.)
- 499a,b **PUBLIC SCHOOL EXTERNSHIP IN SPEECH PATHOLOGY AND AUDIOLOGY (8 ea)**
Prereq: completion of the undergraduate major requirements and permission of department. Supervised experience providing opportunities to develop and demonstrate clinical competence in the management of children with communication disorders. S/U grading only.

GRADUATE COURSES

The following courses are offered for graduate credit for persons enrolled in the department's graduate program. For course descriptions and other information about the graduate program, see the current Graduate Catalog.

- 500 SPECIAL PROJECTS (1-6)
Individual conference.
- 502 BEHAVIORAL RESEARCH IN SPEECH (4)
- 550 VOICE DISORDERS AND THERAPY (3)
- 551 SEMINAR IN SPEECH DISORDERS: THEORY AND THERAPY (3)
- 552 ADVANCED DIAGNOSTIC METHODS IN SPEECH AND LANGUAGE PATHOLOGY (3)
- 553 SEMINAR: LANGUAGE DISORDERS (3)
- 554 SEMINAR: STUTTERING (3)
- 555 ADVANCED STUDIES IN LANGUAGE DEVELOPMENT IN CHILDREN (3)
- 556 SEMINAR IN APHASIA (3)
- 557 CEREBRAL PALSY (3)
- 558 ADVANCED CLINICAL PRACTICE IN SPEECH THERAPY (3)
- 559, 560 ADVANCED CLINICAL PRACTICE IN SPEECH THERAPY (3 ea)
- 561 SEMINAR IN AUDIOLOGY (3)
- 562 ADVANCED AUDIOMETRY (3)
- 563 SEMINAR IN AURAL REHABILITATION (3)
- 564 ADVANCED CLINICAL PRACTICE IN AURAL REHABILITATION (2)
- 565 PSYCHOACOUSTICS (3)
- 566 BIOACOUSTICS (3)
- 567 INDUSTRIAL AUDIOLOGY (3)
- 568a,b,c ADVANCED CLINICAL PRACTICUM IN AUDIOLOGY (2 ea)
- 569 AUDITORY PROCESSING (3)
- 570 THE HEARING IMPAIRED CHILD IN THE CLASSROOM (3)
- 573 ADVANCED PHONETICS (3)
- 574 EXPERIMENTAL PHONETICS (3)
- 575 THE PARENT INTERVIEW (3)
- 575a CLINICAL PRACTICUM IN PARENT INTERVIEWING (2)
- 576 SEMINAR IN CLEFT PALATE (3)
- 599a,b GRADUATE EXTERNSHIP IN SPEECH PATHOLOGY/AUDIOLOGY (8 ea)
- 690 THESIS (6-9)
- 691 WRITING SEMINAR: THE RESEARCH MONOGRAPH IN SPEECH (3)
- 692 INTERNSHIP IN ADMINISTRATION OF SPEECH AND HEARING PROGRAMS (3)
- 696 SUPERVISION IN SPEECH PATHOLOGY AND/OR AUDIOLOGY THERAPY (3)





TECHNOLOGY

College of Arts and Sciences

Many students are surprised and pleased to hear that Western offers technical education programs on its campus; indeed, the Department of Technology is the largest and strongest of its kind in the entire Northwest. Students enroll in the technology courses either because they are interested in completing one of the five major programs offered or because they are pursuing other majors or careers which are enhanced by skill and knowledge in a technical field. Some students take a limited number of technical courses because they enjoy working and learning in the shop setting and wish to include these activities in the elective portion of their university experience.

By counting the courses listed in this section of the catalog, students can be impressed by the number of courses (over 100) which are offered. By reading some of the titles and course descriptions, some understanding of

the breadth of offering can be gained. These courses can be divided, for convenience, into six major categories:

Graphic Communications Technology: These are the courses which deal in two-dimensional media and which involve the various ways by which man transmits information and thoughts through visual means. Included in this category are courses in industrial graphics and drafting, the graphic arts and photography. Actual courses included in this category are 160, 210, 210b, 211, 240, 260, 309, 310, 312, 313, 340, 341, 342, 360, 362, 363, 413, 417r, 419, 440, 441, 442, 443, 444, 447, 448, 449, 460, 469, 540, 544, 545.

Materials and Manufacturing Technology: Courses in this category deal with skill and information pertaining to the ways man copes with his physical and material environment and with which he modifies and shapes

basic materials for his own use. Included in the category are courses in material science, metallurgy, material testing, wood technology (furniture design and construction, laminations), metals technology (material forming, casting, molding, shaping and machining), and polymer science (plastics, thermoplastics and thermosets). The specific courses offered in this area include 120, 220, 221, 222, 223, 224, 231, 303, 320, 321, 323, 325, 326, 328, 331, 333, 335, 420, 421, 422, 428, 429, 433, 434, 439.

Mechanical and Electrical Technology: This category includes a study of power — its generation, transmission, control and utilization, and deals with the topics of fluid power (hydraulics, fluidics, pneumatics), power generation (internal heat engines, external combustion, solar energy), instrument control systems and power measurement, electrical power (motors, generators, transformers, distribution and control), communication (radio, television, facsimile, teletype), industrial (control and instrumentation), and electronics. Courses in this category include 270, 280, 281, 370, 371, 372, 375, 379, 380, 381, 382, 473, 477, 478, 479, 484, 489, 580.

Industrial Design: This is a study of the human and material factors, functional requirements and aesthetic considerations which are combined to solve the problems of product design. The courses offered in design include product design, design history, design factors and techniques. The Western Design Center, offered jointly by home economics and technology, is described on the pages following and relates to the design work of the Technology Department. Design courses offered include 214, 215, 311, 315, 316, 317, 416, 418.

Driver Education: In order to teach driver education in Washington schools, four courses are required, including three of the following: 480, 481, 482, 483, 485, 487.

General and Professional Courses: These are the professional courses for those who wish to teach or for those from other departments or off-campus who have specific interests. One course (391) is for those who wish to study about the relationship of man and technology. Included here are 101, 301, 302, 350, 391, 392, 393, 394, 400, 402, 417e, 450, 459, 488, 490, 490a, 491, 492, 493, 494, 495, 496, 499, 550, 590, 591, 592, 594, 595.

PROGRAMS

A variety of programs are sponsored by the Technology Department that are designed to

enhance articulation of community college students, pre-service academic and research skills, and placement of graduates. A brief explanation of these programs is provided.

DIRECT TRANSFER PROGRAM

A technical "block" transfer program has been approved at WWU. The program accepts transfer of 90 credits* applicable to the Bachelor of Science degree programs in the Department of Technology for students who have completed an Associate degree in technical arts or applied sciences, subject to the following conditions:

The community college degree program must include:

1. Mathematics through an introduction to calculus (to be counted toward WWU general education requirement).
2. One course in physics (to be counted toward WWU general education requirement).
3. At least 50 credits with a GPA of 2.5 in one of the following: electronics; drafting; graphic arts and visual communication; photography; power mechanics; or programs in industrial materials and processes.
4. An approved agreement between the community college and Western.

VEHICLE RESEARCH INSTITUTE

The Vehicle Research Institute was formed in 1976 as an on-going program of research in vehicle design, construction and engineering. The VRI has gained international recognition in the areas of fuel economy, aerodynamic design and engine development. The direct result of the VRI has been the design and development of the Viking automobiles. Students receive academic credit for their involvement with VRI projects.

PLACEMENT

The Department of Technology does not comprise a vocational/technical program to the extent that it seeks to guarantee placement upon graduation. However, in its history the department has enjoyed one of the highest placement records of any program at Western; and the demand for technology graduates continues to be high. But it should be remembered that there are thousands of students in colleges who do not expect direct placement from their college careers; they are in higher education for

*Excluding sub-college and/or remedial courses.

Technology

other valid reasons. The liberal arts are in themselves frequently claimed to be the 'best' type of vocational education; technology majors are not denied the liberal arts. In addition, however, technology majors study in subjects which are germane to a modern technological society and, though their placement cannot be guaranteed, the combination of disciplines they have studied allows them to stand in an advantageous placement position regardless of the nature of current economic conditions. In short, technology does not rely upon narrow vocational goals and does not justify its effort solely upon placement possibilities. However, it is proud of its placement record and a prognosis which appears to be excellent.

THE WESTERN DESIGN CENTER

The Western Design Center (WDC) is a vehicle which serves to provide students with realistic design problems which are drawn from the actual needs of the surrounding area. The WDC is in constant correspondence with various governmental, charitable and similar non-profit agencies in order to seek out design problems which can be structured into assignments for the design students of home economics and technology. These assignments, then, become on-the-job situations and involve students in actual work with design clients.

Students interested in Design Center projects should consult the WDC personnel in home economics and technology.

MAJORS

Five undergraduate majors are administered by the Department, i.e. Industrial Arts Teacher Education, Industrial Design, Technology, Visual Communication Education, and Vocational Industrial-Technical Teacher Education. All five of these majors lead to the Bachelor of Science degree.

Industrial Arts Teacher Education

This teacher preparation program has been offered for over 70 years and is a traditional strength at Western. The program prepares teachers of technical subjects for the junior and senior high schools. Some graduates, if occupationally qualified, choose to teach in the vocational and technical programs of community colleges and technical institutes. For elementary teachers, industrial arts offers an activity approach to all subjects and ways of installing career awareness in the entire elementary program. The department houses

a laboratory which features an individualized all-media approach to the content in career and technical education.

Industrial Design

The industrial design program is intended to provide students with a means of expressing creative ideas. It should help each individual develop the expression of attitudes, function and humanitarian esthetics in terms of industrial tools, techniques, operations and processes.

The design program provides each graduate with a foundation for understanding creative problem solving, for appreciating inter-relationships of humanitarian philosophy, technological capabilities and esthetic expression. The course arrangement is designed to prepare professional graduates to enter our industrial culture as designers, planners, managers, illustrators, or specialists in industrial production or marketing. A complete description of the program is offered in this catalog under "Interdepartmental Programs."

Technology

This program is designed for those who wish to enter industry in a technical and/or management capacity. The program has a common core of technological courses and two distinct options. Option I, referred to as the *Industrial Technology Option*, prepares the graduates to enter supervisory and management levels of technical industries. This option provides the student with general understanding of tools, materials and processes used in industry, a fundamental supporting background in business and/or economics and a degree of depth in some technical phase or some specific technical industry. Option II, referred to as the *Manufacturing Engineering Technology Option*, is designed for those students interested primarily in the technical aspects of the manufacturing industries. Students in this program take courses related to specific manufacturing technologies, a prescribed sequence of courses in science and mathematics in addition to the basic technological core required for both options. An increasing number of employers are seeking graduates of this program. Positions taken by recent graduates of the Industrial Technology option include the following: Management Trainee, Industrial Engineer, Production Management, Machine Designer, Production Engineer, Design Draftsman, Technical Supervisor. Prospective students are encouraged to include physics, chemistry and mathematics in their high school preparation.

Visual Communications Education (VICOED)

Growing out of an earlier graphic arts program, the Ford Foundation funded an innovative and interdisciplinary pilot program called visual communications education (VICOED). This program seeks to develop communicators who understand the processes of communication and who can select and use the appropriate elements (graphic arts, television, film, technical illustrations, photography, etc.). Graduates of this program have been placed in a variety of media-related positions in industry, government and education. Increasingly, schools, colleges and universities have sought VICOED graduates as media specialists in instructional technology. It should be noted that the VICOED program is carefully structured and extensive in nature; it is advantageous therefore for interested students to seek advisement and enrollment in VICOED early in their university careers. A complete description of the program is offered in this catalog under the "Inter-departmental Programs" listing.

Vocational Industrial-Technical Teacher Education

This degree program is designed to meet the needs of those individuals entering the field of vocational education. It is specifically designed for those individuals in the trade, industrial and technical education fields. It is the responsibility of the individual to meet the Washington State Certification requirements for trade, industrial and technical vocational education teachers. The professional vocational education courses that are a component of this degree program are set up to meet the state certification standards. It is recommended that individuals entering this degree program possess the necessary qualifications to meet the work experience component of the Washington State Vocational Education Certification standards.

TECHNOLOGY FACULTY

- CLYDE M. HACKLER (1974) Chairman.
Associate Professor. BS, Eastern Kentucky University; MEd, University of Illinois; EdD, University of Maryland.
- JOSEPH E. BLACK (1967) Associate Professor. BS, Lehigh University; BME, Cooper Union, New York; MME, New York University; PhD, Lehigh University. Registered Professional Engineer, Washington and California.
- ROBERT D. EMBREY (1971) Assistant Professor. BA, MA, MFA, University of Oregon.

- RICHARD J. FOWLER (1965) Associate Professor. BA, MS, Washington State University; EdD, Texas A. & M. University.
- CLAUDE E. HILL (1967) Associate Professor. BA, MA, University of Washington.
- DONALD E. MOON (1966) Associate Professor. BS in Ed, California State College, California, Pa.; MA, Teachers College, Columbia University; EdD, Oregon State University.
- FRED A. OLSEN (1961) Professor. BA, University of Washington; MS, Stout State University; PhD, The Ohio State University.
- SAM R. PORTER (1962) Professor. BA, Iowa State Teachers College; MA, Teachers College, Columbia University; EdD, University of Missouri.
- RAY A. SCHWALM (1949) Professor of Technology and Director, Visual Communications Education. BS, Millersville State College; MS, EdD, Oregon State University.
- MICHAEL SEAL (1968) Professor. BEd, University of British Columbia; MEd, Western Washington State College; EdD, Texas A. & M. University.
- MARVIN A. SOUTHCOTT (1969) Associate Professor. BA, University of Washington; MFA, Maryland Institute: IDSA.
- ELSI M. VASSDAL (1977) Assistant Professor. BS, MEd, Western Washington State College.
- RICHARD F. VOGEL (1971) Associate Professor. BA, MAT, Washington State University; EdD, Texas A. & M. University.

BACHELOR OF SCIENCE

Major — Industrial Arts Education Teacher Education 79 credits minimum

- Breadth requirement — 34-40 credits from the following: Tech 210, 214 and six of the following: Tech 120, 231, 240, 260, 270, 280, 333 and one of the following: Tech 221, 222 or 223
- Depth requirement — 20 credits under advisement from one of the following groups:
 - (a) Graphic Communication Technology (industrial graphics, photography, industrial design)
 - (b) Materials and Manufacturing Technology (woods, metals, materials science, plastics, crafts)
 - (c) Mechanical and Electrical Technology (electricity, electronics, power mechanics)
- Additional course requirements — 25 credits from the following: Tech 391, 488, 491, 493 and 13 credits (minimum) in one or more of the following:
 - (a) Student-designed, departmentally approved interdisciplinary sequence (10 credits maximum)
 - (b) Additional upper - division technology courses
 - (c) Approved cooperative workstudy — Tech 402 (1-15) with maximum of 13 credits

Technology

Teaching Competence

Recommendation for teaching industrial arts certification requires the completion of the major and an overall GPA of 2.5 or better.

Contact Office of Admissions and Advisement in Miller Hall 202 for information concerning professional studies programs.

Minor 25 credits

Courses to be selected under departmental advisement.

Major—Technology

110 credits (Includes supporting courses)

Note: Industrial technology students (Option I) will follow the usual general education sequence; however, it is strongly recommended that they take Math 124(5) or 250(4) to satisfy the mathematics requirements, Chem 115(5) or Chem 121(5) and Physics 131(4) in partial fulfillment of the science requirement and Econ 201(5) as partial fulfillment of the social science requirement.

- Technology core - 27 credits. Tech 120, 210, 223, 231, 270, 333
- Additional Technological Requirements:
 - Option 1 — Industrial Technology
 - (1) Select two from the four below: 9-10 credits
Tech 214, 240, 260, 280.
 - (2) Industrial Technology Emphasis: 34 additional credits from one of the following areas:
 - (a) Graphic Communications
 - (b) Materials and Manufacturing
 - (c) Mechanical and Electrical
 - (3) 20 additional credits related to the above emphasis from the following:
 - (a) Student-designed interdisciplinary sequence* (10 maximum)
 - (b) Additional technology courses
 - (c) Cooperative workstudy (15 maximum)
 - Option II — Manufacturing Engineering Technology
 - (1) Additional specific requirements - 34 credits
Tech 211, 221, 222, 224, 281, 420, 421, 422, 473

*Courses to be selected under departmental advisement. Generally courses from the business administration, math, science and English departments are acceptable. For example English 401(3), Technical and Business Report Writing, is a highly recommended course.

(2) Technical Electives (12 credits required).

To be selected from a departmentally approved list representing the following departments: technology, mathematics, chemistry, physics,** business administration.

- Supporting Courses
 - Option I — Industrial Technology — 19 credits
 - (1) Computer Science 110
 - (2) Business and/or Economics
 - Option II — Manufacturing Engineering Technology — 35-37 credits
 - Math 121, 124; Math 240 and CS 110 or Math 252; Chem 121, 122; Physics 131, 132.

Minor 25 credits

Courses selected under departmental advisement.

Visual Communications (VICOED) Concentration

See Interdepartmental Programs section for specifications.

Industrial Design

See Interdepartmental Programs section for specifications.

Major -- Vocational Industrial-Technical Teacher Education 110 credits

- 59 credit hours in technical courses, as follows:
 - (1) 45 credits for occupational competency or
 - (2) 45 credits in selected courses in area of specialization, or
 - (3) Combination of (1) and (2) to total minimum 45 credits, plus
 - (4) 14 credit hours in area of specialization or courses that are related to or complement the area of specialization (these courses will be selected under advisement of the major adviser to provide the student with maximum depth in his particular occupational area and may well be of a scientific or technical nature)

**By careful selection, these courses may qualify the Manufacturing Engineering Technology graduate for entry into the master's degree in business administration.

- Tech 392, 393, 394, 442, 490, 490a, 495, 498, plus 9 credit hours selected by advisement from Tech 215, 391, 488, 492, 494, 496, to total 44 credits in professional vocational education
- 7 credits in psychology: Psych 351, 353

GRADUATE STUDY

For a concentration in industrial arts leading to the degree of Master of Education, see *Graduate Bulletin*.

COURSES IN TECHNOLOGY

Courses in technology cover a wide range of subject areas. For ready reference, courses may be classified as follows:

Graphic Communications Technology — 160, 210, 210b, 211, 240, 260, 310, 312, 313, 340, 341, 342, 360, 362, 363, 413, 417r, 419, 440, 441, 442, 443, 447, 448, 449, 460, 469, 540, 544

Materials and Manufacturing Technology — 120, 220, 221, 222, 223, 224, 231, 303, 320, 321, 323, 325, 326, 328, 331, 333, 335, 420, 421, 422, 423, 428, 429, 433, 434, 439

Mechanical and Electrical Technology — 270, 280, 281, 370, 371, 372, 375, 379, 380, 381, 382, 473, 477, 478, 479, 484, 489, 580

Industrial Design — 214, 215, 311, 315, 316, 317, 416, 418

Driver Education — 480, 481, 482, 483, 485, 487

General and Professional Courses — 101, 301, 302, 350, 391, 392, 393, 394, 400, 402, 417e, 450, 459, 488, 490, 490a, 491, 492, 493, 494, 495, 496, 499, 550, 590, 591, 592, 594, 595

- 101 **ORIENTATION TO INDUSTRIAL ARTS AND TECHNOLOGY (2)**
The areas of technology, programs of studies, and career opportunities. Recommended for freshmen and new transfer students who seek information on the area. S/U grading only for this course.
- 120 **INDUSTRIAL MATERIALS (4)**
Materials of industrial technology; metals, ceramics, polymers, cements and glasses.
- 131 **WOODCRAFTING (3)**
Characteristics and uses of wood as a medium of design, aesthetics and creative expression. Emphasis on hand-crafting; technical information and experience with wood, hand tools and finishes. Innovative and historical use of wood in folk arts, useful objects, furniture, sculpture and art.
- 160 **INTRODUCTION TO PHOTOGRAPHY (2)**
Investigation of the elements comprising a photograph. Basic principles, materials and processes. An introduction to the language of photographic imagery, both aesthetic and technical. A study of the history of photography through the work of the great photographers. Investigation of the application of photography in the major disciplines, and trends and styles of photographic expression to the cultural developments of the 19th and 20th centuries. A non-lab course. Strongly recommended for those intending to complete the photo sequence.
- 210 **INDUSTRIAL GRAPHICS (5)**
Introduction to basic concepts of technical communication in industry through freehand sketching and instrument drawing of three-dimensional objects. Introduction to team dynamics through creative problem solving.

- 210b **INDUSTRIAL GRAPHICS (3)**
Prereq: enrollment limited to VICOED majors. Introduction to basic concepts of technical communication in industry through freehand sketching and instrument drawing of three-dimensional objects. Introduction to team dynamics through creative problem solving.
- 211 **INDUSTRIAL GRAPHICS (4)**
Prereq: Tech 210 or equivalent. Preparation of working and assembly drawings of machine parts with emphasis on individual creative problem solving through tolerance and positional dimensioning, auxiliary views, sections and use of product catalogs to select and size components.
- 214 **FUNDAMENTALS OF PRODUCT DESIGN (5)**
Basic design concepts and aesthetics of form, color, and space involved in the design process. Considered preliminary to courses in design with graphic media, wood, plastics, metals, and industrial design. Projects and study include applications of two- and three-dimensional design in a variety of media and research into historical design expression. Considered preliminary.
- 215 **EVOLUTION IN INDUSTRIAL DESIGN (3)**
Interrelationship with the arts, sciences, and society; designers, their philosophies and resultant impact on culture.
- 220 **INTRODUCTION TO METALLURGY (4)**
Principles of the common metals and alloys; ferrous and non-ferrous; heat treatments, applications and processing.
- 221 **WELDING (4)**
Basic concepts in welding to include shielded metal arc welding, oxy-acetylene welding, weld testing, welding symbols, heat treating and soldering.
- 222 **PATTERN MAKING AND FOUNDRY (3)**
Prereq: Tech 231. Tools, materials and techniques used to produce foundry patterns and principles and practices employed in the contemporary metal-casting industry.
- 223 **MACHINE METAL PROCESSES (5)**
Prereq: Tech 210 recommended. Basic concepts and skills in machine metal processes: shaping metal by machine tools, chipless machining, automation of machine tools and cold forming processes.
- 224 **INTRODUCTION TO STRENGTH OF MATERIALS (4)**
Elementary statics, stress and strain in members; riveted and bolted joints; statically determined beams; and torsion in shafts.
- 231 **GENERAL WOODS (4)**
Prereq: Tech 210 recommended. Introduction to basic industrial tools and machines used in processing wood materials. Custom design and fabrication of wood products. Technical information related to processes.
- 237 **FOREIGN STUDY (3)**
Basic darkroom, camera, and visualization procedures in black and white photography. Based on both lecture and practical application, the course stresses the use of the camera as a learning tool. Production of the portfolio should emphasize the student's personal experience and complement other course work in that particular foreign setting. This course may not substitute for Tech 260 as a prerequisite, or for the fulfillment of a program requirement unless approved by the WWU instructor. Presently offered only on Guadalajara campus. Contact Foreign Studies office, Old Main 400.

Technology

- 240 VISUAL COMMUNICATION (5)**
Survey of the visual communications field including visual communications theory, information design, reproduction, presentation, and management; involves the print and non-print media.
- 260 GENERAL PHOTOGRAPHY (4)**
Fundamentals of film developing, enlarging, print finishing. Basic elements of black and white composition and visualization. Lab fee, \$5.
- 270 BASIC ELECTRICITY (4)**
Principles and concepts of electricity; laboratory experiences with electrical components, circuits and measuring equipment.
- 280 POWER MECHANICS (5)**
Design principles of major power sources; techniques of torque and power measurement. Chassis dynamometer testing and port air flow testing.
- 281 POWER TRANSMISSION (5)**
Principles and practices of mechanical and fluid transmission of power. Theory and practice of over-running clutches and rolling drag reduction testing.
- 300 DIRECTED INDEPENDENT STUDY (1-6)**
Conference Course Permit required from instructor before registering.
- 301 CRAFTS (3)**
Design and construction in a variety of craft materials.
- 302 MAINTENANCE OF INDUSTRIAL EQUIPMENT (3)**
Prereq: Tech 223, 231, 270. This course will include a survey of industrial maintenance procedures as well as dealing with specific lab problems encountered by instructors in industrial education subjects. Major units of study include industrial maintenance systems or procedures, maintenance of specific stationary machines and hand tools in the following areas: industrial plastics, industrial wood processing, machine metals, automotive maintenance systems. Offered summer only.
- 303 FINISH PRINCIPLES AND PRACTICE (3)**
Introduction to modern finishing materials and processes.
- 309 ENGINEERING DESCRIPTIVE GEOMETRY (4)**
Prereq: Tech 210 and/or 211. Practical applications of concepts and principles of engineering descriptive geometry. Through graphical analysis, three-dimensional analysis of points, lines and planes by auxiliary views and revolution, Engineering applications of plan-profiles, slope, bearing, grade, strike and dip, vector statics and skew line clearance relationships. Application of creative problem solving through term project.
- 310 TECHNICAL ILLUSTRATION (3)**
Prereq: Tech 210 or equivalent. Preparation of three-dimensional pictorial drawings using isometric drawing, axonometric projection and perspective drawing with application of time-saving techniques such as: pre-printed grids, ellipse templates, and other specialized equipment. Introduction to rendering techniques with pencil, ink, pressure sensitives, airbrush and other media.
- 311 APPLIED PERSPECTIVE AND RENDERING (4)**
Prereq: Tech 210; Tech 214 and 310 recommended. The techniques and skills in rendering of buildings, interiors, and products in perspective. Projects include a comprehensive study of perspective systems and shadow construction in various media. Intended to develop the student's ability to sketch informally and present formally ideas pertaining to the expression of architectural subjects, interiors, and products of industrial design.
- 312 ADVANCED DRAFTING (3)**
Prereq: Tech 211. Problems in machine drawing, linkage analysis, intersections and developments, and successive auxiliary view construction. Visitations to observe current drafting practices in industry.
- 313 ARCHITECTURAL DESIGN AND HOUSE PLANNING (3)**
Prereq: Tech 210. Historical development; considerations of design; analysis of needs; utilization of sites, preparation of plans.
- 315 INDUSTRIAL DESIGN PROCESSES (5)**
Prereq: Tech 311. Design as a process of problem solving; problem recognition, definition resolution and presentation; analysis of market and motivational research techniques.
- 316 DIMENSIONAL ANALYSIS IN INDUSTRIAL DESIGN (5)**
Prereq: Tech 315. Application of multi-view projections, pictorials, mock-ups and prototypes to the resolution of a design problem.
- 317 PRODUCT SYNTHESIS IN INDUSTRIAL DESIGN (5)**
Prereq: Tech 316. Preparation of a portfolio of research sketches, working drawings, and renderings in the creation of a mock-up or prototype of an original or modified product.
- 320 ADVANCED MACHINE METAL PROCESSES (4)**
Prereq: Tech 223, Tech 222 recommended; permission of instructor. Advanced theory and skill development in machine metalworking. Includes product and process design, special tooling and machine tool operation.
- 321 METAL FABRICATION (4)**
Prereq: Tech 210 and 221; Tech 214 recommended; permission of the instructor. A course in design and fabrication of metal structures, including layout, cold forming, hot joining and analysis of strength, safety, utility, aesthetics and cost.
- 323 MECHANICS OF MATERIALS (4)**
Prereq: Math 124 or equivalent. Internal response of engineering members to forces, principal stresses and strains and stress concentrations.
- 325 PHYSICAL METALLURGY (4)**
Prereq: Chem 121 and Physics 131. Structure of metals and alloys; equilibrium diagrams, nucleation and growth; recovery and recrystallization; heat treatments; and relation between properties and microstructure.
- 328 METALLOGRAPHY (2)**
Prereq: Tech 220 or 325; permission of instructor. Microscopic and related techniques applied to metal specimens.
- 331 ADVANCED WOODS (4)**
Prereq: Tech 231. Skill and development in the more complex woodworking processes with related information on the woodworking industry.
- 333 PLASTICS (5)**
Prereq: general education chemistry; Tech 231 recommended. Polymer science and analysis of basic plastics materials; experience in product design, tooling, and processing of thermoplastic and thermosetting materials.
- 335 TOOLING FOR PLASTICS PROCESSING (3)**
Prereq: Tech 333. Design and construction of various types of production molds that are used for processing plastics in final shape. Product design in relationship to molding techniques and various techniques and materials used to construct the molds will be the major units of study.
- 340 GENERAL GRAPHIC ARTS I (3)**
Prereq: Tech 240. Graphic arts technology as related to reproduction of graphic design techniques.

- 341 **GENERAL GRAPHIC ARTS II (5)**
Prereq: Tech 340. Techniques, processes, and products of the graphic arts industry; designing, reproducing, presenting, and managing graphic materials.
- 342 **T/V PRODUCTION I (3)**
Prereq: Speech 340 and written permission of the Director of VICOED. Theory and technique of basic television production. Laboratory practice utilizing instructional media facilities. Also offered as Speech 342.
- 344 **FILM ANIMATION (3)**
Prereq: Tech 240, 362 and permission of instructor. The theory and application of animation techniques in Super 8mm film or 16mm film. (Offered alternate summers only.)
- 350 **INDUSTRIAL ARTS FOR THE ELEMENTARY TEACHER (3)**
An activity approach to the study of technology — its tools, materials, products, processes and occupations and integration with the areas of the elementary school curriculum.
- 360 **ADVANCED PHOTOGRAPHY (3)**
Prereq: Tech 260 or 362. Stresses photographic visualization and the development of personal style through concentrated studies of light and design, filters, the zone system, view camera, specialized materials and processes, archival processing, and historical and contemporary trends in American photography.
- 362 **VISUAL COMMUNICATION PHOTOGRAPHY (4)**
Prereq: Tech 240 and VICOED major. Function of photography in visual communication; application of theory and techniques to projects.
- 362 **COLOR PHOTOGRAPHY (3)**
Prereq: Tech 260 or 362. Fundamentals of color theory; techniques of producing color transparencies and prints.
- 370 **BASIC ELECTRONIC CIRCUITS (4)**
Prereq: Tech 270. Theory and application of power supplies, amplifiers, oscillators and digital circuits.
- 371 **SEMI-CONDUCTORS (4)**
Prereq: Tech 370. Characteristics of semi-conductor devices and circuits.
- 372 **INDUSTRIAL ELECTRONICS (4)**
Prereq: Tech 371. Theory and application of circuits using semi-conductor devices such as: diacs, triacs, silicon control rectifiers, unijunction transistors, field effect transistors and integrated circuits.
- 375 **INDUSTRIAL ELECTRICITY (4)**
Prereq: Tech 270. Study of single- and three-phase motors, motor controls, generators and transformers. Measurement of torque, horsepower, power factor and efficiency.
- 379 **VISUAL COMMUNICATION ELECTRONICS (3)**
Prereq: Tech 341. Principles and applications of instrumentation, electronic systems and computer graphics technology in the communication industry.
- 380 **ADVANCED POWER MECHANICS (3)**
Prereq: Tech 280. Efficiency determinants, power measurement, development of concepts introduced in Tech 280.
- 381 **ADVANCED POWER TRANSMISSION (3)**
Prereq: Tech 281. Practical application of hydraulic and fluidic theory; development of concepts introduced in Tech 281.
- 382 **AUTOMOTIVE ELECTRICITY (2)**
Prereq: Tech 270 or 280. Basic principles of electrical components and systems of the automobile and other engines.



- 391 **TECHNOLOGY AND HUMAN VALUES (3)**
Via films, lectures and discussion, various aspects of technology are examined for their impact upon the values of the individual society.
- 392 **INDUSTRIAL AND OCCUPATIONAL COURSE ORGANIZATION (3)**
This course is designed to provide the student with an opportunity to apply the principles and practices involved in planning and organizing of courses of study for industrial and occupational instructional purposes.
- 393 **TEACHING OF INDUSTRIAL EDUCATION (3)**
Prereq: professional involvement in trade, industrial, technical or health occupations vocational education or upper-division standing. This course is designed to provide the student with the basic principles and techniques for effective instruction in the trade, industrial, technical and health occupations vocational education areas. This course is also designed to meet the vocational teacher education certificate requirements as prescribed in the Washington State Plan for Vocational Education.
- 394 **OCCUPATIONAL ANALYSIS (3)**
Prereq: professional involvement in trade, industrial, technical or health occupations vocational education or upper-division standing. This course is designed to provide the student with the basic principles and techniques for performing analysis operations to develop course content for trade, industrial, technical and health occupations vocational education areas of instruction. This course is designed to meet vocational teacher education certification requirements as described in the Washington State Plan for Vocational Education.
- 400 **DIRECTED INDEPENDENT STUDY (1-6)**
Conference Course Permit required from instructor before registering.
- 402 **COOPERATIVE WORK/STUDY (1-15)**
Prereq: junior standing; conference course permit; approval of adviser. Supervised study of technical problems associated with production and/or management in business and industry. Credit varies according to individual employment circumstances, the degree requirements of the applicant and the extent to which employment is related to major.
- 413 **ARCHITECTURAL PROBLEMS (3)**
Prereq: Tech 313. Advanced residential planning, cost estimating; FHA standards, building codes; individual and group research.
- 416 **STRUCTURAL — AESTHETIC FACTORS IN INDUSTRIAL DESIGN (5)**
Prereq: Tech 316. Tectonic principles applied to consumer products, problems related to functional and emotional factors of environmental design involving space, structure, furniture and lighting.

Technology

417 SPECIAL INTEREST SEMINARS

- 417a Woodcarving (3)
Prereq: art or industrial arts teaching experience.
- 417b Energy Workshop for Industrial Arts Teachers (6)
Prereq: teaching experience in industrial arts, written statement of purpose and principal's recommendation. A workshop for IA teachers on energy. Energy theory, measurement, alternatives and application to energy projects and experiments in the secondary IA program.
- 417c Wood Sculpture and Design (3)
Prereq: Tech 417a.
- 417e Instructional Resources in Plastics (1-3)
Includes understanding of plastics materials and processes. Development of instructional aids, tooling devices, curricular materials and project ideas for secondary school activities. Offered during summer session or through Continuing Education.
- 417f Special Interest Seminar — Industrial Careers (3)
To provide industrial education teachers with current information on industrial careers, i.e., positions, salaries, requirements, working conditions and other pertinent career information that can be incorporated into industrial education programs. (Offered through Continuing Education.)
- 417m Visual Communications (3)
Prereq: a basic course in graphic arts, art or photography.
- 417n Individualizing Instruction for Occupational Versatility (3)
Prereq: teaching experience.
- 417p Student Management Systems (3)
A class designed for teachers wishing to incorporate the student management and direction system of the "Occupational Versatility" program.
- 417r Photography Workshop for Teachers (1-4)
The workshop stresses the fundamentals of photography. Included are basic film developing and printing, how to see with the camera, and a familiarization with the history and applications of the medium. The work of well-known photographers will be discussed. Of interest to teachers on all levels from college to elementary school who wish to incorporate photography in the classroom or simply expand their own awareness of the potentials of the medium. Skills and knowledge of photography will be developed by laboratory, lecture, fieldwork and discussion. Each student will be assigned an individual enlarger, and lab time will be unlimited. A camera is required for the course.

418 DESIGN CENTER RESEARCH PROJECT (1-3)

Prereq: Tech 214 or Home Econ 101. Directed research in design under the auspices of the Western Design Center. (Also offered as Home Econ 418.)

419 DIRECTED RESEARCH IN DRAFTING/DESIGN (1-3)

Prereq: Tech 211. Research problem in drafting or design conducted under supervision.

420 MANUFACTURING PROCESSES (3)

Prereq: upper-division standing. Metal fabrication theory, property of materials as related to manufacturing processes, economic aspects and automation.

421 NUMERICAL CONTROL PROGRAMMING (3)

Prereq: upper-division standing. Computer control of manufacturing processes; computer-aided design; manual and computer-aided numerical control part programming, with emphasis on APT.

422 MANUFACTURING MANAGEMENT (4)

Prereq: upper-division standing. Production control; methods analysis; industrial engineering; linear programming and quality control.

423 MANUFACTURING SYSTEMS (3)

Prereq: upper-division standing. Manufacturing science techniques, automation, work measurement, time and motion study, wage incentives and process optimization.

428 DIRECTED RESEARCH IN MATERIAL SCIENCE (1-3)

Prereq: permission of instructor. Research under supervision in an area of material science.

429 DIRECTED RESEARCH IN METALS (1-3)

Prereq: Tech 223, 320. Selection, development, and research, under supervision, within one of the areas of metals technology.

433 ADVANCED PLASTICS (3)

Prereq: Tech 333. Concepts of polymer science; study of structure, properties and applications of plastics materials; design and development of plastics tooling; analysis and experiences in thermoplastics molding and forming processes.

434 REINFORCED PLASTICS (5)

Prereq: Tech 333. Resin and reinforcement systems; material testing and strength analysis; mold design and development; theory and involvement in reinforced plastics production processes.

439 DIRECTED RESEARCH IN WOODS (1-3)

Prereq: Tech 231, 331. Selection, development, and research, under supervision, within one of the areas of wood technology.

440 GRAPHIC DESIGN (5)

Prereq: Tech 341 and 362. Principles and application of effective visual communication, design, and reproduction.

441 VISUAL COMMUNICATION SERVICES MANAGEMENT (5)

Prereq: Tech 341. Estimating and pricing, simplified cost accounting; organization and administration of visual communication services; production, quality and color control instruments and techniques.

442 INSTRUCTIONAL MATERIALS (5)

Prereq: senior or graduate status. Design and production of instructional materials; single concept motion pictures, slide presentations, video tapes and printed materials for course outlines are developed. (Offered alternate summers.)

443 T/V PRODUCTION II (3)

Prereq: Tech 240, Tech 342 or Speech 342, and written permission of the Director of VICOED. Advanced theory and technique of television production. Laboratory experiences utilizing instructional media facilities. Also listed as Speech 443.

444 COMPUTER PHOTO COMPOSITION (3)

Prereq: Tech 240, 340, 341 and Computer Science 110 and permission of instructor. The theory and practical applications of computer-operated photocomposition equipment.

447 PUBLICATIONS PRODUCTION (3)

Prereq: concurrent enrollment in Tech 448. Experiences in design, layout, and production of publications through printed media, film, television, or other means.

448 VISUAL COMMUNICATION (5)

Prereq: completion of the VICOED sequence. Synthesis of basic concepts, models, and theories, the perceptual, social, cultural, and technological determinants of visual form, style and content.

449 DIRECTED RESEARCH IN GRAPHIC ARTS (1-3)

Prereq: Tech 240, 340. Selected problems in graphic arts.

450 CAREER DEVELOPMENT ACTIVITIES (1-3)

Prereq: teaching experience or senior status in teacher education. An activity approach to the relationships between occupations, the process of occupational choice, and aspects of the elementary school curriculum. Examples and applications for incorporating career concepts into the regular curriculum. Skill development in the use of constructive classroom activities.

- 459 DIRECTED RESEARCH IN INDUSTRIAL ARTS FOR THE ELEMENTARY SCHOOL (1-3)
Prereq: Tech 350. Developing industrial arts content with emphasis on the relationship between industrial arts and the elementary school curriculum.
- 460 ADVANCED SEMINAR IN PHOTOGRAPHY (3)
Prereq: Tech 360 or 363. Application of photographic theory and techniques to selected problems. May be repeated for credit.
- 469 DIRECTED RESEARCH IN PHOTOGRAPHY (1-3)
Prereq: Tech 260. Research problems in photography chosen and conducted under supervision.
- 473 DIGITAL ELECTRONICS (4)
Prereq: Tech 270. Digital integrated circuit devices, applications of digital circuits, construction and testing of digital circuits.
- 477 THEORY AND OPERATION OF ELECTRONIC TEST EQUIPMENT (4)
Prereq: Tech 371. Theory and practice in the operation of electronic test equipment common to industrial arts electronic programs.
- 478 PRACTICAL RADIO AND TELEVISION (4)
Prereq: Tech 371. Theory of radio and television transmitters and receivers.
- 479 DIRECTED RESEARCH IN ELECTRICITY (1-3)
Prereq: Tech 371. Advanced study in problems chosen and conducted under supervision.
- DRIVER EDUCATION: Tech 480, 481, 482, and either 485 or 487 (total of 12 credits) are required for a certificate to teach driver education in a state approved course.
- 480 SAFETY EDUCATION (3)
The cause, incidence, and effect of home, school, recreational and vocational accidents; education programs and practices to reduce accidents. (Normally offered summers.)
- 481* BASIC DRIVER AND TRAFFIC SAFETY EDUCATION (3)
Knowledge, attitudes and skills needed to teach driver education in the secondary school; classroom instruction and in-the-car teaching experience. (Normally offered summers.)
- 482* ADVANCED DRIVER AND TRAFFIC SAFETY EDUCATION (3)
Driver and traffic safety and methods of teaching in the secondary school; classroom and in-the-car teaching experience. (Normally offered summers.)
- 483* DIRECTED RESEARCH IN DRIVER AND TRAFFIC SAFETY EDUCATION (1-3)
A special problem in driver and traffic safety. (Normally offered summers.)
- 484 VEHICLE DESIGN (3)
Prereq: Tech 280, 380 or permission of instructor. Suspension design; chassis design, spring rates, tire design parameters; automobile aerodynamics; brake system. (Offered summer only.)
- 485* DRIVING SIMULATORS AND MULTIPLE-CAR DRIVING RANGES (3)
Prereq: Tech 481 and 482 or concurrent enrollment. An examination of the aims, objectives and role of laboratory programs in driver and traffic safety education. Directed experiences in both the simulator and multiple-car driving range methods of laboratory instruction. This course or Tech 487 is required for certification of high school driver education teachers. (Offered alternate summers.)
- 487* ORGANIZATION, ADMINISTRATION AND SUPERVISION OF TRAFFIC SAFETY EDUCATION PROGRAMS (3)
Prereq: Tech 481 and 482 or concurrent enrollment. Organizational, administrative and supervisory aspects of traffic safety education programs in the public schools. Includes the relationships of these programs to the total school program, related professional organizations and current issues. Methods and materials of classroom instruction and curriculum development are included. (Offered alternate summers.)
- 488 SAFETY PRINCIPLES AND PRACTICES FOR INDUSTRIAL EDUCATION TEACHERS (3)
This is a basic course in safety practices for industrial education teachers in grades 1-12 and for vocational teachers who must meet state certification requirements.
- 489 DIRECTED RESEARCH IN POWER MECHANICS (1-3)
Prereq: Tech 280, 381. Advanced study in problems chosen and conducted under supervision.
- 490 PRACTICUM IN SUPERVISED TEACHING OF INDUSTRIAL AND TECHNICAL EDUCATION PROGRAMS (16)
Prereq: open to majors in industrial and technical education during their senior year with departmental approval upon completion of Tech 393, 394, 392 and 495. Supervised experience providing opportunity to develop and demonstrate teaching competency at the secondary and post-secondary level in the area of industrial and technical education.
- 490a SEMINAR IN SUPERVISED VOCATIONAL TEACHING (1)
Prereq: concurrent enrollment in Tech 490. Practicum in Supervised Teaching of Industrial and Technical Educational Programs.
- 491 HISTORY AND PHILOSOPHY OF VOCATIONAL EDUCATION (3)
Evolving issues, objectives, programs and legislation in vocational education.
- 492 FACILITIES FOR INDUSTRIAL ARTS (3)
Prereq: senior standing in teacher education. Planning, development and utilization of industrial arts facilities.
- 493 THE TEACHING OF INDUSTRIAL ARTS (4)
Prereq: admission to teacher education. Derivation and organization of content for industrial arts; principles, procedures, and problems in the teaching of laboratory courses; prerequisite to directed teaching in industrial arts.
- 494-g LEARNING MODULES IN CAREER EDUCATION (1-3)
A series of career educational course modules which may be taken in serial order or individually with maximum credit: 7.
- 494a Career Education Concepts
History, purpose, philosophy and status of career education. Applications and examples drawn from various school subjects and at all grade levels.
- 494b Infusion Techniques in Career Education
The installation of the career education concept into various subjects, with special attention to the basic subjects.
- 494c Career Education Curriculum Development
The process of defining, developing and evaluating career education curriculum and activities.
- 494d Career Education Learning Materials
The identification and selection of learning materials.

*Not applicable to undergraduate or graduate programs in technology.

Technology

- 494a **Guidance Techniques in Career Education**
Guidance functions and competencies for classroom teachers in career education.
- 494f **Community Resources for Career Education**
Identification and development of community resources available to teachers and specialists in career education.
- 494g **Supervision of Classroom Teachers in Career Education**
The supervision of classroom teachers in organizing, planning and conducting career education learning activities.

495 EVALUATION IN INDUSTRIAL AND OCCUPATIONAL EDUCATION (3)

This course concerns the methods of evaluation such as the preparation of measuring devices, methods of assessing technical competency, interpretation of standardized test results, statistical analyses of test data and the improvement of instruction. This course is required by the state for vocational certification of trade and industrial teachers. (Offered through Continuing Education.)

496 COMMUNITY AND INDUSTRIAL RESOURCES (1-3)

A study of those resources available in the community and how they can be used to enhance the educational experience of students engaged in formal schooling.

498 STUDENT LEADERSHIP DEVELOPMENT (3)

Prereq: professional involvement in trade, industrial, technical or health occupations vocational education or upper-division standing. This course is designed to provide the student with the basic principles and techniques for effecting student leadership development in their respective vocational education programs. Designed to meet vocational teacher education certification requirements as described in the Washington State Plan for Vocational Education.

499 SENIOR PROJECT (1)

Prereq: junior or senior standing; technology major. The demonstration of competence in the major through a culminating project which presents a written, pictorial, and photographic summary of work done in the major or of a comprehensive senior-level project.

GRADUATE COURSES

The following courses are offered for graduate credit for persons enrolled in the department's graduate program. For course descriptions and other information about the graduate program, see the current Graduate Catalog.

500 SPECIAL PROJECTS (1-6)

Individual conference.

540 VISUAL COMMUNICATIONS TECHNOLOGY (3)

544 SEMINAR: CURRENT VISUAL COMMUNICATIONS TOPICS (3)

545 ADVANCED PHOTOCOMPOSITION AND ITS APPLICATIONS (5)

550 FOUNDATIONS OF VOCATIONAL EDUCATION (3)

580 DEVELOPMENTS IN AUTOMOTIVE EMISSION CONTROL SYSTEMS (3)

590 CURRICULUM PROBLEMS IN INDUSTRIAL EDUCATION (3)

591 INDUSTRIAL TECHNOLOGY (3)

592 CURRICULUM DEVELOPMENT IN INDUSTRIAL ARTS (3 ea)

592a Electronics

592b Industrial Graphics-Drafting/Design

592c Metals

592d Plastics

592e Power Mechanics

592f Woods

592g VICOED

592h Photography

592j Man and Technology

592k Manufacturing

592m Construction

594 RESEARCH IN INDUSTRIAL ARTS (2)

595 GRADUATE SEMINAR (2)





THEATRE/DANCE

College of Fine and Performing Arts

The Department of Theatre/Dance offers academic majors and minors in both dance and theatre. The programs provide pre-professional training for those intending to pursue a career in the world of theatre and dance. The degree programs also provide a thorough background for those who wish to seek advanced degrees or, in conjunction with other specialities, to prepare for teaching careers.

Theatre study leading to the Bachelor of Arts degree is composed of three elements: core, concentration and electives. The core courses provide breadth of understanding of the art of theatre. Beginning with an introduction to the art of theatre, the core provides entry-level training in acting, dance, technical theatre, directing, dramatic writing, children's theatre, dramatic theory and criticism, and literature. An area of concentration, selected by the student,

provides study in some depth of one of the areas introduced in the core (acting, dance, technical theatre, etc.). Elective courses of study provide an opportunity to explore other areas of theatre arts past the introductory level.

Dance study leading to the Bachelor of Arts degree offers sequence courses in dance technique (jazz, ballet, modern), choreography, and history and philosophy of dance. In addition to dance courses, the major includes related courses in theatre, art and music.

Non-majors are admitted to any theatre or dance course so long as the student has met prerequisite requirements.

An active production program is maintained by the department to provide practical application of studio, laboratory and class-

Theatre/Dance

room training. During the school year, a regular program of faculty directed and choreographed shows are produced. Plays range from the classics to musical comedy and recent Broadway offerings. Dance concerts offer jazz, ballet and modern dance pieces. In addition, some 30 to 40 student-generated productions are presented in connection with undergraduate and graduate theatre and dance production course projects.

Western Theatre On Tour puts two or three productions into the public schools of Western Washington and nearby portions of British Columbia, playing to over 30,000 persons.

Summer Stock is an intensive nine-week program designed to provide participants with experience in all phases of theatre production work — on stage, backstage, in the production shops, and in the offices. Musicals, Shakespeare, comedies, dramas and plays for children are presented.

THEATRE/DANCE FACILITIES

Theatre/dance students at Western currently "learn by doing" in a variety of special classrooms including a 1,200-seat proscenium theatre, a 250-seat modified-thrust proscenium theatre, a well-equipped dance studio and related support facilities including costume, make-up, scene and paint shops. Two new experimental theatres plus support facilities are also available for student use.

For information and guidance, contact the chairman of the department, Mr. Dennis Catrell, Performing Arts Center 295, (206) 676-3878. Graduate students should contact the chairman or the director of graduate study, Dr. Daniel Lerner, Performing Arts Center 295, (206) 676-3876.

THEATRE/DANCE FACULTY

- DENNIS E. CATRELL (1966) Chairman.
Associate Professor. BA, University of Michigan; MA, Northern Illinois University.
- WILLIAM A. GREGORY (1968) Professor and Dean of the College of Fine and Performing Arts. BS, Central Michigan University; MA, Michigan State University; PhD, University of Minnesota.
- MONICA C. GUTCHOW (1960) Assistant Professor. BS, University of Oregon; MFA, University of North Carolina Women's College.
- DANIEL M. LARNER (1968) Associate Professor. AB, Harvard College; MS, PhD, University of Wisconsin, Madison.
- BYRON E. SIGLER (1963) Associate Professor. BA, MFA, Tulane University; PhD, Stanford University.

- DOUGLAS R. VANDER YACHT (1970) Associate Professor. BA, Western Washington State College; MA, Purdue University; PhD, Ohio State University.
- THOMAS E. WARD (1977) Associate Professor. BA, Western Maryland College; MFA, New York University, School of Arts.

ASSOCIATES IN THE ARTS

- Donald A. Adams (1964) Associate in Theatre Arts. BA, MA, University of Washington.
- Roger Germain (1970) Associate in Theatre Arts. BA, Western Washington State College.

BACHELOR OF ARTS

Major — Theatre 85 credits

- Required core (49 credits)
Th/D 101, 160, 201, 212, 222, 231, 250, 285, 322, 370, 380, 428a, or 428b, or 428c, and two courses selected from 324, 325, 327, 328, 421, 422, 423, 480
- Concentration (18 to 20 credits) selected from:
 - a. Acting: Th/D 260, 360, 460 (each repeated once)
 - b. Children's Theatre: Th/D 350, 351, 450, 452 and 6 credits under advisement
 - c. Dance: Th/D 235, 236, 238, 239, 241, 331, 332, 335, 337
 - d. Directing: Th/D 260, 314, 470, 471 and 3 credits under advisement
 - e. Film: Th/D 301, 302, 401, plus 9 credits under advisement
 - f. Literature: Th/D 324, 325, 327, 328, 421 or 422 or 423, 480
 - g. Dramatic Writing: Th/D 385, 485, 486, 487, 488
 - h. Technical Theatre: Th/D 213, 311, 312, 313, 315, 411, 415
- Electives (16 to 18 credits):
Th/D 215, 255, 256, 257, 314, 424, 453, 462

Minor — Theatre 30 credits

- Th/D 101, 160, 212
- Th/D 201 or 231 or 250 or 285
- Th/D 222, 260, 261, 370
- Two courses from Th/D 222, 322, 324, 325, 327, 328, 380, 421, 422, 423, 428a, 428b, 428c, 480

Major — Dance 85 credits

- Theatre: Th/D 101, 212, 215, 160
- Dance Theory, History, Production: Th/D 231, 336, 431, 432, 433
- Dance Technique: Th/D 235, 236, 237, 238, 239, 240, 331, 332, 333, 334, 335, 339, 340, 341

- Dance Improvisation and Composition: Th/D 241, 242, 337, 338
- Art 101, Biol 348, Music 128, P.E. 326

Proficiency in technical skill above the beginning level should be established before taking a dance major. At least two credits from Th/D 232, 233 or 239 are recommended.

A minor is recommended in one of the following areas: theatre, music, literature, art.

Minor — Dance 25 credits

- Th/D 231
- Th/D 235, 236, 237 or 238, 239, 240
- Electives under advisement — 16

GRADUATE STUDY

For concentration in theatre and dance leading to the Master of Arts degree, see the *Graduate Bulletin*, Department of Speech.

A NOTE ON COURSE NUMBERING

In each level of course work (100, 200, 300, 400 and 500), the following numbering system has been used:

Film	01-09
Technical Theatre	11-20
Literature	21-30
Dance	31-45
Children's Theatre	50-59
Acting	60-69
Directing	70-75
History	80-84
Playwriting	85-90

Theatre 101 (Introduction to Theatre) and 110 (Interdisciplinary Art) and 600-level courses are not a part of this system.

It is possible to take an Interdisciplinary Arts major with a concentration in Theatre/Dance. See Arts, Interdisciplinary, in this catalog for full details of the major.

COURSES IN THEATRE AND DANCE

101 INTRODUCTION TO THE ART OF THE THEATRE (3)

An introduction to the basics of the art of the theatre through participation; experiences with improvisation, mime, script analysis, criticism, sensory awareness; also touching on the allied arts of film and television.

135 BEGINNING MODERN DANCE I (2)

The study of basic principles of dance movement in terms of placement, technique, and space, time, energy concepts. Emphasis will be on creative movement experiences, and developing an appreciation of the dance as an art form. May be repeated for credit. Open to non-majors.

138 BEGINNING BALLET I (2)

An introductory study of basic principles of the ballet as an intellectual, artistic and physical medium. Emphasis on basic French terminology, barre exercises, simple combination in adagio and allegro. Open to non-majors. May be repeated for credit.

160 INTRODUCTION TO ACTING (3)

Prereq: Th/D 101. Fundamentals of acting; emphasis on basic techniques and tools used by the actor, including improvisation, resume writing, auditioning, vocal, physical and emotional awareness.

161 ACTING WORKSHOP FOR HIGH SCHOOL STUDENTS (2)

Prereq: Intended for, but not restricted to, students who have completed their junior year of high school. An intensive program to develop actor skills through daily physical, vocal and imagination training. Rehearsal and performance in a variety of theatre environments. Summers only.

201 INTRODUCTION TO THE CINEMA (3)

Introduction to major types of film. Training eye and ear to appreciate the work of the filmmaker. Analysis of basic conventions of framing, editing and camera usage.)

212 INTRODUCTION TO STAGECRAFT AND LIGHTING (5)

Basic theory of planning, drafting, construction and rigging of scenery and lighting. Practical laboratory experiences in scenery construction; painting, handling and rigging of scenery and lighting; scene shop assignment on one production; backstage assignment on second.

213 STAGECRAFT LIGHTING LABORATORY (2)

Prereq: Th/D 212 or concurrent. Practical experience in planning, handling and rigging stage lighting and special effects; assignments on one major production.

215 STAGE MAKE-UP (2)

Theory and practice of applying make-up for the stage. Grading will be S/U only.

222 UNDERSTANDING PLAYS (3)

Prereq: Th/D 101 or permission of instructor. Reading a playscript with an eye to theatrical production. Introduction to primary dramatic forms (tragedy, comedy). Practice in speaking and writing intelligently about plays.

231 INTRODUCTION TO DANCE (3)

An overview of dance subjects and problems with emphasis on the dance as a performing art; brief historical survey; similarities and differences of dance forms, vocational opportunities, dance notation, dance therapy, dance in education.

232, 233, 234 DANCE THEORY AND PRODUCTION (2 ea)

Group and individual experience in dance as a theatre art; participation in the dance concert. A maximum of six hours may be earned. S/U grading.

235, 236, 237 BEGINNING MODERN DANCE II (2 ea)

Prereq: Th/D 135 or equivalent. A continuation of 135 with further study in technique, rhythm, dynamics, space and form for composition. Open to non-majors. Th/D 236—a continuation of 235 in further intermediate dance technique. Th/D 237—further development of materials in 236 including some composition. Each course is a prerequisite to the next.

238, 239, 240 BEGINNING BALLET II (2 ea)

Prereq: Th/D 138 or equivalent. A continuation of classical academic technique; increase in terminology and movement vocabulary; tours, jumps, combinations in adagio and allegro. A three-quarter sequence course; each course is a prerequisite to the next. Open to non-majors.

Theatre/Dance

241, 242 DANCE IMPROVISATION (2 ea)

Prereq: Th/D 241 is prerequisite to 242. Improvisational approaches to movement exploration for the non-dancer and dancer; developing a creative sensitivity to time, space, energy, motion and body awareness.

250 INTRODUCTION TO CHILD DRAMA (3)

Children's theatre, creative dramatics, puppetry; history, value, philosophy and literature of child drama; its uses in theatre, speech therapy, education and recreation.

255, 256, 257 THEATRE THEORY AND PRODUCTION (2 ea)

Instruction and experience in all aspects of theatre organization and production. A maximum of six credits may be earned. Grading will be S/U only.

260 ACTING: STUDIO I (3)

Prereq: Th/D 160 and permission of instructor. The physical, vocal, intellectual and emotional instrument of the individual actor will be explored in relation to demands of a scene or play through the studio approach. Repeatable once for credit by permission of instructor.

295 INTRODUCTION TO DRAMATIC WRITING (4)

Prereq: Th/D 101 or permission of instructor. Beginning exercise in dramatic writing, with emphasis on primary forms and conventions.

300 DIRECTED INDEPENDENT STUDY (1-6)

Conference Course Permit required from instructor before registering.

301 THE ART OF FILM (3)

Prereq: Th/D 201 or permission of instructor. Film as distinguished from but related to other art forms; film aesthetics; technology. Also offered as Speech 345.

302 STUDIES IN FILM TYPES AND STYLES (3)

Prereq: Th/D 201 or permission of instructor. Distinctive elements of melodrama, comedy, serious drama, documentary or fantasy. Also offered as Speech 346.

311 STAGE DESIGN TECHNIQUES (3)

Prereq: Th/D 212 or concurrent. Theory and practical experience in communicating technical and artistic information through drafting, color-rendering and model construction techniques.

312 ADVANCED STAGECRAFT (3)

Prereq: Th/D 212 and 311. Technical analysis of scripts; special effects and properties; laboratory work on productions.

313 ADVANCED STAGE LIGHTING (3)

Prereq: Th/D 213 and 311. Technical and artistic study of light and color as they affect other theatre arts and contribute to artistic design; laboratory work in production.

314 STAGE MANAGEMENT (3)

Prereq: Th/D 160 and 212. An in-depth study of the stage manager's role and responsibilities prior to, during and after production.

315 HISTORIC COSTUME FOR THE STAGE (3)

Evolution of fashion from ancient Greece through the 19th century with reference to contemporary reproduction.

322 REPRESENTATIVE PLAYS (5)

Prereq: Th/D 101, 222. Introductory survey of historically significant and stageworthy plays from all periods.

323 ETHNIC THEATRE (3)

Prereq: Th/D 101. This introductory course surveys the roots and development of Black drama in and outside the United States, the role of Chicano theatre in the protest and labor movements of the Southwest, and explores the dance rituals in the indigenous Indian culture of the Pacific Northwest with its analogy to the origins of Greek and Christian drama.

324 SHAKESPEARE (3)

Survey of principal plays. Also offered as English 214.

325 MODERN EUROPEAN DRAMA (3)

Prereq: Th/D 222 and 322. Selected European plays and playwrights from 1850-1950.

327 MODERN AMERICAN DRAMA (3)

Prereq: Th/D 222 and 322. Selected American plays and playwrights from 1920 to 1950. Also offered as English 419b.

328 CONTEMPORARY DRAMA (3)

Prereq: Th/D 222, 322. Selected plays and significant trends in contemporary English, European and American drama.

331 MODERN JAZZ DANCE (2)

Prereq: Th/D 135. Development and practice of skills to enhance the body as an instrument of jazz dance; emphasis on control and isolation of muscles used in jazz dancing and a discipline and refinement of such movement techniques. Repeatable for credit under advisement.

332 INTERMEDIATE JAZZ DANCE (2)

Prereq: Th/D 135 and 331. A continuation of 331 with increasing difficulty in jazz dance techniques. Repeatable for credit under advisement.

333, 334, 335 INTERMEDIATE MODERN DANCE TECHNIQUE (3 ea)

Prereq: Th/D 237 and four additional credit hours in dance or equivalent. Th/D 333 is the study of advanced modern dance techniques and styles (Graham, Cunningham, Evans, etc). The school of technique will vary depending upon the instructor or guest artist. Th/D 334 and 335 are further developments of material in Th/D 333 or new styles in modern dance training. Repeatable once for credit by permission of instructor.

336 RHYTHMIC ANALYSIS AND ACCOMPANIMENT (3)

Prereq: Th/D 235 or equivalent. Technical aspects of music and rhythms and musical forms as applied to dance movement; the function of percussion and accompaniment for dance techniques, improvisations and accompaniment.

337 DANCE COMPOSITION I — CHOREOGRAPHY (3)

Prereq: Th/D 235 and 336. Fundamentals of composition emphasizing theme and development; form or design; time, force and special aspects in solo and duet studies.

338 DANCE COMPOSITION II — CHOREOGRAPHY (3)

Prereq: Th/D 337. Composition in pre-classic and modern forms.

339, 340, 341 INTERMEDIATE BALLET TECHNIQUES (3 ea)

Prereq: Th/D 240 or equivalent. Th/D 339 is the study of classical academic technique through the strict adherence to fundamental principles. Th/D 340 is a continuation of Th/D 339 with an increase of terminology and movement vocabulary. Th/D 341 is a further development of the classic technique with increasing difficulty in tours, jumps, combinations in adagio and allegro. Open to non-majors. Repeatable once for credit by permission of instructor.

350 CREATIVE DRAMA (3)

Th/D 250 recommended. Principles and methods for using improvised drama as an experimental means of fostering the young person's growing awareness of himself and his world. Laboratory work with students at elementary and secondary schools.

- 351 **PUPPETRY (3)**
Design, construction and manipulation of puppets; their use in productions for the child audience, in speech therapy, in elementary education, and as a craft for children.
- 360 **ACTING: STUDIO II (3)**
Prereq: six hours of Th/D 260 and and/or permission of instructor. Continuation of the refinement of skills and techniques presented in Acting: Studio I. Additional concentration on work with scenes and short plays. Repeatable once for credit by permission of instructor.
- 370 **PLAY DIRECTION I (3)**
Theory and practice of stage direction including selection of play, casting and blocking, and production of a scene for public performance.
- 380 **INTRODUCTION TO HISTORY OF THE THEATRE (5)**
Development of theatre arts from primitive origins to the present.
- 385 **INTERMEDIATE DRAMATIC WRITING WORKSHOP (4)**
Prereq: Th/D 285 or permission of the instructor. Further practice in primary forms and conventions of drama. Longer forms. Introduction to mixed forms and contemporary styles.
- 400 **DIRECTED INDEPENDENT STUDY (1-6)**
Conference Course Permit required from instructor before registering.
- 401 **NEW DEVELOPMENTS IN THE ART OF FILM (3)**
Prereq: Th/D 301 or 302, or permission of instructor. New developments in film as an art form. The course will cover the latest experiments in new methods of expression, as they would be defined by aesthetic principles.
- 411 **SCENIC DESIGN (3)**
Prereq: Th/D 312 and 313 or permission of instructor. Design for the modern theatre; emphasis on interpretation of the play through design; practical designs and techniques.
- 415 **STAGE COSTUMING (3)**
Prereq: Th/D 315. Costume design and execution; specific emphasis on basic sewing, use of patterns, materials and costume crafts, costume plots and wardrobe supervision.
- 421, 422, 423 **DEVELOPMENT OF THE ENGLISH DRAMA (3 ea)**
Prereq: Th/D 222 and 322. Historical and critical survey of the English drama, with emphasis upon the greater writers (exclusive of Shakespeare); medieval and Elizabethan-Jacobean; 1660-1900; 20th century. (Also offered as English 412a,b,c.)
- 424 **STUDIES IN SHAKESPEARE (3)**
Prereq: Th/D 324 or English 214. Seminar in selected plays. Also offered as English 414r.
- 428 **MAJOR DRAMATISTS (3 ea)**
Prereq: Th/D 222 and 322. In-depth treatment of playwrights influential in the development of drama.
428a English
428b Continental European
428c American
- 431 **HISTORY OF DANCE (3)**
Prereq: Th/D 231. Historical and philosophical development of the dance from primitive man through the contemporary period.
- 432 **DANCE PRODUCTION (2)**
Prereq: Th/D 231, 235, and 4 credit hours in dance. Lighting, costuming and make-up; formulating, developing and presenting various types of dance programs.
- 433 **LABANOTATION (3)**
Prereq: Th/D 231, 235, or equivalent. An elementary course in dance notation. Reading and writing bodily movements, ballet and modern dance sequences with emphasis on directions, levels, arm and leg movements.
- 434 **THE DANCE ARTS IN EDUCATION (3)**
Prereq: permission of instructor or demonstrated competency at the intermediate level in dance technique. Materials and methods of instruction in the modern dance and ballet. Observation and teaching opportunities in a laboratory studio environment.
- 439 **ADVANCED BALLET TECHNIQUE (3)**
Prereq: Th/D 339, 340, 341 and/or audition/instructor approval. Intense technical ballet syllabus geared to obtain a pre-professional level. Includes advance theory and terminology. Pointe, variations, preparatory partnering exercises.
- 450 **CREATIVE DRAMATICS LEADERSHIP (3)**
Prereq: Th/D 350. Advanced techniques; supervised teaching.
- 452 **CHILDREN'S THEATRE (3)**
Th/D 350 recommended. Plays for children studied for appreciation of their values for the child audience; principles of children's theatre play selection.
- 453 **TOURING THEATRE (5)**
Prereq: permission of instructor. Theory and principles of touring technique and problems; participation in college theatre touring program. Grading will be S/U only.
- 460 **ACTING: STUDIO III (4)**
Prereq: 6 hours of Th/D 360 and audition. Continuation of refinement of skills and techniques presented in Acting: Studio II. This course is devoted to advanced workshops and performance projects with directors and playwrights. Repeatable once for credit by permission of instructor.
- 462 **ADVANCED WORKSHOP IN SUMMER STOCK (15)**
Prereq: written permission of instructor required before registering. Offered only summer quarter. Contact Director of Theatre for details.
- 470 **PLAY DIRECTION II (3)**
Prereq: Th/D 370. Producing and directing a one-act play for public performance; special emphasis on working with the actor.
- 471 **PLAY DIRECTION III (5)**
Prereq: Th/D 470. Producing and directing a full-length play for public performance; emphasis on problems in high school, community and professional theatres.
- 472a,b **HIGH SCHOOL DRAMA DIRECTORS INSTITUTE (2, 4)**
A workshop for those who are now engaged or who intend to become engaged in the processes of play production, from script selection, production planning, casting and rehearsal to performance. This Institute utilizes the resources of the concurrent acting workshop for high school students. Repeatable with permission of instructor. (Summer only.)
- 480 **HISTORY OF THE THEATRE II (3)**
Prereq: Th/D 380. Significant practices, trends and figures in contemporary European and American theatres.
- 485, 486, 487 **DRAMATIC WRITING WORKSHOP (4 ea)**
Prereq: Th/D 385 or permission of instructor. Opportunity for disciplined expression in writing for stage, film, television or other media. May be repeated as 485, 486 or 487 to a maximum of 12 credits. (Also offered as English 452a,b,c.)

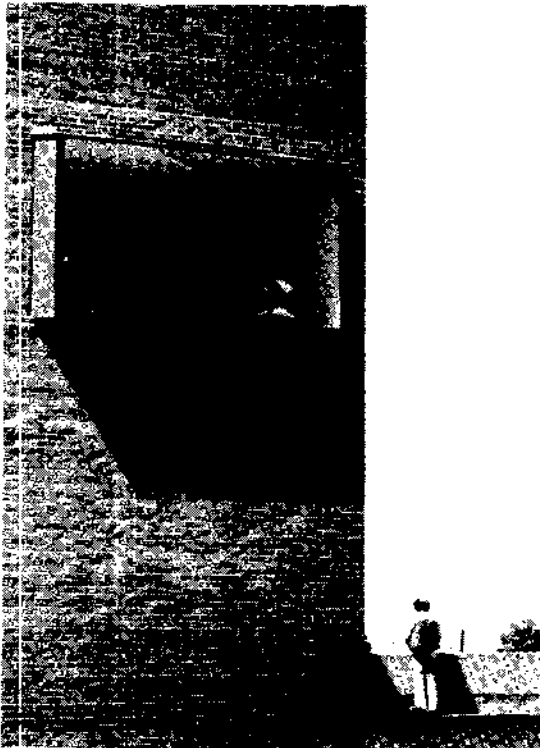
488 REVISION AND PRODUCTION SCRIPT PREPARATION (2)

Permission of the instructor required. Supervised revision and script preparation for production in any medium, and/or opportunity for extra work on full-length scripts. Normally taken concurrently with Th/D 485, 486 and/or 487 when student's work is or is about to be in actual production. May be repeated for a maximum of six credits.

GRADUATE COURSES

The following courses are offered for graduate credit for persons enrolled in the department's graduate program. For course descriptions and other information about the graduate program, see the current Graduate Catalog.

- 500 SPECIAL PROJECTS (1-6)
Individual conference.
- 501 INTRODUCTION TO RESEARCH IN THEATRE/DANCE (4)
- 511 SEMINAR IN SCENIC DESIGN AND STAGE LIGHTING (3)
- 522 SEMINAR IN DRAMATIC THEORY AND CRITICISM (4)
- 528 SEMINAR IN MAJOR DRAMATISTS AND DRAMATIC PERIODS (3)
- 550 SEMINAR IN CHILD DRAMA (3)
- 570 PLAY ANALYSIS AND THEATRE PRODUCTION PLANNING (4)
- 571 SEMINAR IN PLAY DIRECTION (4)
- 585 PLAYWRITING SEMINAR (3)
- 586 ADVANCED PLAYWRITING SEMINAR (3)
- 690 THESIS (6-9)
- 691 WRITING SEMINAR: THE RESEARCH MONOGRAPH IN THEATRE (1-3)
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University Personnel

Librarians

- MARIAN L. ALEXANDER (1970) Assistant Professor and Head Catalog Librarian. AB, Occidental College; MLS, University of California, Los Angeles.
- ROBERT J. CROSS (1969) Associate Professor and Associate Director for Public Services. BA, Carleton College; MLS, University of Washington.
- THOMAS FRAZIER (1964) Associate Professor and Humanities Librarian. BA, MA, MLS, University of Washington.
- ENID HAAG (1975) Associate Professor and Education Librarian. BS/Educ, University of Nebraska; MA/Educ, MLS, University of Denver.
- KATHLEEN J. HASELBAUER (1972) Assistant Professor and Science Librarian. BA, Western Washington University; MLS, University of Washington.
- RAYMOND G. McINNIS (1965) Associate Professor and Head Reference Librarian. BA, University of British Columbia; MLS, University of Washington.
- DAN MATHER (1969) Associate Professor and Associate Director for Technical Services & Library Systems. BA, MLS, University of Washington.
- ANN M. OBOURN (1977) Assistant Professor and Head Acquisitions and Serials Librarian. BA, MLS, University of Washington.
- RICHARD K. PETERSON (1966) Assistant Professor and Special Collections Librarian. BA, University of Washington; BA in Ed, Western Washington University; MA, PhD, MLib, University of Washington.
- CYNTHIA S. RICHARDSON (1978) Instructor and Catalog Librarian. BA, Whitman College; MSLS, University of Southern California.
- MARIAN A. RITTER (1969) Assistant Professor and Music Librarian. BME, MLS, University of Portland.
- WILLIAM H. O. SCOTT (1960) Associate Professor and Documents Librarian. AB, AM, AMLS, University of Michigan.
- C. FRED WATERMAN (1967) Assistant Professor and Business Librarian. BS, MLS, University of Pittsburgh.

SUMMARY OF ENROLLMENT – INDIVIDUALS

Resident

Summer Quarter, 1978	3,813
Fall, Winter, Spring, 1978-79	12,253

Continuing Education

Independent Study	255
Off Campus	3,609
Total Continuing Education Enrollment	3,864

DEGREES AND CERTIFICATES

Degrees granted from August, 1978, to
June, 1979, inclusive:

Master of Education	220
Master of Arts	70
Master of Science	30
Bachelor of Arts in Education	306
Bachelor of Arts	786
Bachelor of Science	307
Bachelor of Fine Arts	1
Total	1,720

Teaching Certificates issued from

August, 1978, to June, 1979, inclusive:	
Provisional	360
Recommended for certification to the State Superintendent for Public Instruction – Standard Teaching Certificate	265

APPENDICES

Program and Activity Policies

No qualified person shall, on the basis of race, color, religion, national origin, sex, age, handicap, or marital status be excluded from participation in, be denied the benefits of or be subject to discrimination in any program or activity provided by the University including the Associated Students. In addition, the University will not utilize off-campus facilities, nor participate in activities or services which are operated in a discriminatory manner.

Counseling and guidance in making educational and career choices will be free of stereotyping. It is the policy of the University to encourage the elimination of stereotyping and bias in testing and other curricular material.

With limited exceptions, which shall be reviewed by the Affirmative Action Director, all classes, courses of study and other educational programs and activities offered by the University will be open to all persons

The University will modify its academic requirements and procedures for evaluating student academic achievement as necessary to ensure that such requirements or evaluation methods do not discriminate or have the effect of discriminating on the basis of handicap against a qualified applicant or student. All University programs are accessible to mobility impaired students. The University assists in providing auxiliary aids for students with impaired sensory, manual, or speaking skills. It is the responsibility of the student needing these modifications or aids to request them. Informal requests for modifications or aids should be made with the department of Student Affairs. If further assistance is needed in obtaining these modifications or aids the Affirmative Action Office should be contacted.

A person who believes s/he has been discriminated against by the University because of race, color, religion, national origin, sex, age, handicap, marital status or Vietnam Era or disabled veteran status is urged to utilize the internal grievance procedure provided by the University through the Affirmative Action Office as soon as possible after the alleged act of discrimination giving rise to the grievance.

See Appendix E. The Affirmative Action Office is located at 400/410 Old Main, phone 3306.

Appendix B STUDENT RIGHTS AND RESPONSIBILITIES

WAC 516-20-005 PREAMBLE. Students of Western Washington Univer-

sity have an obligation to fulfill the responsibilities incumbent upon all citizens, as well as the responsibilities of their particular roles within the academic community. This chapter advises the student of his rights and responsibilities while enrolled at Western Washington University. The student is expected to respect academic codes and federal, state, and local laws, and to act as a responsible member of the university community. As citizens, students enjoy the same basic rights as all members of society and are bound by the same responsibilities.

WAC 515-20-010 THE ACADEMIC CODE. Violations of the academic code of Western Washington University are defined in WAC 516-20-011. Students accused of violations of the academic code shall be subject to university judicial action. The university and its teaching faculty shall take all reasonable steps to prevent and detect any violation of this academic code.

WAC 516-20-011 ACADEMIC CODE VIOLATIONS DEFINED. A student shall be subject to disciplinary action for the following acts of academic dishonesty:

- (1) Giving unauthorized information to another student or receiving unauthorized information from another student during any type of examination or test.
- (2) Obtaining or providing without authorization questions or answers relating to any examination or test prior to the time of the examination or test.
- (3) Using unauthorized sources for answers during any examination or test.
- (4) Engaging in any and all forms of plagiarism. Plagiarism is defined as the act of appropriating the literary composition of another, or parts or passages of another's writings, or the ideas or language of the same, and passing them off as the product of one's own mind.
- (5) Engaging in any behavior which materially or substantially obstructs or disrupts teaching, research, or administrative functions necessary to assure continuation of the academic process, or any proceedings under this chapter.
- (6) Submitting fraudulent admission credentials.
- (7) Forgery of official university documents.

WAC 516-20-015 PENALTIES FOR VIOLATION OF THE ACADEMIC CODE. The sanctions set forth in this section are available to the university through its judicial structure for students convicted of violating the academic code.

- (1) Student(s) convicted on first offense:
 - (a) May be assigned a grade of F for the work in question or for the course involved.
 - (b) May be required to make restitution for any and all damage to or

Appendix A POLICY OF NON-DISCRIMINATION

It is the policy of the Board of Trustees of Western Washington University to provide equal employment opportunity for all employees and qualified applicants for employment, and equal access to programs and services for all students and members of the community regardless of race, color, religion, national origin, sex, age, handicap, marital status, or Vietnam era or disabled veteran status. The Board of Trustees pledges that every effort will be made to provide the resources necessary for implementation of this policy.

It is the responsibility of each and every member of the University community to insure that this policy becomes a functional part of the daily activities of Western Washington University.

The University will continue to cooperate with agencies of the federal and state governments in fulfilling its obligations under the laws of the United States and the State of Washington.

The objectives of the Western Washington University Affirmative Action Program are to eliminate discrimination and to develop a work force and student body which reflect an equitable distribution of minority group members, women, veterans and handicapped individuals at all levels of employment and throughout all departments of the University.

Personnel Policies

The University recruits on the basis of qualifications without regard to race, color, religion, national origin, sex, age, handicap, marital status or Vietnam era or disabled veteran status, except where such is a bona fide occupational qualification.

Recruitment for graduate assistants and student employees shall be publicized so all eligible interested individuals have an opportunity to apply.

Appendices

loss of personal or university property which is incurred as a result of the student's behavior. Restitution may include money payment to compensate for theft, damaged or destroyed property; repair or replacement of damaged or destroyed property; renovation of disturbed, cluttered, or contaminated areas.

(c) May be placed on Disciplinary Probation. This action indicates that for a specified period of time the student's continued enrollment is made conditional upon no further violations of the code. No notation is made on the permanent academic transcript, but a record is kept on file in the Office of Student Affairs until the student graduates or permanently severs his/her relationship with the university.

(d) May be placed on Disciplinary Suspension. This action results in the withdrawal of privileges of attending the university for a specified period of time.

(e) May lose credits earned at a former institution if he/she at the time of application for admission did not provide official transcripts of all work at such institutions.

(2) Student(s) convicted on the second offense:

(a) Shall receive a grade of F in the course involved and shall be placed on Disciplinary Probation.

(b) May be required to make restitution for any and all damage to or loss of personal or university property which is incurred as a result of the student's behavior.

(c) May be placed on Disciplinary Suspension.

(d) May be expelled. This action results in the withdrawal of privileges of attending the university with no promise (implied or otherwise) that the student may be reinstated to good standing at any future time.

(3) Student(s) convicted on the third offense:

(a) May be required to make restitution for any and all damage to or loss of personal or university property which is incurred as a result of the student's behavior.

(b) Shall receive a grade of F in the course involved, shall be placed on Disciplinary Suspension, and upon return to the university shall be placed on Disciplinary Probation for the remainder of his/her academic education.

(c) May be expelled.

WAC 516-20-020 FREEDOM OF EXPRESSION. The rights of freedom of speech, petition, and assembly are fundamental to the democratic process. The Constitution of the United States guarantees these freedoms to all members of the Western Washington University community. The university recognizes that it has an obligation to maintain on campus an atmosphere which allows the institution to perform the fundamental task of providing an opportunity for all members of this community to pursue further knowledge through accepted

academic processes. To maintain a balance between the stated objectives of the university and the constitutional rights of students, it is essential that demonstrations and other expressions of opinion be peaceful. Students may not materially or substantially disrupt or obstruct freedom of expression.

WAC 516-20-030 SPEAKERS. In conformity with the traditions of free speech and free inquiry, the following rules are established to govern the appearance on campus of speakers not themselves members of the university community:

(1) Any person may speak on the campus of Western Washington University when invited to do so by a member of the university community. Normal restraints imposed by law, such as rules concerning slander, shall be observed by speakers. The appearance of an invited speaker on the campus does not constitute an endorsement, either implicitly or explicitly, of the speaker's views by the university's faculty, administration, student body, or Board of Trustees, and the university does not assume any responsibility for views expressed by persons speaking on the university campus.

(2) The scheduling of speakers shall be subject to the availability of appropriate space and the regulations currently in effect governing the use of university facilities.

(3) Public address or audio amplification equipment may normally be used only in the Viking Union Plaza and athletic fields. Use of such equipment in other areas of the campus must be authorized by the Vice President for Student Affairs or the Vice President's designee.

(4) The right of free speech does not immunize a speaker from legal action if the substance of the speaker's remarks is found to violate the legal rights of others.

(5) The essence of the right to speak is the freedom of the speaker to make his statement, and both the speaker and the audience are entitled to proceed without being subjected to physical interference or violence. Persons deliberately engaging in acts of violence or threats of violence or in other conduct which materially or substantially disrupts the exchange of ideas on the campus of Western Washington University are subject to removal from the campus and/or prosecution under law.

WAC 516-20-040 PRINTED MATERIAL. The university recognizes its obligation to protect students' freedom of expression while at the same time minimizing the impact of visual pollution and physical damage to university property.

Affixing signs, banners, posters, or other displays to building exteriors, including walls, balconies, building exterior columns, roofs, or fixtures is not permitted with the exception of certain banners as in subsection (1) of this section. The university shall pro-

vide sufficient bulletin boards and shall permit other methods for disseminating information such as leaflets, handbills, posters and banners, according to the following guidelines:

(1) Handbills, leaflets, posters, written statements and similar materials may be distributed and/or posted, without the necessity for advance review or approval. Exceptions to this policy include the banners authorized through the Viking Union reservation desk and during student body elections when exceptions will be determined by the elections board. (Banner specifications may be obtained from the Director of the Viking Union and/or Director of Housing.)

Other exceptions for very special events, conferences, directional signs, etc., will be made by the Supervisor of Scheduling for academic areas; by the Housing Office for housing areas; and by the Viking Union for student activity facilities.

(2) Displays on building interiors must be confined to bulletin boards or similar areas provided for that purpose. Attaching signs or other displays to walls, doors, stairs, railings, balconies, or other interior structures causes damage and is, therefore, prohibited.

(3) The chairperson or department head may exercise the authority to control the interior of their allotted space with regard to bulletin boards and signs on doors. Boards not allocated to a specific office will be maintained through regular custodial staff activity. Handbills, leaflets, and similar materials may be distributed from any room properly scheduled for that purpose, from authorized areas in the Viking Union, and from outdoor areas on the campus when consistent with the protection of university property. Persons distributing handbills or similar materials have a responsibility to prevent or avoid excessive littering. Persons hanging posters or similar materials will respect the rights of others by posting materials only where space is available on bulletin boards and by exercising discretion in size and number of posters per event which appear on any one bulletin board. Specific guidelines may be obtained from the Viking Union.

(4) All printed materials shall indicate the name of the person or organization sponsoring or distributing the materials. All printed material which announces a coming event or attraction shall specify the date.

(5) All printed materials may be subject to removal if their content is libelous or primarily commercial in nature.

(6) All posters and banners advertising events must be removed by the distributing individual or group no later than two school days after the event.

(7) Displays which are improperly posted will be removed and retained at the Viking Union until 10:00 a.m. each Monday. Materials which have

not been removed two days after the event will be disposed of.

WAC 516-20-050 PLACEMENT. The University endorses a free and open placement and recruitment policy.

WAC 516-20-120 IDENTIFICATION OF PERSONS ON THE CAMPUS. University authorities have the right to seek proper identification of persons on the campus when there is reasonable cause to believe that said persons have violated federal, state, or local laws or university rules, regulations or policies.

WAC 515-20-137 JUDICIAL STRUCTURE. To facilitate understanding of the judicial structure established by this chapter, the following diagram is provided.

VICE PRESIDENT FOR
STUDENT AFFAIRS
OF THE UNIVERSITY

UNIVERSITY JUDICIAL BOARD
(Appellate, Referral)

UNIVERSITY CONDUCT
HEARING OFFICER
(Appellate, Original)

WAC 516-20-140 UNIVERSITY JUDICIAL BOARD. (1) There is established a university Judicial Board (hereinafter "Judicial Board") which shall consist of six members: two faculty members, three students, and one member of the student affairs staff.

(2) The two faculty members of the Judicial Board shall be appointed by the Vice President for Academic Affairs. The member of the student affairs staff on the Judicial Board shall be appointed by the Vice President for Student Affairs. The three student members of the Judicial Board and three alternates shall be appointed by the Western Washington University Associated Students' President. All appointments for each academic year shall be made during the first four weeks of fall quarter of the academic year. The Chairperson of the Judicial Board shall be elected by the members of the board from within its membership.

(3) The term of office of members of the Judicial Board shall be one regular academic year. If a student position on the Judicial Board becomes vacant prior to the end of a term of office, the position shall be filled by one of the appointed alternates.

(4) The University Judicial Board shall have authority to adjudicate and administer sanctions for violations of this chapter. Alleged violations or appeals which occur within the final two weeks of a spring quarter may be heard by the Summer Board.

WAC 516-20-150 SUMMER QUARTER JUDICIAL BOARD. (1) There shall be established a Summer Quarter Judicial Board (hereinafter

"Summer Board"). The Summer Board shall have authority to adjudicate and administer sanctions for violations of this chapter when they occur during summer quarter.

(2) The Summer Board shall serve only during the summer quarter. Alleged violations or appeals which occur during the final two weeks of a summer quarter may be heard in the subsequent quarter by the university Judicial Board.

(3) The Summer Board shall be composed of two students appointed by the Western Washington University Associated Students' President, one faculty member appointed by the Vice President for Academic Affairs, and a member of the student affairs staff appointed by the Vice President for Student Affairs.

WAC 516-20-152 UNIVERSITY CONDUCT HEARING OFFICER. (1) The University Conduct Hearing Officer (hereinafter "Hearing Officer") shall be appointed by the Vice President for Student Affairs.

(2) The University Conduct Hearing Officer shall have authority to adjudicate and administer sanctions for violations of this chapter.

(3) The Hearing Officer shall consider appeals made from decisions of faculty in cases of alleged violations of this chapter and shall have initial jurisdiction for alleged violations of the Academic Code, WAC 516-20-011(6). The Hearing Officer shall consider appeals from decisions of the Director of Admissions in cases of alleged violation of WAC 516-20-011(5).

WAC 515-20-156 JUDICIAL PROCEEDINGS. University judicial proceedings shall be instituted only for violations of the provisions of this chapter. The responsibility for interpreting the provisions of this chapter in the context of a particular case is vested in the Hearing Officer and the Judicial Board or the Summer Board. A particular act shall constitute a violation of this chapter only where a reasonable interpretation of the language of the provisions of this chapter indicates that the act is prohibited. The Hearing Officer, the Judicial Board, or the Summer Board may call upon the Committee on Student Rights and Responsibilities for an advisory interpretation of chapter 516-20- WAC—STUDENT RIGHTS AND RESPONSIBILITIES.

WAC 515-20-160 INITIATION OF JUDICIAL PROCEEDINGS. Formal judicial proceedings against a student for an alleged act of academic dishonesty may be initiated by the instructor responsible for the course involved.

(1) The instructor must discuss all allegations with the student within seven class days of discovering the alleged violation. This discussion must include the nature and date of the alleged violation, all evidence associated with the incident, and the fact that the student need not give

any information regarding the alleged violation.

(2) In the event it is not possible to discuss the alleged violation because of the absence of either party from campus, the instructor shall not submit a grade until he/she has had an opportunity to notify the student and discuss the matter. If the alleged violation occurs at the end of a quarter, the faculty member will notify the student of the allegation within the first fourteen school days of the subsequent quarter. The matter must be discussed between instructor and student at the earliest possible time both parties are available.

(3) If convinced that a violation of the Academic Code did occur, the instructor may invoke the appropriate sanction(s) from WAC 516-20-015 with the exception of disciplinary suspension or expulsion, in which case the instructor shall forward the case immediately to the Vice President for Student Affairs for referral to the Hearing Officer.

(4) The instructor must notify the student of his/her decision and forward to the Vice President for Student Affairs a written statement of that decision with all supporting evidence. This official statement will be retained in the Student Affairs office conduct file for the prescribed probationary period or until the student has graduated or otherwise terminated his/her association with the university.

(5) In cases of alleged disruptive behavior (WAC 516-20-011(5)), the member of the university community bringing the charge shall deliver to the Vice President for Student Affairs a written statement of charges against the student. The Vice President shall refer the case to the Hearing Officer.

WAC 516-20-165 NOTICE OF HEARING. (1) The Chairperson of the Judicial Board, Summer Board, or the Hearing Officer may request a student formally charged with a violation of this chapter to appear before the Judicial Board, Summer Board, or Hearing Officer by delivering to the student a formal notice of hearing and request to appear.

(2) The formal notice of hearing and request to appear shall state the nature of the alleged violation, the section of the academic code violated, and the time and place of the hearing.

(3) The notice of hearing and request to appear shall be sent by certified mail or hand delivered. When certified mail is used as a means of delivery, the notice will be mailed to the student at the last address on file in the Office of Student Affairs. If the notice is returned via the mails undelivered, the Office of Safety and Security will be charged with hand delivery and providing proof of delivery. The accused student must receive the notice of hearing and request to appear by not later than seven school days prior to the hearing.

Appendices

WAC 516-20-170 FAILURE TO APPEAR BEFORE A JUDICIAL OFFICER OR JUDICIAL BOARD. The failure of a student, formally charged with a violation of this chapter, to appear before the Hearing Officer, the Judicial Board, or the Summer Board after receiving a notice of hearing and request to appear shall be prohibited from registering for subsequent quarters until such time as he/she does appear before the Hearing Officer, the Judicial Board, or the Summer Board.

WAC 516-20-172 WITHDRAWAL OF STUDENT PRIOR TO COMPLETION OF PROCEEDINGS. A student formally charged with violation of the academic code who voluntarily withdraws from the university prior to the completion of the proceedings before the Hearing Officer or a judicial board is not excused from pending judicial action. The accused student's future registration will be held in abeyance until such time as the student arranges to be available for the completion of the judicial proceedings. Whenever a student formally charged with a violation of the academic code is required to withdraw from the university for reasons beyond the student's control prior to the completion of the proceedings before a judicial board or Hearing Officer, the proceedings shall be postponed until such time as the student re-enrolls at the university.

WAC 516-20-175 PROCEEDINGS TO BE OPEN OR CLOSED. All proceedings of the Hearing Officer or judicial boards shall be open to the public unless the accused student submits a written request asking that the proceedings be closed to the public. If the accused student wishes a closed hearing, written notice requesting such shall be submitted to the Hearing Officer or chairperson of the judicial board at least twenty-four hours in advance of the hearing.

WAC 516-20-180 RIGHTS OF THE ACCUSED STUDENT. (1) A student accused of violating the university's academic code shall have the right to a fair and impartial hearing before the university Hearing Officer, the university Judicial Board, or the Summer Judicial Board.

(2) No student may be asked by the Hearing Officer, the Judicial Board, or the Summer Board to give information or to answer any question concerning an alleged violation by the student of the academic code unless and until the student has been informed of:

(a) The fact that the student is suspected of having violated the academic code;

(b) The provision of the academic code which the student is suspected of having violated;

(c) The nature and date of the alleged violation;

(d) The student's right not to give any information regarding the alleged violation;

(e) The fact that the student may be accompanied by advisers of his/her choice, including legal counsel, at hearings to be held about the alleged violation.

(3) In judicial proceedings the accused student shall have the right to speak in his or her own behalf and be accompanied by advisers of his or her choice, including legal counsel. If the student intends to be represented by counsel, he/she must notify the Hearing Officer or the chairperson of the judicial board at least seventy-two hours before the time scheduled for the hearing. The university may be represented by legal counsel.

(4) In all judicial proceedings the Hearing Officer, the Judicial Board, or the Summer Board and the accused student shall have the right to call any person to speak concerning the alleged violation, subject to the rules of privilege recognized by law. The Hearing Officer or judicial Board may limit or exclude evidence which is irrelevant, immaterial, repetitious, or lacking in probative value.

(5) An accused student has the right to know who has brought the charges or allegations against the student and to cross-examine both the person(s) bringing the charges and all persons who present testimony against the student.

(6) A student shall not be subjected to judicial action more than once for the same single violation of the academic code.

(7) The burden of proof in judicial proceedings shall rest with the accuser, and a violation of the academic code must be proven by a fair preponderance of the evidence considered as a whole.

(8) Five of the six members of the Judicial Board and all the members of the Summer Board shall be considered a quorum (i.e., must be present in order for that board to take action). Each member of a judicial board shall have one vote in the deliberation of the board. Actions or decisions by a judicial board must be supported by a majority of the members of the board who are present at the time of the decision or action. A member of a judicial board who considers himself unable to render an impartial decision with regard to a particular case shall absent himself from the deliberations of the board with regard to that case, and may be replaced by an alternate.

WAC 516-20-181 ALTERNATIVE TO JUDICIAL PROCEDURES. (1) In cases where a clear or present danger does not exist, but where repeated disruption has occurred, and where there is question as to whether the student's mental health is such that she/he can profit from a particular university experience and the student is believed to have violated a particular university rule, regulation, or policy, the case will be referred by an Associate Dean of Students to the Vice President for Student Affairs. Be-

fore such referral is made, an Associate Dean of Students shall have attempted to assist the student through counseling or referral to other agencies. There should be written indication that such attempts at assistance have been offered and that other students or faculty or the educational mission of the university have been adversely affected by the individual's behavior.

(2) The vice president will conduct a hearing to determine whether there has been a violation of the code and what course of action should be taken. Written notification will be forwarded to the student at least seven days in advance, including time, date, and place of the hearing, the nature of the alleged violation and the section of the university's Student Rights and Responsibilities code allegedly violated. The student may bring someone to speak in his/her behalf. In the absence of such a resource, the vice president will appoint a person to assist the student before and during the hearing. This hearing is an alternative to the normal judicial procedure when it is deemed by an Associate Dean of Students that the individual is unable to participate in a judicial board hearing.

(3) The vice president will determine an appropriate course of action, based on one or a combination of the following:

(a) Continued enrollment;

(b) Treatment to be determined by the student with concurrence of the Vice President for Student Affairs;

(c) Change of living environment;

(d) Required medical leave of absence for a specified period. In event of this action, the student must provide reasonable evidence of readiness to cope with the university environment before she/he can be readmitted.

WAC 516-20-182 INTERIM SUSPENSION PERMITTED. In order to prevent danger to individuals, substantial destruction of property and significant disruption of teaching, research or administrative functions necessary to assure the continuation of the academic function, the Vice President for Student Affairs or his authorized designee may temporarily suspend a student for stated cause. In all cases the student is entitled to a hearing before the appropriate hearing officer or board as soon as such hearing can be held, but not to exceed five school days after the date of interim suspension unless the student should request an extension. During the interim suspension period the student shall be allowed on university property only to the extent deemed permissible by the Vice President for Student Affairs.

WAC 516-20-185 DECISION BASED SOLELY ON EVIDENCE. The decision of a hearing officer or judicial board shall be based solely on the evidence presented.

WAC 516-20-190 NOTIFICATION OF DECISION. The Hearing Officer or the chairperson of the judicial board shall notify an accused student in writing of the disposition of the student's case and of the student's right to appeal an adverse decision.

WAC 516-20-195 RECORDS OF PROCEEDINGS. (1) A hearing officer or judicial board shall make a record of each case handled. This record shall include a statement of the charges brought against the accused student, a listing of the participants or witnesses in the judicial proceedings, a summary of the evidence presented during the proceedings and a statement of the final action taken by the hearing officer or judicial board. The records prepared by a hearing officer or judicial board shall be delivered to the Office of the Vice President for Student Affairs.

(2) The university shall not make the records of judicial proceedings available for inspection by any member of the public except at the written request of the student involved.

WAC 516-20-200 APPEALS (1) A student aggrieved by the decision of an instructor may appeal to the university Conduct Hearing Officer. Either party may appeal an adverse decision of the Hearing Officer to the university Judicial Board or Summer Quarter Judicial Board.

(2) The appeal must be made in writing to the Vice President for Student Affairs within seven school days of receiving notice of the decision and must set forth the basis for the appeal. No sanction may be invoked against the appellant while such appeal is pending.

(3) Either party may appeal to the Vice President for Student Affairs from final decisions by the Judicial Board or Summer Board. Such appeal must be made in writing within seven school days of the board's decision. The Vice President for Student Affairs may uphold, overrule or modify the final board decision only if said final decision was arbitrary, capricious or beyond the scope of the boards' authority.

(4) If an appeal is filed, the Hearing Officer or Judicial Board chairperson will establish a time and place for the appeal proceedings and will give appropriate notice to all individuals involved in the proceedings. The Judicial Board or Hearing Officer shall review an appeal on the basis of the evidence presented to, and record prepared by, the instructor or Hearing Officer from which the appeal is taken. The appellant has the right to request as a part of his/her written statement, that the appeal be either a review of the proceedings without a rehearing or a complete hearing of the evidence.

(5) If an appeal is filed with the Vice President for Student Affairs, the Vice President shall review the appeal on the basis of the evidence presented to, and the record prepared

by, the Judicial Board from which the appeal is taken.

WAC 516-20-210 COMMITTEE ON STUDENT RIGHTS AND RESPONSIBILITIES. (1) There is established a Committee on Student Rights and Responsibilities to be composed of four students: one appointed by Inter-Hall Council, one appointed by the President of the Associated Students, one appointed by the Associated Students' Governing Board, and one selected at large from the student body; one member of the student affairs staff appointed by the Vice President for Student Affairs; one faculty member appointed by the Faculty Senate; one Associate Dean of Students; and the Director of Safety and Security.

(2) The primary purpose of the Committee on Student Rights and Responsibilities shall be to evaluate the university's academic code and policies concerning student rights and responsibilities. The committee may provide interpretations or may recommend changes in policy concerning student rights and responsibilities.

(3) The committee shall act as appellate group for decisions by the Vice President for Student Affairs to withhold certain records from students; shall act as appellate group in accordance with WAC 516-26-060 if informal proceedings fail to resolve complaints of students; and shall provide the review and revision mechanism for recommending changes in the Student Records Policy.

WAC 516-20-215 FAIRHAVEN COLLEGE. (1) Fairhaven college, through the Fairhaven Judicial Subcommittee of the College Council, shall have autonomy with respect to the judicial processes at Fairhaven College. These judicial procedures shall be subject to review and change by the College Council and shall be established in a manner which is consistent with the student rights and responsibilities philosophy.

(2) The Fairhaven Judicial Subcommittee of the College Council shall have jurisdiction over all violations of the academic code which occur on the Fairhaven campus. Violations of the academic code by Fairhaven students while on the main campus of Western Washington University shall be under the jurisdiction of the University Conduct Hearing Officer and the University Judicial Board.

Appendix C STUDENT RECORDS POLICY

WAC 516-26-010 PURPOSE. The purpose of this chapter is to implement Public Law 93-380, The Family Educational Rights and Privacy Act of 1974, by establishing rules and procedures to insure that information contained in student records is accurate and is handled in a responsible manner by the university and its employees.

WAC 516-26-020 DEFINITIONS. For purposes of this chapter the following terms shall have the indicated meanings:

(1) "Student" shall mean any person who is or has been officially registered at and attending Western Washington University and with respect to whom the university maintains education records or personally identifiable information.

(2)(a) "Education records" shall refer to those records, files, documents and other materials maintained by Western Washington University or by a person acting for Western Washington University which contain information directly related to a student.

(b) The term "education records" does not include the following:

(i) Records of instructional, supervisory or administrative personnel and educational personnel ancillary thereto which are in the sole possession of the maker thereof and which are not accessible or revealed to any other person except a substitute;

(ii) If the personnel of the university's Department of Safety and Security do not have access to education records under WAC 516-26-080, the records and documents of the Department which are kept apart from the records described in WAC 516-26-020(2)(a), are maintained solely for law enforcement purposes, and are not made available to persons other than law enforcement officials of the same jurisdiction;

(iii) Records made and maintained by the university in the normal course of business which relate exclusively to a person's capacity as an employee and are not available for any other purpose; or

(iv) Records concerning a student which are created or maintained by a physician, psychiatrist, psychologist, or other recognized professional or paraprofessional acting in his professional or paraprofessional capacity, or assisting in that capacity, and which are created, maintained or used only in connection with the provision of treatment to the student and are not available to anyone other than persons providing such treatment, except that such records may be personally reviewed by a physician or other appropriate professional of the student's choice.

(3) "Personally identifiable information" shall refer to data or information which includes either (a) the name of a student, the student's parent, or other family member, (b) the address of the student, (c) a personal identifier, such as the student's social security number or student number, (d) a list of personal characteristics which would make it possible to identify the student with reasonable certainty, or (3) other information which would make it possible to identify the student with reasonable certainty.

(4) "Vice President for Student Affairs" shall refer to the Vice President for Student Affairs or his designee.

WAC 516-26-030 ACCESS TO RECORDS. (1) Except as provided in WAC 516-26-035, each student at Western Washington University shall have access to his or her education records. The right of access shall include the right to inspect, review, and obtain copies of education records.

(2) The Vice President for Student Affairs shall prepare a list of the types of student education records which are maintained by Western Washington University.

(3) A student wishing access to his or her education records shall submit a written request for access to the Vice President for Student Affairs. A request for access shall be acted upon by the Vice President for Student Affairs within a reasonable period of time, not to exceed twenty days.

(4) The Vice President for Student Affairs shall provide students of the university with an opportunity for reasonable access to education records, provided that the Vice President for Student Affairs shall be responsible for taking appropriate measures to safeguard and insure the security and privacy of the institution's records while being inspected by students.

(5) The Vice President for Student Affairs will inform in writing a student who has requested access to his or her education records of the nature of any records which are being withheld from the student on the basis of the exceptions set forth in WAC 516-26-035. A student may challenge a decision by the Vice President for Student Affairs to withhold certain of the student's records by filing an appeal with the Student Rights and Responsibilities Committee.

(6) This section shall not prohibit the University Registrar from providing a student with a copy of the student's academic transcript without prior clearance from the Vice President for Student Affairs.

WAC 516-26-035 ACCESS TO RECORDS — LIMITATIONS ON ACCESS. (1) Western Washington University shall not make available to a student the following types of materials:

(a) The financial records of the student's parents or any information contained therein.

(b) Letters or statements of recommendation, evaluation of comment which were provided to the university in confidence, either expressed or implied, prior to January 1, 1975, provided that such letters or statements shall not be used for purposes other than those for which they were originally intended.

(c) If a student has signed a waiver of the student's right of access in accordance with subsection (2) of this section, confidential records relating to the following:

- (i) Admission to any educational agency or institution;
 - (ii) An application for employment;
- or

(iii) The receipt of an honor or honorary recognition.

(2) A student, or a person applying for admission to the university may waive his or her right of access to the type of confidential records referred to in subsection (1)(c) of this section, provided that such a waiver shall apply only if the student is, upon request, notified of the names of all persons making confidential recommendations, and such recommendations are used solely for the specific purpose for which the waiver has been granted. Such a waiver may not be required as a condition for admission to, receipt of financial aid from, or receipt of other services or benefits from the university.

(3) If any material or document in the education record of a student included information concerning more than one student, the student shall only have the right either to inspect and review that portion of the material or document which relates to the student or to be informed of the specific information contained in that portion of the material or document.

WAC 516-26-040 RIGHT TO COPY RECORDS. (1) The Vice President for Student Affairs shall, at the request of a student, provide the student with copies of the student's education records. The fees for providing such copies shall not exceed the actual cost to the university of providing the copies.

(2) Official copies of transcripts from other educational institutions, such as high school or other college transcripts, will not be provided to students by the university.

WAC 516-26-050 CHALLENGES— TO CONTENT OF RECORDS — TO RELEASE OF RECORDS — OR TO DENIAL OF ACCESS TO RECORDS.

(1) Any student who believes that inaccurate, misleading, or otherwise inappropriate data is contained within his or her education records shall be permitted to have included within the record a written explanation by the student concerning the content of the records.

(2) A student shall have the right, in accordance with the procedures set forth in WAC 516-26-055 and 516-26-060, to:

(a) Challenge the content of education records in order to insure that the records are not inaccurate, misleading, or otherwise in violation of the privacy or other rights of the students;

(b) Have the opportunity to correct or delete inaccurate, misleading, or otherwise inappropriate data contained within education records;

(c) Challenge the release of education records to specific persons as contrary to the provisions of this chapter; and

(d) Challenge a decision by the university to deny the student access to particular types of records.

(3) A student shall not be permitted

under this chapter to challenge the validity of grades given in academic courses, except on the grounds that, as a result of clerical error, the student's records fail to accurately reflect the grades actually assigned by an instructor.

WAC 516-26-060 CHALLENGES— HEARING BEFORE STUDENT RIGHTS AND RESPONSIBILITIES COMMITTEE. (1) If informal proceedings fail to resolve the complaint of a student, the student may file with the Vice President for Student Affairs a written request for a hearing before the Student Rights and Responsibilities Committee of the university.

(2) Within a reasonable time after submission of a request for hearing, the Student Rights and Responsibilities Committee shall conduct a hearing concerning the student's request for corrective action.

(a) The student and the university shall be given a full opportunity to present relevant evidence at the hearing before the Student Rights and Responsibilities Committee.

(3) If a student demonstrates that the student's education records are inaccurate, misleading, or otherwise in violation of the privacy or other rights of the student, the Student Rights and Responsibilities Committee shall have authority to order the correction or deletion of inaccurate, misleading or otherwise inappropriate data contained in the records.

(4) If a student demonstrates that the release of the student's education records would be improper under this chapter, the Student Rights and Responsibilities Committee shall have authority to order that the records not be released.

(5) If a student demonstrates that the student is entitled to access to particular documents under this chapter, the Student Rights and Responsibilities Committee shall have authority to order that the student be permitted access to the records.

(6) The decision of the Student Rights and Responsibilities Committee shall be rendered in writing within a reasonable period of time after the conclusion of the hearing.

WAC 516-26-070 RELEASE OF PERSONALLY IDENTIFIABLE INFORMATION OR EDUCATION RECORDS. Except as provided in WAC 516-26-080, 516-26-085, or 516-26-090, the university shall not permit access to or the release of a student's education records or personally identifiable information contained therein to any person without the written consent of the student.

WAC 516-26-080 RELEASE OF PERSONALLY IDENTIFIABLE INFORMATION OR EDUCATION RECORDS — EXCEPTIONS TO CONSENT REQUIREMENTS. (1) The university may permit the access to or release of a student's education records of personally identifiable information contained therein without the written

consent of the student to the following parties:

(a) University officials, including faculty members, when the information is required for a legitimate educational purpose within the scope of the recipient's official responsibilities with the university and will be used only in connection with the performance of those responsibilities;

(b) Federal or state officials requiring access to education records in connection with the audit or evaluation of federally or state supported educational programs or in connection with the enforcement of federal or state legal requirements relating to such programs. In such cases the information required shall be protected by the federal or state officials in a manner which shall not permit the personal identification of students or their parents to other than those officials, and such personally identifiable data shall be destroyed when no longer needed for the purposes for which it was provided;

(c) Agencies or organizations requesting information in connection with a student's application for, or receipt of, financial aid;

(d) Organizations conducting studies for or on behalf of the university for purposes of developing, validating, or administering predictive tests, administering student aid programs, or improving instruction, if such studies are conducted in a manner which will not permit the personal identification of students by persons other than representatives of such organizations, and the information will be destroyed when no longer needed for the purposes for which it was provided;

(e) Accrediting organizations in order to carry out their accrediting functions; or

(f) Any person or entity authorized by judicial order or lawfully issued subpoena to receive such records or information, upon condition that the student is notified of all such orders or subpoenas in advance of compliance therewith by the university. Any university employee or official receiving a subpoena or judicial order for education records or personally identifiable information contained therein shall immediately notify the Assistant Attorney General representing the university.

(2) Education records of a student or personally identifiable information contained therein which are released to third parties, with or without the consent of the student involved, shall be accompanied by a written statement indicating that the information cannot subsequently be released in a personally identifiable form to any other party without the written consent of the student involved.

(3) The university shall maintain a record, kept with the education records of each student, indicating all parties, other than those parties specified in WAC 516-26-080(1)(a), which have requested or obtained access to the student's education records, and indicating the legitimate

interest that each such party has in obtaining the records or information contained therein. This record of access shall be available only to the student, to the employees of the university responsible for maintaining the records, and to the parties identified under WAC 516-26-080(1)(a) and (c).

WAC 516-26-085 RELEASE OF INFORMATION IN EMERGENCIES. (1) The Vice President for Student Affairs or his designee may, without the consent of a student, release the student's education records or personally identifiable information contained therein to appropriate parties in connection with an emergency if the knowledge of such information is necessary to protect the health or safety of the student or other persons.

(2) The following factors should be taken into consideration in determining whether records may be released under this section:

(a) The seriousness of the threat to the health or safety of the student or other persons;

(b) The need for personally identifiable information concerning the student to meet the emergency;

(c) Whether the parties to whom the records or information are released are in a position to deal with the emergency; and

(d) The extent to which time is of the essence in dealing with the emergency.

(3) If the university, pursuant to subsection (1) of this Section, releases personally identifiable information concerning a student without the student's consent, the university shall notify the student as soon as possible of the identity of the parties and to whom the records or information have been released and of the reasons for the release.

WAC 516-26-090 DIRECTORY INFORMATION. (1) The university may release "directory information" concerning a student to the public unless the student requests in writing of the Vice President for Student Affairs that the student's directory information not be released except as provided in WAC 516-26-070, 516-26-075, 516-26-080 or 516-26-085.

(2) The term "directory information" shall include information relating to the student's name, local and home address, telephone listing, class schedule, dates of attendance, degrees and awards received, participation in officially recognized sports, and weight and height if a member of an athletic team.

WAC 516-26-095 DESTRUCTION OF STUDENT RECORDS. Except as otherwise provided by law, the university shall not be precluded under this chapter from destroying all or any portion of a student's education records, provided that no education record to which a student has requested access shall be removed or destroyed by the university prior to providing

the student with the requested access.

WAC 516-26-100 NOTIFICATION OF RIGHTS UNDER THIS CHAPTER. The university shall provide reasonable notification to students of the rights of students under this chapter.

(1) Notice will be provided to students under this section at least annually, and shall include the following:

(a) A statement of the types of education records maintained by the university.

(b) The name and position of the employee of the university responsible for the maintenance of each type of record, the persons who have access to those records, and the purposes for which such persons have access;

(c) A copy of the rules and procedures set forth in this chapter; and

(d) A statement concerning the cost which will be charged to a student for reproducing copies of the student's records.

Appendix D STUDENT ACADEMIC GRIEVANCE POLICY AND PROCEDURES

1. Policy

Students have protection, through orderly procedures, against arbitrary or capricious actions or decisions by their instructors; students also have protection against erroneous actions or decisions by academic units. At the same time, students are responsible for achieving and maintaining the standards of academic performance and excellence which are established by their instructors and for complying with all relevant policies, standards, rules, and requirements which are formulated by the University and the University's academic units. A student wishing to pursue an academic grievance must use the following grievance procedure once having received notice of the action or decision which gives rise to the grievance. The emphasis of the grievance procedures is on informal resolution of the grievance. Grievances which involve hearings before the Student Academic Grievance Board should be rare.

Students who do not meet the deadlines given in the procedures shall be deemed to have waived their right to appeal. If any officer of the University or the Board fails to meet the deadlines established, the student may continue to the next level in the procedures. The deadlines are set to provide a rapid resolution of the grievance. However, unforeseen circumstances such as illness or absence from the campus may result in an extension of a deadline. Such extensions shall be recorded in writing by the unit head, dean or secretary to the Board, as appropriate.

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2 Academic Grievances

Academic grievances are limited to the following:

- 1) A claim by the student that an assigned grade is the result of arbitrary or capricious application of otherwise valid standards of academic evaluation, or
- 2) A claim by the student that the standards for evaluation are arbitrary or capricious, or
- 3) A claim by the student that the instructor has taken an arbitrary or capricious action which adversely affected the student's academic progress, or
- 4) A claim by the student that an academic unit has reached a decision not in keeping with University policy or taken an erroneous action which adversely affects the student's academic standing or academic career.

Note: Where an action is claimed to be in violation of affirmative action, a separate set of procedures are used (see Appendix E - Affirmative Action Student Grievance Procedures.)

3. Procedures

A. Informal Resolution

A student with an academic grievance against an individual instructor shall first thoroughly discuss the matter with the instructor involved. The student must meet with the instructor within ten (10) days of receiving written notification of the action or decision which gives rise to the grievance. In the case of absence from the campus of either of the parties, the student shall inform the academic unit head, in writing, of the existence of the grievance and the unit head shall arrange for consultation between the parties concerned at the earliest possible opportunity. Should the faculty member be on extended leave, or have resigned from the university, the unit head shall act for the instructor.

The instructor and the student should make a good faith effort to resolve the grievance. Grievances resolved at this stage do not require a written record unless the resolution involves a grade change. Grade changes require the approval of the department chairperson (or dean in Huxley and Fairhaven), who then directs the Registrar to make the specific grade change; a copy of the memo to the Registrar will be sent to the student and faculty member.

If a resolution is not achieved between the student and the instructor within five (5) days after the first meeting between the student and instructor, the student has five (5) days to ask the academic unit head, or designee, to attempt to informally resolve the issue. The unit head, or designee, will meet with both parties to clarify the issues and attempt to resolve them. If the issue is resolved

within five (5) days after the student has sought the assistance of the unit head, the unit head, or designee, shall prepare an informal agreement, in writing, for both sides to sign. No reasons need be given. Such an agreement, once signed by both parties, may not be appealed.

If an agreement cannot be reached within the five-day review period, and the student still wishes to pursue the grievance, the student shall request the unit head or designee to present the case to the Dean of the College. The unit head has five (5) days to present the material to the Dean. The material presented should include all of the documents relevant to the case and an analysis of the issues. The Dean shall continue the process of seeking an informal resolution and collect more material as necessary. If a resolution can be reached, the dean shall prepare an informal agreement as above. Such an agreement, once signed by both parties, may not be appealed.

If the student has a grievance against an academic unit, the student shall first thoroughly discuss the matter with the unit head. The student must meet with the unit head within ten (10) days of receiving notification of the action or decision of the unit which gives rise to the grievance. If the grievance is not resolved within ten (10) days of the initial meeting between the student and the unit head, the student may request, in writing, further review by the Dean of the College, following the procedures for grievance against individual faculty.

If the grievance against a faculty member or academic unit is not resolved at this stage, the Dean shall make a decision based on the merits of the case. The reasons for the decision shall be in writing and shall be given to both the student and the instructor. The Dean's decision must be rendered and given to both parties within five (5) days of receiving the material. The written decision of the Dean will include: (1) A statement of the grievance, (2) a statement of the efforts made to resolve the issue, (3) a statement of action, with reasons.

Either side may appeal a decision of the Dean to the Student Academic Grievance Board. The appeal must be filed within five (5) days after the receipt of the Dean's written decision.

B. Appeal to the Board

(1) *Composition of the Board.* The Student Academic Grievance Board shall consist of six (6) members: three students and three faculty. An administrator appointed by the Vice President for Student Affairs will serve as executive secretary to the Board and will be responsible for the arranging of meetings and the collection and maintenance of necessary documents. The Board, for any hearing, will be selected in the following manner—

- (a) The pool of Board members shall consist of six (6) faculty appointed by the Faculty Senate for three-year terms; six (6) undergraduate students and six (6) graduate students appointed by the Associated Students Board for one-year terms.
- (b) Each party to the grievance shall have the right to reject two faculty and two students from the list of the pool of Board members.
- (c) From the remaining members, the Vice Provost for Instruction shall select the Board members for the hearing, and shall appoint the chairperson. If the grievance involves a graduate student, at least two of the Board members must be graduate students.

(2) Appeal Procedures

- (a) *Lodging appeal.* The party appealing to the Board shall present the appeal to the executive secretary of the Board within five (5) days after issuance of the Dean's written decision. The letter of appeal shall state the basis of the appeal. The secretary will send a copy of the appeal to the second party to the grievance, who may respond in writing. All materials used at any stage of the grievance shall be made available to both parties and to the Dean.
- (b) *Mediation.* A mediator may be appointed by the Vice Provost for Instruction from a list of four persons previously appointed by Faculty Senate. The mediator has five (5) days from the time of appointment to attempt to resolve the issue to the satisfaction of both parties, otherwise the appeal proceeds to a hearing.
- (c) *Hearing.* A hearing shall be called within fifteen (15) days of the filing of the appeal unless both parties agree to a delay, or unless the grievance is resolved through mediation.

A quorum is four (4) members of the Board. Both the student and the instructor may be represented by an advocate.

Both the student and the faculty member shall be invited to present oral arguments which shall be restricted to matters already in the record. New causes for grievance may not be raised at the hearing. Members of the Board may question either party.

No testimony may be taken by the Board unless both parties are present, or have waived their right to be present.

At the conclusion of the hearing, the Board shall, in writing,

- (a) Request additional informa-

tion, to be considered at a future hearing, or

- (b) Find that there is insufficient cause to overrule the Dean's decision and recommend to the Vice President for Academic Affairs that it be upheld, or
- (c) Find that there is sufficient cause to modify or overrule the Dean's decision and recommend appropriate action to the Vice President for Academic Affairs.

C. Appeal to the Vice President for Academic Affairs

Either party may appeal to the Vice President for Academic Affairs from a decision by the Board. Such appeal shall be made, in writing, within five (5) days after the issuance of the Board's written decision. The Board Chairman has the right to make a written response to the appeal within five (5) days of filing the appeal. The Vice President may overrule or modify the decision of the Board only if that decision was arbitrary, capricious, based on insufficient information, or was beyond the scope of these procedures as defined in Section 2. The decision of the Vice President for Academic Affairs is final. Copies of the Vice President's decision will be sent to the student, faculty member, unit head, Dean, chairperson and Secretary of the Board.

D. Maintenance of Records

All written statements and testimony considered in the grievance process and a copy of the final written decision of the Board or Academic Vice President shall be retained on file in the Academic Vice President's office for a period of one (1) year following final disposition of the grievance.

Where a resolution or decision results in a grade change, the unit head shall inform the Registrar of the grade change.

4. Definitions

These definitions are for the purposes of these procedures only:

- 1) "Academic unit" is Huxley or Fairhaven college or a department within the colleges of Arts and Sciences, Fine and Performing Arts, Business and Economics, or School of Education.
- 2) "Unit head" is the department chairperson, or, in the case of Huxley and Fairhaven colleges, the chairperson of the college personnel committee.
- 3) The unit head "designee" can be any faculty member or administrator from the academic unit.
- 4) Reference to "days" means "school days" and includes the registration period and the week in which exams are scheduled.

**Appendix E
AFFIRMATIVE ACTION
STUDENT GRIEVANCE
PROCEDURE**

Persons who have questions or need assistance in processing a grievance should contact Joan Stewart, Affirmative Action Director, Old Main 400/410, Phone 3306.

A person who believes he or she has been discriminated against by the University because of race, color, religion, national origin, sex, age, handicap, marital status or Vietnam Era or disabled veteran status is urged to utilize the internal grievance procedure provided by the University through the Affirmative Action Office as soon as possible after the alleged act of discrimination giving rise to the grievance.

A. Informal Resolution

Any person may contact the Affirmative Action Office for informal discussion, advice and assistance. These contacts are kept confidential. The Affirmative Action Director will act as facilitator upon request.

B. Formal Investigative Resolution

1. Any person may file a formal grievance against any employee, department, or unit of the University if he or she believes illegal discrimination has taken place by filing a written description of the alleged act of discrimination with the Affirmative Action Director on the form provided by the Affirmative Action Office. Statements should be as detailed and accurate as possible.

2. The grievant will receive acknowledgement of the filing of the grievance and the respondent and the Vice President in charge of the employee, department or unit of the University will be notified of the grievance within 3 working days.

The Affirmative Action Director or an investigator designated by him or her must meet with the grievant within 10 working days of receipt of the formal grievance. The grievant may be accompanied by an advocate or observer.

4. The Affirmative Action Director (or his or her designee) will investigate the grievance, including meeting with the respondent (and the respondent's advocate/observer).

5. Within 15 working days following the first meeting with the grievant the investigator will meet with the grievant, the respondent and their advocates/observers for further information gathering. The grievant and respondent must submit the names of all witnesses they wish the investigator to interview and all documents they wish the investigator to study.

6. Following this meeting the documentation and witness statements will be compiled and evaluated. The Affirmative Action Director, in consultation with the President and after receiving legal advice from the assigned Assistant Attorney General, will prepare findings of fact, conclusions, and recommend remedies, if any. This report will be given to the grievant, the respondent, the appropriate Vice President, and the President of the University within 20 working days of the second meeting.

7. If the report of the Affirmative Action Director is acceptable to the grievant, the respondent, and the appropriate Vice President, the President may direct implementation of the report or may modify it.

8. If the grievant, respondent or the appropriate Vice President finds the report or President's decision unacceptable and wishes to appeal, a written appeal must be submitted to the President within 10 calendar days. The appeal must specify in detail which of the findings of fact, conclusions, recommended remedies or other aspects of the report or decision to which exception is taken as well as the reasons for the exceptions.

If the individual appealing has appeal rights under WAC Chapter 516-08 the hearing procedure contained therein will be utilized. Other appeals will be heard by a three member Appeal Panel to be appointed by the President within 10 working days of the appeal.

The Appeal Panel will receive the Affirmative Action Director's report, case file and President's decision. Unless a manifest injustice would result, the Appeal Panel will not examine documents or call witnesses not previously submitted or consider aspects of the report or decision for which specific written exception has not been taken in the appeal.

The Appeal Panel will submit a written recommendation to the President. The Appeal Panel recommendation is not binding on the President or the Board of Trustees.

9. The President may make a final decision for the University for payments of \$2000 or less to a grievant or group of grievants, however, the Board of Trustees has reserved the authority to approve affirmative action awards for amounts in excess of \$2000 and the President shall notify the Board of Trustees whenever the resolution of a complaint involves promotion, tenure, back pay or the initial appointment of an employee in order that the Board may take appropriate action consistent with the Board of Trustees Handbook.

C. Alternative Formal Resolution

The grievant may choose to utilize

Appendices

the formal grievance procedure of his/her group such as the faculty, student or labor agreement procedure. These alternative formal procedures are mutually exclusive. A grievant choosing Alternative C and not finding the satisfaction sought may not turn to Alternative B. It is the prerogative of the body creating the grievance procedure under C whether they will entertain a grievance which has previously been heard under Alternative B.

D. Handicap Grievance

A person denied access to a program or activity or employment because of a determination that that individual's handicap disqualifies him/her may appeal the decision to an ad hoc handicap grievance tribunal consisting of a student and an employee (faculty if the dispute concerns an academic program), one of whom is handicapped, and an expert in handicap rehabilitation to be appointed by the President.

A person who has been refused admission to Western Washington University and who believes his/her handicap has affected his/her grade point, test scores or other criteria for admission in a way not reflective of true ability may appeal the admission decision to the University Admissions Committee. When a person appeals an admission decision on the basis of handicap, a person, usually a member of the faculty, with expertise in the rehabilitation of the handicap manifest by the appellant will sit as a voting member of the University Ad-

missions Committee to hear the appeal.

The decision of the tribunal is final unless overturned by the President.

E. Outside Agencies

A person who believes that s/he has been the subject of discrimination may choose to see a lawyer regarding civil redress or may choose to file a discrimination grievance with the following agencies. These agencies require grievances to be filed within 180 days of the alleged act of discrimination.

Washington State Human Rights Commission
Fourth Floor
1601 Second Avenue Building
Seattle, Washington, 98101
Phone: 464-6500

Office for Civil Rights,
Department of Health,
Education, and Welfare
Arcade Plaza Building MS 508
1321 Second Avenue
Seattle, Washington 98101
Phone: 442-0473

Office of Federal Contract
Compliance
Room 1023 Federal Office Building
909 First Avenue
Seattle, Washington 98174
Phone: 442-4508

Equal Employment Opportunity
Commission
414 Olive Way, Times Square

Building, Fourth Floor
Seattle, Washington 98101
Phone: 442-0968

U.S. Department of Labor,
Wage and Hour Division ESA
506 Second Avenue, Room 2008
Seattle, Washington 98104
Phone: 442-4482

Appendix F PARKING AND TRAFFIC

It is recommended that vehicles not be brought to the campus unless absolutely necessary. The geographical location of the campus makes the parking currently available on and around the campus inadequate to cover the desires of the university community.

Western Washington University has established rules and regulations governing parking under Washington State Administrative Code 516-12. Although parking regulations are constantly under study and revision, all students who utilize parking facilities on campus are required to purchase a parking permit and register their car (or cars), motor bike, or motorcycle, at or before the time of official registration. The current parking permit fees vary from \$4 to \$18 per quarter depending on the location of the parking lot. Violators of parking regulations are towed away. For further information contact the campus Safety and Security Department.

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