## University ef Washington Bulletin



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## Study at the UW this summer

Summer is a special time to learn at the University of Washington. There is no summer enrollment limit, so admission is open to all qualified applicants. Continuing UW students, Washington residents, students from other universities and colleges and residents of other states and countries are welcome to attend.

## Choose from over $\mathbb{1}, 500$ courses

The UW offers one of the nation's largest summer programs, including more than 1,500 courses in over 100 fields of study. Many classes and workshops described in this bulletin are scheduled only in the summer. You can earn up to a year's language credit in nine weeks by completing an intensive summer language course. Many courses are scheduled for educators seeking cerification and endorsements.

## Shorit terms are availlable

Four and one-half-week $a$ and $b$ terms are available in addition to the full nine-week summer term. Many special summer institutes and workshops are scheduled for even shorter periods. Some classes that are open only to majors in other quarters may be taken by nonmajors in the summer.

## In-sfote fees for most courses

Residents and nonresidents pay in-state fees in the summer except for courses offered by the medical and dental schools.

## It's easy to apply and register

If you haven't already applied, simply complete the application on the inside back cover of this bulletin. You may register by touch-tone telephone (starting April 26), once you are notified of admission.

Continuing UW students enrolled for Spring Quarter 1993 do not need to apply for Summer Quarter. Use the Summer Quarter Time Schedule in this bulletin and register by STAR the same way as for any other quarter.

Summer Quarter 1993 sessions

- June 21-Aug. 20 Full Term
- June 21-July 21 a Term
- July 22-Aug. 20 b Term


## Summer Quarter Quick Reference

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## How to apply and register*

1. Complete the application on the inside back cover. If you have already applied for Summer/Autumn admission as a matriculated student, you do not need to complete this application.
2. Mail the application with a nonrefundable application fee of \$35 (please attach a check in U.S. funds made payable to the University of Washington). Applications will be processed as soon as possible. However, due to the volume of applications received, processing time may take four to six weeks.

- If you have never attended UW credit classes, mail application to:
Office of Admissions, PC-30
320 Schmitz Hall
University of Washington
Seattle, WA 98195
- If you have previously attended UW credit classes and have been:assigned a student I.D. number, mail application to: Registration, PD-10
225 Schmitz Hall
University of Washington
Seattle, WA 98195

3. You may register by touch-tone telephone as soon as you receive notification of acceptance butnot before April 26, 1993. See STAR registration instructions, pages 124-125.
See Admissions, pages 112-114, or call Summer Quarter Academic Advising, (206) 543-6160, for additional information.

* Continuing UW students currently enrolled for Spring Quarter 1993 or students who completed Winter Quarter 1993 and took Spring Quarter off do not need to apply for Summer Quarter. Use the Summer Quarter Bulletin and Time Schedule and register by STAR the same way as for any other quarter.


## Important dates for <br> Summer Quarter 1993

APRIL 26 STAR registration by phone begins for
Summer Ouarter
JUNE 1 Last day applications accepted by mail; later applications accepted in-person only
JUNE 21 Full Term and $a$ Term classes begin; students billed for Summer Quarter tuition
JULY 5 Independence Day holiday
JULY 9 Tuition payment deadline
JULY 21 a Term ends
JULY $22 \quad b$ Term begins
AUG. 20 Full term and $b$ Term end
For other application deadlines and important dates, please refer to the Student Action Guide, pages 117-118.

## Course descriptions and time schedule information

Course titles and descriptions are listed in the Course Descriptions section of this bulletin, pages $6-64$. Courses offered at branch campuses at Bothell and Tacoma are listed on pages 65-66.

- denotes a Term, June 21-July 21; $\Delta$ denotes $b$ Term, July 22-Aug. 20. Courses without a symbol meet for the full Summer Quarter, June 21-Aug. 20. Specific dates are given for short, intensive workshops which do not meet for entire term lengths. See page 6-7 for more information on how to read course listings.

The Time Schedule section of this bulletin, pages 68-108, contains the dates and times you need to plan your schedule and the schedule line number (SLN) used when registering by phone using STAR. See page 67 for more information on how to read the time schedule.

## Summer Quarter Quick Reference

## Overview

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Course descriptions and time schedule information

## Freshmen Summer Start Program

New incoming UW freshmen who want to begin their college careers during the summer may register for courses frequently taken by incoming freshmen in the arts, humanities, social sciences and sciences. Freshmen will be able to register for Summer Quarter beginning April 26. For questions about how the Freshmen Summer Start courses fit into the UW curriculum contact Advising at (206) 543-6160.

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## Table of Contents



## Visiting Faculty

The UW is proud to announce the following visiting professors for Summer Quarter

## College of Architecture and Urban Planning

## Landscape Architecture

Arthur R. Rice, M.L.A., Harvard University; faculty, North Carolina State University

LARC 498D Design and Graphic Workshop:
San Juan Islands

## College of Arts and Sciences

## Anthropology

Karl G. Heider, Ph.D., Harvard University; faculty,
University of South Carolina
ANTH 356 Visual Anthropology
ANTH 469 Visual Anthropological Research
Methods
Steven Webster, Ph.D., University of Washington; faculty, University of Auckland, Auckland, New Zealand

ANTH 100 Introduction to Anthropology

## Art History

Rod Slemmons, curator, prints and photographs, Seattle Art Museum

ART H 232 Photography: Theory and Criticism

## Comparative Literature

Jens Lund, Ph.D., Indiana University; faculty,
Washington State Folklife Council
C LIT 230 Introduction to Folklore Studies
(Joint with SCAND 230)
C LIT 333 Folklife and Material Culture (Joint with SCAND 333)
International Studies
Gustavo Vega Cánovas, Ph.D., Yale University; faculty,
El Colegio de México
SIS 490BA Special Topics: Mexico, the United States and Canada: Towards a New Partnership
Raymond Hébert, Ph.D., University of Manitoba; faculty, St. Boniface and University of Manitoba SISCA 341 Government and Politics of Canada (Joint with POL S 341)

## Mathematics

Stanley Luke, Ph.D., University of Pittsburgh; faculty, Seattle Pacific University

MATH 111 Applications with Algebra
MATH 170 Mathematics for the Elementary School Teacher
MATH 420 History of Mathematics

## Music

Richard J. Colwell, Ph.D.; faculty, Boston University MUSED 496A Assessment of Issues in Music Education
Ana Lucia Frega, Ph.D.; faculty, National Conserva-
tory of Music, Buenos Aires, Argentina MUSED 496H Comparative Music Education Methods
Allyn Miner, Ph.D.; faculty, University of Pennsylvania

MUSIC 428 Music of North India
MUSIC 445 Selected Topics in Ethnomusicology
Bruno Nettl, Ph.D., Indiana University; faculty,
University of Illinois
MUSIC 599EA Readings in Music: Transmission, Teaching, Learnings in World Music
Peter R. Webster, Ph.D., University of Rochester; faculty, Northwestern University

MUSED 496LA 'Creative Music Experiences in the Curriculum: Theory and Practice
MUSED 496ZA Creative Music Experiences in the Curriculum: Technological Solutions

## Philosophy

Steven J. Wagner, Ph.D., Princeton University; faculty,
University of Illinois
PHIL 453A Philosophy of Language

## Scandinavian Languages and Literature

Brita Butler-Wall, Ph.D., University of California,
Los Angeles; faculty, School of TESL, Seattle,
Washington
SWED 150 Scandinavian Summer Institute

## Statistics

Peter Green, Ph.D.; faculty, Bristol University STAT 578 Special Topics in Spatial Statistics
Chris Triggs, Ph.D., University of Auckland,
New Zealand; faculty, University of Auckland,
New Zealand
STAT 390 Probability and Statistics in Engineering and Science

## College of Education

Gloria Ladson-Billings, Ph.D., Stanford University; faculty, University of Wisconsin, Madison
EDC\&I 474A Multiethnic Curriculum and Instruction
Diana T. Slaughter-Defoe, Ph.D., University of Chicago; faculty, Northwestern University EDC\&I 505AA Multicultural Education: Educating Young Children of Color
Carlos J. Ovando, Ph.D., Indiana University; faculty, Indiana University, Bloomington EDC\&I 494BA Multicultural/Global Education: Issues, Concepts and Strategies

## College of Engineering

## Mechanical Engineering

Anas A. Madani, Ph.D., Cornell University; faculty, King Abdulaziz University, Saudi Arabia
Alexey Vladimiz Nenarokomov, Ph.D., Moscow Aviation University; faculty, Moscow Aviation University

## The Graduate School of Library and Information Science

Martha Dragich, M.A., J.D., University of Minnesota; assistant chief, Legal Research and Library Services Branch, Administrative Offices of the United States Courts
LIBR 577A Law Library Administration
Nancy Gershenfeld, M.L.S., University of Washington; technical services librarian, Microsoft Corporation LIBR 498B Automation in Libraries
Charles Meadow, M.S., Rutgers University; associate dean, University of Toronto
LIBR 498CA Text-based Information Service
Herman Totten, M.L.S., Ph.D., University of Oklahoma; associate dean, North Texas State University LIBR 498DA Multicultural Library Services
Herbert S. White, M.S., Syracuse; faculty, Indianà University

LIBR 498A Special Libraries and Information Centers

## Graduate School of Public Affairs

Frank Chopp, B.A., University of Washington; executive director, Fremont Public Association

## PB AF 511 $\triangle$ Management of Not-for-Profit

 OrganizationsVictor C. Flatt, J.D., Northwestern University; attorney, Washington State Court of Appeals

PB AF 505 The Law of Public Administration
Nancy Long, M.P.A., University of Washington; director of planning, marketing and community services, Pacific Medical Center PB AF 511A Management of Not-for-Profit • Organizations

Elizabeth Reveal, M.P.A., Harvard University; director of finance, City of Seattle

PB AF 503 Administrative and Executive Leadership
William R. Ross, M.A., Duquesne University; principal, Ross and Associates

PB AF 593A Environmental Policy Processes


## Guide to Course Descriptions

## Symbols

- 

Class meets a Term:
June 21-July 21
No symbol: class meets full term
A
Class meets $b$ Term:
July 22-Aug. 20
No symbol: class meets full term
W
A course number followed by a W indicates that the course is a writing course and partially fulfills the College of Arts and Sciences "W" course requirement.

## (2, max. 8)

The first number is the number of credits that may be earned in a single quarter or term.
The second is the maximum number of credits that may be earned by repeating the course.

## (1-5)

Varying number of credits per single quarter or single term. Specific number may be determined by consultation with instructor or advisor.
${ }^{*}$ )
Variable credits: Call the sponsoring department for more information.

## CR/NC only

Course offered for credit/ no credit grading only.

Course titles and descriptions are arranged in alphabetical order by college and school; academic departments are listed alphabetically within the appropriate college. The Time Schedule section of this bulletin, pages 67-108, contains the dates and times you need to plan your schedule, and the schedule line number (SLN) used when registering by phone using STAR. For further information, contact the appropriate department.

## Credits

The University of Washington is on the quarter system. The credit listed for each course is the quarter credit. Semester credits multiplied by 1.5 equal quarter credits; quarter credits divided by 1.5 equal semester credits. Credit is given for full-quarter courses only when the entire quarter is completed.
Some courses may be repeated for additional credit during subsequent quarters or terms; in this case, the maximum number of credits that may be earned is stated (e.g., 2, max. 8).

## Course listing system

Most course listings include course number, title, credits given (specific or variable), a description and statement of subject matter and method, and any prerequisite required. Independent study courses and seminars or other courses offered on a special-arrangement basis with the department are shown at the end of the regular departmental listing. For details about courses offered by special arrangement, consult the Time Schedule section of this bulletin or the department.
Courses numbered from 100 through 299 are lowerdivision courses normally for freshmen or sophomores; those numbered from 300 through 499 are upper-division courses normally for juniors, seniors and postbaccalaureate students. Courses numbered 500 and above generally are restricted to graduate students.
When acceptable to the graduate program, 300 -level courses in a minor or supporting field and 400 -level courses may be applied toward the minimum Graduate School requirements of residence and total credit count for the degree.
A student of senior, postbaccalaureate or non-matriculated standing who wishes to register for a 500 level graduate course must obtain permission from the instructor of the class and the departmental chairperson or designated representative.

## Graduate courses

## 600, 700 and 800

Courses numbered 600,700 and 800 are restricted to students in the Graduate School. They appear by number and title only where applicable under the department course listings. Descriptions for these courses are generally uniform and are listed below in order to eliminate the necessity of repeating them each time the courses appear. The asterisk (*) following the course title indicates the amount of credit is variable. Some 600,700 and 800 courses are offered on a credit/no-credit-only basis. Call the sponsoring department for more information.

## 600 Independent Study or Research (*)

Individual readings or study, including independent study in preparation for doctoral examination, research, etc. Prerequisite: permission of supervisory committee chairperson or graduate program coordinator. The name of the faculty member responsible for supervising the student should be listed on the program of studies. Call the sponsoring department for more information.

## 601 Internship (*)

Internship required of students in a graduate degree program other than Doctor of Arts. Prerequisite: permission of supervisory committee chairperson or graduate program coordinator. The name of the faculty member responsible for supervising the student should be listed on the program of studies. Call the sponsoring department for more information.

## 700 Master's Thesis ( ${ }^{*}$ )

Research for the master's thesis, including research preparatory or related thereto. Limited to graduate students who have not yet completed the master's degree in their major field at the University of Washington. Prerequisite: permission of supervisory committee chairperson or graduate program coordinator. The name of the faculty member responsible for supervising the student should be listed on the program of studies. Call the sponsoring department for more - information.

## 750 Internship ( ${ }^{*}$ )

Internship required of all graduate students in the Doctor of Arts degree program. Call the sponsoring department for more information.

## 800 Doctoral Dissertation (*)

Research for the doctoral dissertation, including research preparatory or related thereto. Limited to intermediate graduate students, i.e., those who have completed the master's degree or the equivalent and have been formally admitted into a doctoral degree program or candidate-level graduate students. Premaster students initiating doctoral dissertation research should register for 600 . Prerequisite: permission of supervisory committee chairperson or graduate program coordinator. The name of the faculty member responsible for supervising the student should be listed on the program of studies. Call the sponsoring department for more information.

## Courses fulfilling the distribution requirement

The following courses, identified by the letter $\mathbf{D}$ in course descriptions in this bulletin, may be taken to meet the University of Washington College of Arts and Sciences distribution requirement:
Afro-American Studies (AFRAM) 201
Asian American Studies (AAS) 205, 206
Chicano Studies (CHSTU) 201
American Indian Studies (AIS) 240
Anthropology (ANTH) 100, 202, 203, 353
Archaeology (ARCHY) 105, 205
Physical Anthropology (PHY A) 201
Art (ART) 105, 109
Art History (ART H) 201, 202, 203, 311, 337, 380
Astronomy (ASTR) 101, 150
Atmospheric Sciences (ATM S) 101
Biology (BIOL) 100, 203
Botany (BOT) 113
Chemistry (CHEM) 100, 102, 140, 141, 150, 151, 160, 161, 223, 224, 237, 238, 239, 241, 242
Classics Courses in English (CLAS) 101, 205, 424, 430
Communications (CMU) 201, 202, 203, 475
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Dance (DANCE) 101, 201, 204
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$304,311,314,315,322,325,335,340,352,353,354,359$, 366, 375, 390, 394
Environmental Studies (ENV S) 203
Forest Resources Management (FRM) 350
Genetics (GENET) 360
Geography (GEOG) 100, 205, 207
Geological Sciences (GEOL) 101, 308
Germanics (GERM) 390, 497, 498
General History (HST) 111, 112, 113, 261, 312
History of the Americas (HSTAA) 201, 301
International Studies (SIS) 426
Linguistics (LING) 200, 203
Mathematics (MATH) $111,112,124,125,126,170$
Microbiology (MICRO) 301, 302
Music (MUSIC) 116, 161, 162, 331
Music Ensemble (MUSEN) 300, 302, 350, 500, 502, 550
Philosophy (PHIL) 100, 102, 120, 240, 267, 320, 347,446
Physics (PHYS) $110,114,115,116,117,118,119,121,122$, 123, 131, 132, 133, 224, 225
Political Science (POL S) 101, 201, 202, 203, 270, 321, 426
Psychology (PSYCH) 101, 102, 200, 205, 222, 257, 305, 306, 345, 355, 357
Scandinavian (SCAND) 200, 230, 280, 312, 333
Sociology (SOC) 110, 240, 271, 352, 371
Speech and Hearing Sciences (SPHSC) 300
Speech Communication (SPCH) 102, 220, 334, 373
Statistics (STATT) 220, 311
Women Studies (WOMEN) 200, 257, 353, 357, 364
Zoology (ZOOL) 118

## Courses fulfilling the proficiency requirement

The following courses, identified by the letter $P$ in course descriptions in this bulletin, may be taken to meet the Uni-' versity of Washington College of Arts and Sciences proficiency requirement:
Economics (ECON) 311
English (ENGL) 111, 121, 131, 197, 198, 271
Mathematics (MATH) 111, 112, 124
Philosophy (PHIL) 115, 120
Physics (PHYS) 110
Psychology (PSYCH) 213
Statistics (STAT) 220, 311

## Courses fulfilling the W requirement

Students who plan to take majors in the College of Arts and Sciences and who started college Autumn Quarter 1985, or later, must complete 10 credits of courses designated W. Some other undergraduate majors also require $W$ courses. W courses are not English composition courses, but, rather, are courses in which a substantial amount of writing is required. Almost any department can offer W courses. The following summer courses have been designated as W courses (letters indicate course section).
Architecture (ARCH) 460 U
Biology (BIOL) 401 A,B
Chemistry (CHEM) 299 A; 499 A, B
Communications (CMU) 300 A; 328 A; 341 A
Drama (DRAMA) 302 A
Economics (ECON) 463 A
English (ENGL) 197 A; 198 A,B; 200 A,B,C,D,E; 202 A; 203 A; 204 A, B
History (HST) 498 A,B
Ancient and Medieval History (HSTAM) 402 A
International Studies (SIS) 421 A; 450 A
Physics (PHYS) 407 A; 408 A; 409 A
Political Science (POL S) 303 A ; 450 A
Psychology (PSYCH) $231 \mathrm{ZN} ; 232 \mathrm{ZN} ; 233 . \mathrm{ZN} ; 419$ A
French (FREN) 301 A; 302 A
Spanish (SPAN) 302 A
Sociology (SOC) 110 D, U; 240 A; 352 A
Speech and Hearing Sciences (SPHSC) 350 A

## Guide to Course Descriptions

Courses fulfilling the distribution requirement

Courses fulfilling the proficiency requirement

Courses fulfilling the W requirement

Intensive language courses

## Intensive language courses

Earn up to a year's worth of language credit in nine weeks by completing an intensive summer language course.
Courses are offered in the following languages:

| - Arabic | - Hindi | - Russian |
| :---: | :---: | :---: |
| - Chinese | - Italian | - Spanish |
| - Czech | - Japanese | - Swahili |
| - French | - Kazakh | - Swedish |
| - German | - Kirgiz | - Tajik |
| - Greek | - Korean | - Uzbek |
| Hebrew | $\square$ Latin |  |

# College of Architecture and Urban Planning 

During Summer Quarter 1993, the College of Architecture and Urban Planning offers several courses aimed at beginning students, including: Appreciation of Architecture II (ARCH 151), Introduction to Architectural Photography (ARCH 313), Introduction to Architectural Drawing (ARCH 314), Architectural Sketching (ARCH 415), Watercolor Drawing (ARCH 418), Design Drawing I (ARCH 498A), and Design Drawing II (ARCH 498B).

## College of Architecture and Urban Planning (CAUP) B.A. Program

208 Gould Hall, JO-20
Telephone: 543-4217

## 270 Computers in Environmental Design and Planning (3)

Laboratories, lectures, and demonstrations that introduce computing in environmental design and planning, as well as a survey of the primary elements of computing in general. Basic skills development in text and word processing, database management, two- and three-dimensional graphics, land-use mapping and modeling, spreadsheet analysis utilizing VAX, CDC, and microcomputer systems. Prerequisite: entry code.

## 340^ People-Environment Relations (3)

Dynamics of people-environment interactions. An appropriate spectrum of environmental scales will be addressed, building on practical and empirical work of several faculty members in the college.

## 470* Society and Environmental Design and Planning Policy (3)

Historical evolution of national environmental policies. Institutional and legal frameworks, the nature and value of policy, and the processes of community/society decision-making at all scales.
496

## Practical Experience (3-6, max. 6)

Open only to majors. Prerequisite: entry code. CR/NC only.

## 498 Special Projects (1-12, max. 12) <br> B. Design Drawing (3)

A video recorded course by Kirby Lockard-ten individual sessions (students can work at their own pace) available through Odegaard Undergraduate Library, Media Center. Support syllabi necessary to complete assignments are available from CAUP office in 208 Gould.

## C. Color in the Environment: Applicotions in Architecture (3)

An introduction to concepts of color, color theory, and application in an architectural context. This special course is aimed at the beginning student, but focuses on one area of design to give the student a more specific experience.

## D. Studio (6)

An introduction to design and planning processes and principles for majors in the CAUP program and others who are seeking beginning development and understanding of the disciplines.

## Architecture (ARCH)

208 Gould Hall, JO-20
Telephone: 543-4180

## 151 Appreciation of Architecture II (3) D

Historical survey of the architecture of Western civilization. For nonmajors.

## 313 Introduction to Architectural Photography (3)

Introduction to basic elements and processes of architectural photography to include camera controls, exposure technique, and photo processing. Student must provide own camera with lens, shutter, and aperture controls.

## 314 Introduction to Architectural Drawing (2)

Skill development in conceptualization of forms and their relationships through observation and recording in freehand graphic manner. The course deals with proportion, scales, light effect, value texture, and various perspective techniques.

## 403 Architectural Problems (6)

Various studio problems in nonresidential building design to develop basic skills in the synthesis and integration of building form. Prerequisite: 302 or permission.

## 415 Architectural Sketching (3)

Exercises in freehand representational drawing using charcoal, graphite, and conte crayon with emphasis on line, proportion, values, and composition. Studies progress from geometric to nongeometric forms.

## 418 Watercolor Drawing (3)

Explore watercolor medium as both a fine art and as an appropriate medium for architecture presentation. Prerequisite: student should feel comfortable with freehand drawing. Previous drawing course(s) highly recommended.

## 420 Structural Design I (4)

Reinforced concrete fundamentals. Prerequisite: 322.

[^1]
## 426 Structụral Unił Masonry (3)

Structural behavior and design of reinforced brick, tile, and unit masonry structures. Joint with CESM 487.

## 455 Special Studies in Gothic Art and Architecture (3)

Detailed study of Gothic architecture and its accompanying sculpture and stained glass, with special emphasis on the twelfth and thirteenth centuries in France and England. Joint with ART H 455.

## 460W $\diamond$ Design Theory and Analysis (3)

Problematical nature of philosophies of anchitecture; interaction of philosophical concepts and architectural form and expression. Fundamentals of architectural criticism.

## 498* Special Projects (3-6, max. 12)

## A. Design Drawing I (4)

Projects, lectures, demonstrations, and exercises to develop skills in freehand drawing and an understanding of drawing as a vital means to see, analyze, and represent essential aspects of the visual environment.

## U. Seminar on Architectural Theories (3)

Recent developments in architectural theory, urban design theory, criticism, and the methodology of criticism. Prerequisite: ARCH 460 or permission.
4984 Special Projects (3-6, max. 12)
B. Design Drawing II (4)

Projects, lectures, demonstrations, and exercises to introduce the language of architectural drawing, with emphasis on freehand drawing as the primary means to imagine, explore; and develop design ideas. Prerequisite: ARCH 498A.

## C. CAD Introduction (4)

An intensive introduction to the use and abuse of CAD systems in an architectural office. Offer a choice of platforms and software (Mac vs. PC, generic CAD vs. AutoCAD). System use and discussion of issues and approaches to efficient application of system functions to architectural drawing production. Prerequisites: basic computer literacy highly recommended.

## 506 . Advanced Architectural Studies (6)

Advanced experimental studies dealing with significant architectural relationships that involve scholarly investigation, development, and presentation of results. Majors only.

## 596 Fieldwork in Professional Practice ( ${ }^{*}$, max. 9)

On-location study under the supervision of a practicing professional involved in an aspect of environmental design CR/NConly. Entry code required.
Courses by special arrangement
Undergraduate Research, Independent Study or Research, Master's Thesis

# Building Construction (BCON) 

116 Architecture Hall, AL-15
Telephone: 543-6377
The Department of Building Construction offers a series of basic introductory courses open to nonmajors (undergraduates and graduates), as well as a summer internship course open to only building construction majors. The introductory courses emphasize the basic fundamentals of the processes, practices, materials, and techniques related to the construction industry. Please contact the department for additional information.

## 310 Construction Documents I (3)

This is the first of two courses designed to introducestudents to working drawings, specifications, and the various documents required to undertake residential and light commercial types of projects. The course will provide an opportunity for students to read and interpret construction documents as well as understand how they are used in the process of contract bidding and negotiation. The class will meet twice a week and is open to nonmajors with junior standing.

## 312 Introduction to the Construction Industry (3)

An introductory course providing a general overview of the construction profession and industry to those with little or no knowledge about the industry. Students gain a basic understanding of the industry; types of construction projects; the key players and their respective roles and relationships; terminology; contract documents and their uses; procurement and delivery methods; professional ethics; and career paths and opportunities available in the industry. Open to nonmajors with junior standing.

## 313 Construction Methods and Materials I (3)

An introduction to construction types, building methods, and structural systems commonly used in residential and light commercial projects. This is the first of two courses designed to provide the student with a basic knowledge of construction materials and techniques used in their installation. The course will begin with a survey of construction standards, basic materials, and conclude with common building methods. Emphasis will be on residential and light commercial types of construction projects. Open to nonmajors with junior standing.

## 496 Construction Practice (3)

Integration of classroom theory with practical experience through direct, on-the-job applicationfor one summer. For majors in building construction with 135 credits completed. Applicants are selected under competitive application during Spring Quarter. Entry code required. CR/NC only.

## Course by special arrangement

Undergraduate Research

## Landscape Architecture (L ARC)

348 Gould Hall; JO-34
Telephone: 543-9240
This summer the Department of Landscape Architecture will offer several courses which are open to nonmajors. Each course surveys different aspects of landscape architecture and reflects current concerns on technological developments in landscape architecture. An introductory Design Studio and career exploration course (LARC300) emphasizes hands-on experience with landscape architecture design concepts and techniques. History of Environmental Design on the West Coast (LARC 451) is a lecture course surveying the history of environmental arts in California and the Pacific Northwest. Ethical dilemmas facing environmental designers will be examined in a weekly seminar class, Environmental Design Ethics (L ARC 498C). The Design and Graphics Workshop-San Juan Islands (L ARC 498D), a five-day camping field trip to the San Juan Islands, focuses on design and graphic activities in a wide range of outdoor settings. There are also opportunities to study special topics in new courses this summer. Students can learn the most current computer image processing techniques in the Hyper-Media Computer Studio (L ARC 498/ 598A). Restoration Design: Ecological and Artistic Field Studies of Washington's Natioe Plant Communities (L ARC 498/598B) is an introduction to the restoration of damaged ecosystems, integrating science and art. An interdisciplinary design studio exploring the potential for integrating art into environments, The Art of Collaboration (LARC 598C), will be also offered. Please contact the department for further information.

## 300 Introductory Landscape Architecture Design Studio (6)

Develops basic design and graphic skills. Format includes studio, lectures, field trips, and one-day workshops. Students conduct site analysis and produce drawings to convey design concepts. Workshop topics include relationship of visual perception to drawing, the role of values in design, verbal communication, and behavioral analysis of the design process. Open to nonmajors.

## 406 Individual Design Studio (6)

Senior projects in landscape architecture vary according to students' particular emphasis and needs. Majors only.

## 451 History of Environmental Design on the West Coast (3)

Survey of the development of the environmental arts of landscape architecture, architecture, and urban planning from the eighteenth century to the present, with major emphasis on the twentieth century. Developments in these environmental arts in California will be compared with those in the Pacific Northwest. Open to nonmajors.

## 476 Professional Operations (3-6, max. 6)

Practicum course for landscape architecture majors for internship and exposure to the profession with working experiences at various levels of professional endeavor. CR/NC. Majors only.

## 498 Special Projects (1-10, max. 30)

## A. Hyper-Media Computer

 Studio (6)Advanced image processing techniques utilize the new state-of-the-art Hyper-Media Computer Lab. Students take existing photographic images and manipulate and convert the images into a presentation form. This technology of image display for professional presentation is changing dramatically and the course enables students to remain abreast of current developments. Joint with 598A. Open to nonmajors.

## B. Restoration Design: Ecological and Artistic Field Studies of Washington's Native Plant Communities (6)

A new course intended to integrate science and art in the study of several native plant communities in Washington state. The restoration of damaged ecosystems is now a central activity in this profession, and this course is envisaged as an attractive introduction to this area of practice. Joint with 598B. Open to nonmajors.

## C. Environmental Design Ethics (3)

A three-credit seminar exploring the ethical dilemmas facing environmental designers in the Pacific Northwest. The course will involve practitioners in architecture, landscape architecture, and urban design:and planning. What changes in values and attitudes will we need in the 1990s to be effective now that all of the easy environmental design decisions have been made? The discussion will be appropriate for students, environmental designers and anyone involved in environmental design. CR/NC. Open to nonmajors.

## D. Design and Graphics Work-shop-San Juan Islands (3)

June 28-July 2 Five-day intensive field trip emphasizing development of graphic and design skills applicable to landscape architecture, anchitecture, art, forestry, botany, and related fields. Camp at University of Washington's Cedar Rock Preserve on Shaw Island, with design projects at other locations on the San Juan Islands. Prior art/ graphic training not required. Required orientation meeting on Friday, June 25, 6-8 p.m in 142 Gould Hall. Location: Cedar Rock Preserve,Shaw Island. Open to nonmajors.

## 598. Special Projects (1-10, max. 30)

## A. Hyper-Media Computer Studio (6)

Advanced image processing techniques utilize the new state-of-the-art Hyper-Media Computer Lab. Students take existing photographic images and manipulate and convert the images into a presen-
tation form. This technology of image display for professional presentation is changing dramatically and the course enables students to remain abreast of current developments. Joint with 498A. Open to nonmajors.

## B. Restoration Design: Ecological and Artistic Field Studies of Washington's Native Plant Communities (6)

A new course intended to integrate science and art in the study of several native plant communities in Washington state. The restoration of damaged ecosystems is now a central activity in this profession, and this course is envisaged as an attractive introduction to this area of practice. Joint with 498B. Open to nonmajors.
598 Special Projects (1-10, max. 30)
C. The Art of Collaboration (6)

Interdisciplinary design studio. An exploration of the exciting potential for integrating art into environments designed by architects. and landscape architects. Open to seniors and above.

## Courses by special arrangement

Undergraduate Research, Independent Study or Research, Graduate Internship, Master's Thesis

## Urban Design and Planning (URBDP)

410 Gould Hall, JO-40
Telephone: 543-4190

This summer the department is offering a series of courses emphasizing tools and skills used in the practice of urban design and planning and related activities. Open to undergraduates, graduates, and professionals who want to expand their knowledge base and skill level. Courses are short and fast-paced and are scheduled so that several may be taken concurrently in the evenings after work or on a long lunch break.

## 407- Urban Planning Studio (5)

Synthesis of urban design and planning problems and methods in a laboratory section. Focuses on the current planning activities of the City of Seattle, especially the urban village concept, and explores ways in which student-conducted research and investigations can enrich the city's plan-making process. Students work in small teams which are reconfigured at least once during the quarter. Team findings are presented to appropriate "clients" and professional-level reports documenting the research and findings will be produced. Open to nonmajors. Prerequisites: 300 and CAUP 200, and entry code.

## 498 Special Topics (1-9, max. 15) <br> A. Macintosh Workshop on Digital Grophic Media (3)

An intensive course in desktop publishing, graphics, presentation, animation, and 3D rendering using Macintosh IIfx machines. Some basic knowledge of computers required. Course is designed to provide skill development and boost student/ professional productivity. CR/NC only.

## 498* Special Topics (1-9, max. 15)

## B. Pacific Northwest Ecotourism Planning (3)

The Pacific Northwest has become an important year-round tourism destination. The mountains, water, and islands entice thousands of domestic and international visitors to take sports and sightseeing.vacations in the region. Unfortunately, tourists inevitably scar the scenic beauty they come to visit. Mountains are eroded, water polluted and islands overcrowded with new vacation homes and tourist services. Ecotourism principles provide guidelines to planners wishing to preserve local resources. This course explores the roles local planners, resort designers, and tourism directors can play to create a tourism industry that maintains and enhances the resources of the region. Includes guest speakers form the tourism industry. CR/NC only.

## C. Research and Professional Document Computer Workshop (3)

Explore the organization and full utilization of computer capabilities while working toward thesis, dissertation, or professional document preparation. Focus on Macintosh applications. Areas covered include using special features of Microsoft ${ }^{\infty}$ Word such as outlining, formatting with style sheets, table of contents, and generation tables. Various graphic formats through scanning are also covered. Majors only. CR/NC only.

## 498土 Special Topics (1-9, max. 15)

## D. Desktop Publishing on the Macintosh (3)

Hands-on workshop covering all features of PageMaker, essentials of Microsoft ${ }^{*}$ Word, graphics, and scanning to produce newsletters, publications, flyers, etc., for your office, school, or personal use. CR/NC only.

## Courses by special arrangement

Special Projects, P.rofessional Project, Independent Study or Research, Master's Thesis, Doctoral Dissertation

## College of Arts and Sciences

The College of Arts and Sciences offers a broad range of courses centered in the humanities, social sciences, and natural sciences. Students who plan to graduate from the College are expected to fulfill proficiency, distribution, and major requirements.

Numerous courses in English composition, mathematics, and foreign language that may be taken to satisfy the proficiency requirement are offered during Summer Quarter. Special intensive courses are offered in several languages. Students also may choose from a variety of courses in the humanities, social sciences, and natural sciences, which may count toward fulfilling the distribution requirement. In addition, courses for entering freshmen in all departments that offer major fields of study are available.

Recognition of the importance of writing in undergraduate education led to the adoption of a new requirement for students graduating from the College of Arts and Sciences who began college in or after Autumn Quarter 1983. These students must include among their courses 10 credits designated as "W" (writing courses).

For students who have selected a major and who use the summer sessions to hasten the time of their graduation, certain advanced courses are listed in all departments. The upper-division courses are changed each year to bring the necessary variety to students whose attendance is limited to Summer Quarter.
Teachers will find a variety of courses in foreign languages, English, the natural and social sciences, and the fine arts that are directed to their needs and interests.

## American Ethnic Studies (AES)

## B510 Padelford Hall, GN-80 <br> Telephone: 543-5401

American Ethnic Studies courses are offered in:

- Afro-American Studies
- Asian American Studies
- Chicano Studies

American Ethnic Studies is a multicultural and multiracial research, teaching, and service unit dedicated to providing relevant knowledge in the study of ethnicity and ethnic relations. Through the department's three programs, Afro-American, Asian American, and Chicano Studies, students are provided with interdisciplinary, ethnic-specific and comparative concepts, theories and methods of inquiry which shape the cultural, social, historical, economic and political character of selected American ethnic communities.

[^2]The department plans to offer majors in American Ethnic Studies and in each of the ethnic-specific programs. Currently a major in Afro-American Studies is offered. General Studies degrees in both Asian American Studies and Chicano Studies are offered.

## 362* Race Relations (5)

Interracial contacts and conflicts. Joint with SOC 362.

## 461 Comparative Ethnic Race Relations in the Americas (5)

Sketches the ethnoracial systems operating in American society. Studies these systems as systems, and examines their institutional and interpersonal dynamics. Compares ethnoracial systems in order to arrive at empirical generalizations about race/ethnorelations in the Americas. Joint with SOC 461.

## Afro-American Studies (AFRAM)

## B504 Padelford Hall, GN-80 <br> Telephone: 543-5401

Afro-AmericanStudies is an interdisciplinary program drawing together courses in a variety of academic disciplines in order to broaden the student's knowledge about the Black experience and to prepare the student to meet requirements for careers in various fields of employment.

## 201 Introduction to Black Studies (5) D

The history, culture, religion, institution, politics, economics, arts, and psychology of peoples of African descent as developed from experience in both the old world and the new. Multidisciplinary analysis of social life from a black perspective as illustrated in selected historical and contemporary writings.

## 270* The Jazz Age (5)

Interdisciplinary study of the period after World War I to the Great Crash. Afro-American and Anglo-American currents and impulses that flowed together in the Roaring Twenties. Covers politics of "normalcy," economics of margin, literature of indulgence and confusion, transformation of race relations, and cultural influence of jazz.

## 306, 307, 308 Intensified Basic Swahili $(5,5,5)$

Development of basic grammatical and conversational skills in the most important language of East and Central Africa. Basic Swahili $(306,307,308)$ is taught in an intensified form during Summer Quarter. Students receive a total of 15 credits for the course. The class may be used for the Foreign Language requirement.
Course by special arrangement Independent Study

## Asian American Studies (AAS)

B501 Padelford, GN-80
Telephone: 543-5401

## 205 Asian American Cultures (5) D

An introduction to the historical and cultural experiences of Asians in America from 1850 to 1950: immigration patterns, evolution of subcultures, evacuation, and social organizations. Not open to students who have taken GIS 305.

## 206 Contemporary Problems of Asian Americans (5) D

Recent Asian American issues from 1950 to the present. Topics include ghetto communities, civil rights, identity problems and ethnicity, social organizations, political movements, and recent immigration.

## 305 Asian American Cultures for Teachers (5)

Specially designed for teachers who wish to learn more about the history, culture, and current concerns of Asians in the United States. Implications for elementary and secondary school are considered. Not open to students who have taken 205. Prerequisite: permission of instructor.

## Course by special arrangement

Undergraduate Independent Study

## Chicano Studies (CHSTU)

B10 Padelford Hall, GN-80
Telephone: 543-5401
The Center for Chicano Studies provides support for the Chicano campus community through four types of service: curricular offerings, research, faculty recruitment, and advocacy. An undergraduate degree in Chicano Studies is not offered. However, a General Studies degree is available to students interested in following a program in this area. Consult a general studies adviser in B10 Padelford.

## 201 Introduction to Chicano Studies (5) D

Selected themes in the Chicano experience; studies in Chicano politics and Chicano socioeconomic concerns. Not open to students who have taken GIS 302 or CHSTU 102.

## 254* History of Chicanos in Washington State (5)

History, extent, and results of the Chicano presence from earliest Spanish explorations to the present; contemporary problems of Chicanos in a broader national context.

## Course by special arrangement Independent Study

# American Indian Studies (AIS) 

C514 Padelford, GN-05

Telephone: 543-9082

## 240* Native North American Women (5) D

Indian women in the social structure, historical and contemporary roles, changes in male-female relationships; problems and opportunities of contemporary women. The feminist movement and Indian rights.

## 311 North American Indians: Pacific Northwest (5)

Traditional societies of the Pacific Northwest from southern Alaska to northern California;significant areal features such as rank, totemic crests, guardian spirits, the potlatch, fishing, and foraging illustrated by comparisons and by selected ethnographic sketches. Continuity between past and present.

## 3174 North American Indians: Southwest (5)

Overview of history and ethnography of the Southwest with emphasis on Apacheans, Pueblos, and Pimans/Yumans. Social organization, religion, world view, and expressive culture of specific groups such as Navajo, Hopi, Zuni, Tewa, and Papago will be stressed.

## Anthropology (ANTH)

M32 Denny Hall, DH-05
Telephone: $543-5240$
Anthropology courses are offered in:

- Sociocultural Anthropology
- Archaeology
- Physical Anthropology

The Department of Anthropology offers courses at the introductory and upper-divisionlevels for both majors and nonmajors, as well as for teachers, social workers, and others interested in cultural and biological variation.
An archaeological field school (ARCHY 270, 571) will be conducted at Mogollon Village in New Mexico. Mogollon Village is a prehistoric pithouse site with material that dates between A.D. 1 and A.D. 1000 . This course provides an opportunity to learn basic field and laboratory techniques that are not available in the classroom, including artifact and site recognition, survey, excavation, and mapping. Students will work with a wide spectrum of archaeological data and become familiar with the prehistory of the AmericanSouthwest. Enrollment is limited by facilities. A fee for room and board is charged in addition to tuition. Applications are due by April 15, 1993. For a field school information/ application packet, call (206) 543-5240.

## 100 Introduction to Anthropology (5) D

Introduction to the subfields of archaeology, physical anthropology, and sociocultural anthropology through examination of selected problems in human physical, cultural, and social evolution. Not recommended for students who have had other courses in anthropology, archaeology, or physical anthropology. May not be counted toward the 55 credits required for the major in anthropology.
Courses by special arrangement
Master's Thesis, Doctoral Dissertation

## Sociocultural Anthropology (ANTH)

## 202* Principles of Socioculłural Anthropology (5) D

Comparison of lifeways of various non-Western and Western peoples. Introduction to the basic theories and methods used in the field.

## 203 Introduction to Anthropological Linguistics (5) D

Linguistic methods and theories used within anthropology. Descriptive and theoretical linguistics compared; historical linguistics and comparative method; sociolinguistics; language and culture; human language and animal communication compared; survey of history of anthropological linguistics in North America. Joint with LING 203. Not open for credit to students who have taken LING 200,201 , or 400.

## 353- Anthropological Studies of Women (5) D

Cross-cultural and comparative survey of the varieties of women's cultural experiences, statuses, and roles in cultural context and the anthropological theories used to account for them. Topics include biological factors, studies of primates, woman the gatherer, work in pre-industrial and industrial societies, women in folklore and music, matriarchy and matrilineal kinship, childbirth, and women's roles in economic development. Joint with WOMEN 353. Prerequisites: 202 and WOMEN 200, or permission of instructor.

## 355- Aging in Cross-Cultural Perspective (3)

Survey of strategies for dealing with the fact of aging in various socio-cultural systems. Relates the varieties of cultural solutions to the theories on aging, drawn from psychology and medicine, with emphasis on non-Western societies.

## 356 Visual Anthropology (3)

The place of photography and films in ethnography; their use in the documentation and interpretation of cultural and social systems.

## 429 Expressive Culture (5)

Anthropological view of one expressive act of culture; plastic-graphic arts, myths and folktale, music, dance, humor and tragedy, or play and games. Prerequisite: 202 or permission of instructor.

## 431 Oral Tradifions (3)

Oral traditions and verbal expression, examined anthropologically and in relation to student interests. Critical examination of relevant theories and methods of analysis. Prerequisite: 100 or 202.

## 451 -452A Phonology I, II $(4,4)$

Speech sounds, mechanism of their production, and structuring of sounds in languages; generative view of phonology. Joint with LING 451 and 452A. Prerequisite: LING 200 or 400 , either of which may be taken concurrently, or permission of instructor.

## 461-Syntax I (4)

Study of the structural properties of language; introduction to generative transformational syntax. Joint with LING $461 \star$. Prerequisite: 200 or 400 or permission of instructor.

## 469 Special Studies in Anthropology (3-9, max. 9)

## A. Visual Anthropological Research Methods (3)

Introduction to research uses of film, video, and still photography in all subfields of anthropology. Readings and discussion on what has been done, plus exercises and projects in making and analyzing visual record. This course complements ANTH 356.

## 4754 Perspectives in Medical Anthropology (5)

Introduction to medical anthropology. Explores the relationships among culture, society, and medicine. Examples from Western medicine as well as from other medical systems, incorporating both interpretive and critical approaches. Joint with HSERV 475.

## 489 Anthropology Practicum (3-9, max. 15)

Faculty-supervised off-campus internship in organizations utilizing anthropological skills in nonacademic settings. Establishing educationally valuable individual projects for internships with faculty sponsor. Organizations include museums, social service, and other governmental agencies, and private nonprofit service agencies. Prerequisites: major in anthropology and permission of instructor, entry code.

## 500 Preceptorial Reading (6)

For beginning graduate students who have not had adequate training in the problems, principles, and methods involved in the analysis and com-
parison of social and cultural systems. Not open to graduate students in the sociocultural anthropology program.

## Courses by special arrangement

Undergraduate Research, Independent Study or Research

## Archaeology (ARCHY)

## 105 World Prehistory (5) D

Prehistoric human ancestors from three million years ago: their spread from Africa and Asia into the Americas, survival during ice ages, development of civilizations. Well-known archaeological finds (e.g., Olduvai Gorge; Neanderthals; Jericho; Egyptian pyramids;Mexican temples; Mesa Verde; Ozette, Washington). May not be counted toward the 55 credits required for the major in anthropology.
205 Principles of Archceology (5) D
Techniques, methods, and goals of archaeological research. Excavation and dating of archaeological materials. General problems encountered in explaining archaeological phenomena.

## 270 Field Course in Archaeology (12)

Introduction to field acquisition of archaeological data through survey and excavation. Ongoing field projects; recovery and recording techniques. Prerequisites: application (see introductory paragraph concerning the archaeological field school conducted at Mogollon Village in New Mexico) and entry code.

## 304* New World Archaeology (3)

History of earliest Americans, beginning with crossing of land bridge between Asia and North America and eventual spread over the Americas. Highlights prehistory and best examples of western hemisphere's civilizations. Mexico, Yucatan, Peru, southwestern and eastern United States, Washington.

## 571 Field Course in Archaeology (5)

 Introduction to field acquisition of archaeological data through survey and excavation. Ongoing field projects; instructional emphasis on recovery and recording techniques and on management of field projects. Prerequisites: application (see introductory paragraph) and entry code.
## 591 Advanced Field Course in Archaeology (6-9)

For students with previous field experience and graduate work in archaeology. Emphasis on decision making in field and project management. Prerequisites: $497,498,571,575$ or permission of instructor.

## Courses by special arrangement <br> Undergraduate Research, Independent Study or Research, Internship

[^3]
# Physical Anthropology (PHY A) 

## 201 Principles of Anthropology (5) D

Evolution and adaptation of the human species. Evidence from fossil record and living populations of monkeys, apes, and humans. Interrelationships between human physical and cultural variation and environment; role of natural selection in shaping our evolutionary past, present, and future.
Courses by special arrangement
Undergraduate Research, Independent Study or Research, Internship

## Art (ART)

104 Art Building, DM-10
Telephone: 543-0646

The School of Art offers courses in art history, ceramic art, design, drawing, fiber arts, metal design, painting, photography, printmaking, and sculpture.

Classes may fill early; there is no assurance that a student will be able to register for a given course. Prerequisites are strictly observed. Auditing is not permitted in studio courses. Course entry codes are available in the following locations: undergraduate art and art history in 104 Art; graduate art in 102 Art; graduate art history in 209 Art.

## 105 Drawing (5) D

Perspective, light and shade, composition.

## 106 Drawing (5)

See description of 105. Prerequisite: 105.

## 109 Design (3) D

Art structure as basis for creative work. Organization of line, space, and color.

## 110 Design (3)

See description of 109. Prerequisite: 109.

## 150 3D Design Fundamentals (5)

Introduction to fundamentals of three-dimensional design process. Both practical and conceptual skills explored and demonstrated through assigned projects. Sketch books, model making, mechanical drawings, and other methods of presentation will be defined and discussed. Students will be required to pay an additional fee for materials.

## 201 Ceramic Art: Handbuilding (5)

Introduction to handbuilding, kiln firing, and glazing processes. Examination of contemporary sculpture in clay. Prerequisites: 106 and 110. Students will be required to pay an additional fee for materials.

230 Introductory Photography (5)
Introduction to the theory, techniques, and processes of still photography. Emphasis on both darkroom procedures and camera use. Projects stress the visual and creative potential of the medium. Students must provide camera with lens, shutter, and aperture controls. Students will be required to pay an additional fee for materials.
246 Images on Paper (5, max. 10) The use of paper as an active substance to work with. May include papermaking, casting, and collage. Prerequisites: 106 and 110 . Students will be required to pay an additional fee for materials.

## 256, 257 Painting $(5,5)$

Oil painting. Prerequisites: 106,110 for $256 ; 256$ for 257.

## 259 Water-Soluble Media

(5, max. 15)
Prerequisites: 106, 110.

## 265 Intermediate Drawing (5, max. 15)

Prerequisites: 106, 110.

## 272 Beginning Sculpture Composition (5)

Fundamentals of composition in the round and in relief. Prerequisites: 106,110 . Students will be required to pay an additional fee for materials.
276 Contemporary Directions, Art in Public Places (5)
Contemporary directions in public art focusing on innovative public artworks, artists, and art programs in Washington state.
307. Intermediafe Painting (5, max. 10)
Prerequisite: 257.
325 Advanced Drawing (5, max. 15)
Study on the advanced level involving history, practice, and theory of drawing as an art form. Prerequisites: 15 credits in 265.

## 332 Infermediate Sculpture Composition (5, max. 15)

Advanced work in various media and techniques. Prerequisites: 272 and entry code.

## 349 Serigraphy (5)

Traditional and contemporary methods. Prerequisites: 106, 110 . Students will be required to pay an additional fee for materials.

## 350 Special Topics in Printmaking (5, max. 15)

Book arts. Non-adhesive bindings, serial imagery, historical, and contemporary issues in book arts. Students will be required to pay an additional fee for materials.

## 353 Intermediate Ceramic Art

 (5, max. 15)Ceramic design and construction, stoneware, clay bodies, glazes. Prerequisites: 201, 202, and entry code. Students will be required to pay an additional fee for materials.

## 360 Life (5, max. 10)

Drawing and painting from the model. Prerequisites: 257 and 15 credits in 265.

## 372 Intermediate Photography (5)

Theory and technique of color printing, manual, and machine processing, with emphasis on C-41 and Type C chemistry. Prerequisites: 230 and entry code. Students will be required to pay an additional fee for materials.

## 390 Sheet Materials (5)

Research and development as part of the design process. Advanced work with sheet materials using an experimental approach. The objective is to produce a functional three-dimensional design from two-dimensional generic sheet material. Prerequisite: permission of instructor and entry code. Students will be required to pay an additional fee for materials.

## 411 Advanced Photography (5, max. 15)

Topics include color printing, large format photography, attificial lighting, and photography image transformation Prerequisites:370,371,372, and entry code. Students will be required to pay an additional fee for materials.

## 415 Senior Thesis in Photography (5, max. 10)

Development of a coherent photographic theme or topic over two consecutive quarters resulting in a finished thesis portfolio. Prerequisites: 411 and entry code. Students will be required to pay an additional fee for materials.

## 436 Sculpture Composition

## (5, max. 15)

Individual compositions in various media in large scale. Prerequisites: 15 credits in 332 and entry code.

## 454 Advanced Serigraphy (5, max. 15)

Prerequisite: 349 . Students will be required to pay an additional fee for materials.
463 Advanced Painting (5, max. 15) Development of individuality in painting through creative exercises. Prerequisites: 10 credits each in 307 and 360 and entry code.

## 498 Individual Projects-Painting/

 Sculpture (3 or 5, max. 15)499* Individual Projects-Design (3 or 5, max. 15)

## B. Guatemala/USA: A Weaver's Exchange (3)

July 12-23 Interpreting backstrap structures for themult-harmess loom. A workshop featuring two Mayan weavers teaching traditional weaves of Guatemala. Backstrap structures will be analyzed and translated for use on multi-harness and computer Dobby looms. Prerequisite: entry code. Students will be required to pay an additional fee for materials.

## C. Contemporary Steelsmithing (5)

 Steel forging, tool making for the craft, and related shop practices. Emphasis on the formal possibilities of steelsmithing. Welding experience helpful butnotrequired. Prerequisite: entry code. Students will be required to pay an additional fee for materials.499 Individual Projects-Design (3 or 5, max. 15)

## D. Computer Image Making (5)

Explore the image making potentials of selected Macintosh based graphics applications. Includes image scanning, drawing with object-oriented drawing programs, creating and altering images with pixel-based graphic applications. Prerequisites: fundamental knowledge of Macintosh operations and interface, and entry code. Students will be required to pay an additional fee for materials.

## Courses by special arrangement

Advanced Individual Projects in Fiber Arts, Independent Study or Research

## Art History (ART H)

## 201 Survey of Western Art (5) D

Major achievements in printing, sculpture, architecture, and the decorative arts of Europe, the Near East, and North Africa, from prehistoric times to the beginning of Christianity. .

## 202 Survey of Western ArtMedieval and Renaissance. (5) D

The arts of the Byzantine Empire, Islam, and westem Christendom through 1520 A.D.

## 203 Survey of Western Art-

 Modern (5) DWestern art from 1520 to present.

## 311* Chinese Art (5) D

Overview of the art of China. Emphasis on the role of the arts of the Chinese culture and on the traditional styles. Techniques associated with each of the major media: painting, ceremonial boxes, architecture, and sculpture.

## 337 African Art and Society (5) D

Explores the ideas and notions expressed visually in sculpture, painting, ceramics, textiles, and architecture and describes their relationships to man and culture in Africa.

## 380 Nineteenth- and TwentiethCentury Art (5) D

Arts and architecture of Europe and America from Realism to the present, with emphasis on stylistic and thematic changes in painting.
Courses by special arrangement
Individual Projects, Independent Study or Research, Master's Practicum and Thesis, Doctoral Dissertation

## Asian Languages and Literature (ASIAN)

225 Gowen Hall, DO-21
Telephone: 543-4996
Asian Languages and Literature courses are of-
fered in:

- Chinese
- Hindi
- Indian
- Japanese
- Korean

Intensive language courses in Chinese, Japanese, Hindi, and Korean are offered in concentrated scheduling that enables students to complete up to 15 credits of a foreign language during Summer Quarter.
See also Office of International Programs and Exchanges, page 63 , for information on the Chinese Language Program at Peking University.

## Chinese (CHIN)

134 First-Year Intensive Chinese (15)
Equivalent of $111,112,113$. Introduction to the standard language: correct pronunciation and basic structure; drill in oral use of the language. Especially recommended for students who plan to devote more time to other subjects during the regular academic year. No credit if 111, 112, 113 taken.

## 234 Second-Year Intensive Chinese (15)

Equivalent of 211,212, 213. Rapid learning of characters and reading of texts. Practice in conversational Chinese. Prerequisite: 113 or 134, or equivalent. No credit if 211, 212, 213 taken.

## Course by special arrangement

Undergraduate Research

## Hindi (HINDI)

## 321, 322, 323 Intermediate Hindi

 $(5,5,5)$Systematic expansion of vocabulary and grammar. Intermediate-level prose and poetry readings. Oral drills. Concurrent registration in 321, 322, 323 required. Prerequisite: 313 or equivalent.

## Course by special arrangement Undergraduate Research

## Indian (INDN)

403 Introduction to Written Urdu (3) Introduction to modern Urdu for students with at least an elementary knowledge of Hindi. Prerequisite: HINDI 313 or equivalent:'

## Japanese (JAPAN)

## 134 First-Year Intensive Japanese (15)

Elementary communicative skills in modern spoken Japanese. Intensive preparation using audio and video tapes. Basic skills in the written language. No initial knowledge of Japanese is presumed. Satisfies requirements for entry to 211 . Students with prior background must take placement test.

## 234 Second-Year Intensive Japanese (15)

Development of further functional communicative skills in the spoken and written languages. Satisfies requirements for entry to 311 , but, recommended primarily for those who will be going to Japan shortly upon completion. Prerequisite: 113 or placement by examination.

## Course by special arrangement

Undergraduate Research

## Korean (KOR)

301, 302, 303 Introduction fo Korean $(5,5,5)$
Fundamentals of the Korean language. Emphasis on Korean alphabet and spelling, pronunciation, and basic grammar. Concurrent registration in 301, 302 and 303 required. Prerequisite: entry code.

## Astronomy (ASTR)

260 Physics Hall, FM-20
Telephone: 543-2888

## 101 Astronomy (5) D

Introduction to universe and objects in it: emphasis on conceptual, contrasted with mathematical, comprehension. Modern theories, observations; ideas concerning nature, evolution of galaxies;

[^4]quasars; stars; black holes; planets; solar system. No credit for students who have taken 102 or 201; not open to upper division majors in physical sciences or engineering.

## 150 The Planets (5). D

For liberal arts and beginning science students. Survey of the planets of the solar system, with emphasis on recent space exploration of the planets and on the relationship of man and his earth to the other planets.

## 581 Techniques in Optical Astronomy (5)

Theory and practice of obtaining optical data. Astronomical photoelectric photometers, spectrographs, interferometers, CCDs, and infrared equipment. Data-reduction techniques with emphasis on statistical analysis using digital computers. Observations with MRO 30 -inch telescope.

## Courses by special arrangement

Undergraduate Research, Independent Study or Research, Dọctoral Dissertation

## Atmospheric Sciences (ATM S)

408 Atmospheric Sciences-Geophysics
Building, AK-40
Telephone: 543-4250

## 101 Weather (5) D

Theearth's atmosphere, with emphasis on weather observation and forecasting. Daily weather map discussions. Explanations of highs, lows, fronts, clouds, storms, jet streams, air pollution, and other features of the atmosphere. Physical processes involved in weather phenomena. Intended for nonmajors.

## Courses by special arrangement

Independent Study or Research, Master's Thesis, Doctoral Dissertation

## Biology (BIOL)

318 Hitchcock Hall, KB-05
Telephone: 543-9120

For additional courses in biology and closely related fields of study, see also the following departments of the College of Arts and Sciences: anthropology, botany, genetics, psychology, and zoology; the Colleges of Forest Resources, Ocean and Fishery Sciences, and Pharmacy; and the Schools of Medicine, Nursing, and Public Health and Community Medicine.

## 100 Introductory Biology (5) D

Biological principles and concepts, and the application of biological knowledge to problems of human beings and society. Development of an awareness of science. For nonscience majors only.

## 203 Introductory Biology (5) D

The third course in a three-quarter sequence introducing the phenomena of life for students intending to take advanced biology courses and preprofessional programs. Emphasis on plant structure and function, and principles of ecology and evolution. Prerequisites: 201 and 202 (formerly 210 and 212) or permission of Biology office.

## 401W Cell Biology (4)

Structure and function of the cell. Prerequisites: 201, 202, 203 or equivalent; one upper division course in a related area (embryology, histology, physiology, or biochemistry).

## Botany (BOT)

430 Hitchcock Hall
Telephone: 543-1942

Introductory and advanced courses are offered for majors and nonmajors, in-service teachers; and students new to the Northwest. Opportunities for research and graduate instruction in marine biology are offered at the Friday Harbor Laboratories in the San Juan Islands. Applications of qualified undergraduate students will be considered for enrollment in the graduate courses. For information and bulletin, write; Director, Friday Harbor Laboratories, 620 University Road, Friday Harbor, WA 98250, or call (206) 543-1484.

## 113 Plant Identification and Classification (5) D

Plant classification; field study and laboratory identification of the common plant families and the conspicuous flora of western and central Washington. Field trips.
331 Landscape Plant Recognition (3)
Field recognition of important groups of woody and herbaceous landscape plants, emphasizing diversity at the genus and family levels. Cultivated plant nomenclature. Plant descriptive characters evident in the field with eye and hand lens. Hardiness and landscape applications. Joint with UHF 331.

## Courses by special arrangement

Independent Study or Research, Master's Thesis, Doctoral Dissertation

## Chemistry (CHEM)

109 Bagley Hall, BG-10
Telephone: 543-1610
Undergraduate adviser: 543-9343
The Department of Chemistry offers many courses for nonmajors as well as for students who wish to work for Bachelor of Arts or Bachelor of Science degrees or for a minor in chemistry. In addition to research or thesis work, graduate students may register for seminars that include special lectures by distinguished visitors.

## 100 Chemical Science (5) D

One quarter introduction to chemistry for nonscience majors or students with little or no chemistry background. Atoms and molecules, their interactions with energy and their reactions; emphasizes impact of chemistry on everyday life. Can stand alone or be followed by $102,140,203,205$. Prerequisite: high school algebra or equivalent; recommended: MATH 111.

## 102 General and Organic Chemistry (5) D

Organic compounds; hydrocarbons, alcohols, aldehydes, ketones, ethers, acids, aromatics, fats and oils, proteins, and carbohydrates. Students who plan to take 223 or 237 should not take 102. Prerequisite: 100 or equivalent.

## 140 General Chemistry (4) D

For science and engineering majors. Atomic nature of matter, nuclear chemistry, stoichiometry, Periodic Table, quantum concepts, gas laws. Prerequisites: high school algebra and chemistry or 100 and MATH 111 or 120; recommended: high school physics and concurrent registration in 141 and MATH 124.

## 141 General Chemistry Laboratory (1) D

Introduction to laboratory work, including experiments to illustrate analytic techniques, stoichiometry, and synthesis. Designed to complement 140. Prerequisite: prior completion of, or concurrent registration in 140 or 145. CR/NC only.

## 150 General Chemistry (4) D

Chemical bonding, liquids and solids, solutions, chemical equilibrium, acid-base, solubility, and nonmetals. Prerequisite: 140 or 145;recommended: concurrent registration in 151.

## 151 General Chemistry Laboratory (1) D

Experiments to illustrate the chemistry of common metals, acid-base titration, and solubility products as well as qualitative analysis. Designed to complement 150. Prerequisites: 141 and prior completion of, or concurrent registration in 150 or 155.

## 160 General Chemistry (4) D

Introduction to thermodynamics, electrochemistry, chemical kinetics, organic chemistry, synthetic polymers and bio-polymers. Prerequisite: 150 ; recommended: concurrent registration in 161.

## 161 General Chemistry Laboratory (2) D

Introductory experiments in electro-chemistry, thermochemistry, chemical kinetics, and organic synthesis. Designed to complement 160 . Prerequisites: 151 and prior completion or concurrent registration in 160 or 164.

## 199 Special Problems (1, max. 6)

Research in chemistry. For chemistry majors only. Prerequisites: chemistry grade point average above 3.00 and entry code. CR/NC only.

## 223* Organic Chemistry-Short Program (4) D

First of a two-quarter lecture series in organic chemistry, for majors in biology and related fields who elect not to complete the full year sequence. Introduction to structure, nomenclature, reactions, and synthesis of main functional group families of organic compounds. Prerequisite: 155 or 160.

## 224A Organic Chemistry-Short Program (4) D

Continuation of the abbreviated coverage of the main functional group classes of organic compounds. Short introduction to biomolecules (lipids, carbohydrates, amino acids, proteins, and nucleic acids). Prerequisite: 223.

## 237 Organic Chemistry (4) D

First course for students planning to take three quarters of organic chemistry. Structure, nomenclature, reactions, and synthesis of the main types of organic compounds. Prerequisite: 155 or 160.

## 238 Organic Chemistry (4) D

Second quarter for students planning to take three quarters of organic chemistry. Further discussion of physical properties and transformations of organic molecules, especially aromatic and carbonyl compounds. Prerequisite: 237.

## 239 Organic Chemistry (3) D

Third quarter for students planning to take three quarters of organic chemistry. Polyfunctional compounds, natural products, lipids, carbohydrates, amino acids, proteins, and nucleic acids. Prerequisite: 238.

## 241 Organic Chemistry Laborafory

 (3) DPreparation of representative compounds. Prerequisites: 157 or 161 and 223 or 237.

## 242 Organic Chemishry Laboratory

 (3) DPreparations and qualitative organic analysis. Prerequisites: 224 or 238 and 241.

## 299W Special Problems and Report Writing (1, max. 6)

Research in chemistry and/or chemical literature. For chemistry majors only. Requires writing a scientific report. Prerequisites: grade-point average above 3.00 in chemistry and entry code. CR/NC only.

## 321 Quanfitative Analysis (5)

Introduction to chemical analysis, including gravimetric, volumetric, spectrophotometric, and potentiometric analyses. Laboratory computer use included. Prerequisites: 155 or $160 ; 157$ or 161.

## 455 Physical Chemistry (3)

Introduction to quantum chemistry and spectroscopy. Theory of quantum mechanics presented at an elementary level and applied to the electronic structure of molecules and to molecular spectra. Prerequisites: 155 or 160, MATH 126 ( 308 recommended), and college physics.

## 456 Physical Chemistry (3)

Chemical thermodynamics. Laws of thermodynamics presented with applications to phase equilibria, chemical equilibria, and solutions. Joint with CHE 456. Prerequisites: 155 or 160, MATH 126 (307 and 308 recommended), and college physics. May be taken without 455 .

## 590 Seminar in General Chemistry

 ( 1, max. 18)591 Seminar in Inorganic Chemistry (1, max. 18)
592 Seminar in Analytical Chemistry (1, max. 18)
593 Seminar in Orgqnic Chemistry (1, max. 18)
595 Seminar in Physical Chemistry (1, max. 18)

## Courses by special arrangement

Undergraduate Research, Undergraduate Research and Report Writing, Independent Study or Research, Master's Thesis, Doctoral Dissertation

## Classics

218 Denny Hall, DH-10
Telephone: 543-2266

- Classics Courses in English
- Classical Archaeology
- Greek
- Latin

The Department of Classics offers courses in Greek and Latin from the introductory to the graduate level and a selection of classics courses in English requiring no knowledge of the languages,

The Master of Arts degrees in classics and in Latin may be earned by attending Summer Quarters only. For details, contact the department.
For other courses of interest to classics students, see History (Ancient and Medieval) and Philosophy.

## Classics Courses in English (CLAS)

## 101 Latin and Greek in Current Use (2) D

Designed to improve and increase English vocabulary through a study of the Latin and Greek elements in English, with emphasis on words in current literary and scientific use. Knowledge of Latin or Greek is not required. No auditors. CR/NC only.
205 Bioscientific Vocabulary Building from Latin and Greek (3) D
Designed to help students master the scientific vocabulary of particular fields by a study of the Latin and Greek roots that are used to create the majority of scientific terms. Recommended for nursing and premedical students and science majors. Knowledge of Latin or Greek is not required. No auditors. CR/NC only.

## 424 The Epic Tradifion (5) D

Ancient and medieval epic and heroic poetry of Europe in English: The Iliad, Odyssey, and Aeneid; the Roland or a comparable work from the medieval oral tradition; pre-Greek forerunners, other Graeco-Roman literary epics, and later medieval and Renaissance developments and adaptations of the genre. Choice of reading material varies according to instructor's preference. Offered jointly with C LIT 424.

## 430 Greek and Roman Mythology

 (3) DPrincipal myths found in classical and later literature.

## Greek (GRK)

101 102A Elementary Greek $(5,5)$
Intensive study of the grammar of ancient Greek, with reading and writing of simple Attic prose. No auditors. Prerequisite: 101 for 102.

## 463 Hellenistic Greek Literature (3-5, max. 15)

Readings in Menander. Prerequisite: 307 or equivalent.

## Courses by special arrangement

Supervised Study, Independent Study or Research

## Latin (LAT)

## 101* 102A Elementary Latin $(5,5)$

Intensive study of grammar, with reading and writing of simple Latin prose. No auditors. Prerequisite: 101 for 102.

## 463 Latin Literature of the Empire

 (3-5, max. 15)Readings, with discussion, from Suetonius' Life of Augustus. Prerequisite: 307 or equivalent.

[^5]
## 520 Seminar: Sallust's Bellum Catilinae and Bellum Jugurthinum (5, max. 45)

Prerequisite: entry code (Denny 218).
Courses by special arrangement
Superoised Study, Independent Study or Research

## Classics (CLAS)

Courses by special arrangement
Master's Thesis, Doctoral Dissertation

## Communications (CMU)

118 Communications Building, DS-40 Telephone: 543-8860

This summer's curriculum includes courses in advertising, broadcast journalism, and photography, and a 400 -level course open to both undergraduate and graduate students. General courses cover the history and development of communication and journalism, the process of communicating, and mass communication and society.

## 201 History and Development of Communication and Journalism (5) D

Development of communication from prehistoric times; social and technical inventions; political and economic contexts. Not open for credit to students who have taken 214.

## 202 The Phenomena of Communicating (5) D

Types of communicating behaviors in progressively more complex situations, from individual cognition through interpersonal interactions to mass communicating. Not open for credit to students who have taken 200.

## 203 Mass Communications and Society (5) D

Structure and functions of mass media communication systems; audiences and content; alternative structures; implications of new technologies. Not open for credit to students who have taken 150 .

## 300W Fundamentals of Applied Communication (5)

Practice in communicating in variety of social relationships: intimate; employer-mployee; instruc-tor-student; client-helper; public organization. Problem areas include: cooperation, competition, instruction, and invention. Prerequisites: 202 or permission of instructor.

## 315 Writing and Research for the Mass Media (2)

Introduction to writing and research skills necessary to work in the media professions. Practice in gathering information and organizing it for presentation in a mass medium. Successful comple-
tion is necessary to move into upper level skills courses. Open only to majors. Prerequisite: ability to type.

## 320* Legal Aspects of Communications (5)

Regulations governing publication and broadcast in the mass media. Open to nonmajors.

## 328W News Lab (8)

Students work full-time in news lab reporting for area's newspapers and radio stations covering all county offices/services. Involves heavy writing schedule, deadlines, advanced reporting. Open only to majors. Prerequisite: entry code.

## 330 Principles of Public Relations (5)

An introduction to the field of public relations as practiced in a number of professional settings. Public and private enterprise will be examined. Local, regional, national, and international issues will be studied. Classroom focus will include lectures by outside experts. Prerequisite: 203.
340 Introduction to Advertising (5)
Overview of the advertising industry, its history, structure, operations, and institutional role.

## 341W Beginning Advertising Copy and Loyout (5)

Writing effective copy; developing creative approaches. Specific approaches and strategies. Open only to majors. Prerequisites: $315,340$.

## 345 Advertising Campaigns (5)

Preparation of an advertising plan for a product or service. Open only to majors. Prerequisites:341, 344, entry code.

## 347 Advertising Internship (2-5, max. 6)

Internships are assigned to qualified students through the cooperation of the industry working with the school. Open only to majors. Does not apply to required 50 credits in communications. Prerequisites: 341 or 344 , depending on nature of internship; 120 credits completed; and entry code. CR/NC only.

## 354 Basic Visual Communication (3)

Basics common to all visual media, plus motion. Use of electronic and film materials in news and public affairs programming; emphasis on visual continuity and editorial judgment. Open only to majors.

## 358 TV News Reporting and Editing (5)

Preparation and presentation of news broadcasts, including reporting, scripting, and use of visuals. Prerequisites: $315,350,354$.

## 367 Broadcast Internship

(2-5, max. 6)
Experience in the day-to-day operation of a broadcast station. Internship credit may not be applied to fulfill specific course requirements or to 50 -credit requirement for a communications major. Prerequisites: $315,320,350$, and courses determined by faculty coordinator; and entry code. CR/NC only.

## 399 Editorial Journalism Internship (2-6, max. 6)

Supervised academic work done in connection with editorial internship. Designed to extend the student's knowledge of professional perspectives. Does not apply to required 50 credits in communications. Open only to majors. Prerequisites: 315, 320,322 , and permission of instructor, entry code.

## 423- Journalism Ethics (5)

Ethical issues in journalism; philosophical positions; historical context. Prerequisites: $315,322$.

## 424* The Intellectual Foundations of American Journalism (5)

Examines the thinkers and philosophers who have influenced modern journalism. Studies the main ideas in the development of world thought and their impact on today's journalists. Explores the role communications systems have played in the creating of the world's cultures. Prerequisite: introductory work in the social sciences.

## 471 $\triangle$ Comparative Media Systems (5)

Comparative analysis of national media systems in context of cultural, economic, political, and social milieux in which they operate. Joint with SISCA 471. Prerequisite: introductory course work in the social sciences.

## 475 Communications and International Relations (5) D

Political, economic, and cultural issues with respect to media development and cross-border information flow. Prerequisite: introductory course work in the social sciences.

## 498 Problems of Communications. (1-5, max. 10)

Research and individual study. Prerequisite: permission of instructor.

## 550 Advanced Communication Methods (1-3)

Directed individual projects at a level acceptable by print or broadcast media. Advanced techniques of research and production analyzed and applied. Open only to Master of Communications students. Prerequisites: permission, entry code.

## 597 Practicum in Communication Research (1-5)

Prerequisites: permission, entry code.
Courses by special arrangement
Independent Study or Research, Master's Thesis, Doctoral Dissertation

# Comparative History of Ideas (CHID) 

B102D Padelford, GN-10
Telephone: 543-7333
Courses by special arrangement
Senior Thesis, Independent Study or Research

## Comparative Literature (C UT)

B531 Padelford Hall, GN-32
Telephone: 543-7542

The comparativestudy of literature is not restricted to any one culture or language. Typical areas of inquiry include literary traditions and periods, genres, and motifs; patterns of influence and reception of literary works among various national cultures; and the general principles of theory of literature criticism. Readings are in English, and courses are open to both majors and nonmajors. Detailed course descriptions are available' in the Comparative Literature office.

## 230* Introduction to Folklore Studies (3) D

Comprehensive overview of the field of folkloristics, focusing on verbal genres, customs, belief, and material culture. Examples drawn from both the United States and Scandinavia to reflect current diversity in the field. Particular attention to the issues of community, identity, and ethnicity. Joint with SCAND 230.

## 333* Folklife and Material Culture (3)

 DMethods and materials of comparative folklife studies. Joint with SCAND 333.

## 424 The Epic Tradition (5) D

Ancient and medieval epic and heroic poetry of Europe in English: The Iliad, Odyssey, and Aeneid; the Roland or a comparable work from the medieval oral tradition; pre-Greek forerunners, other Graeco-Roman literary epics, and later medieval and Renaissance developments and adaptations of the genre. Choice of reading material varies according to instructor's preference. Literary background recommended. Joint with CLAS 424.

## Courses by special arrangement

Directed Study or Research, Honors Thesis, Independent Study or Research, Special Seminar or Conference, Master's Thesis, Thesis Colloquium, Doctoral Dissertation

## Computer Science and Engineering. (CSE)

114 Sieg Hall, FR-35
Telephone: 543-1695
See Computer Science and Engineering, page 53.
Dance (DANCE)
258 Meany Hall, AB-10
Telephone: 543-9843

## 101 Introduction to Dance I

 (4, max. 8) DContemporary dance technique, ballet, and new approaches to movement training.

## 104 Modern Technique (*, max. 8)

Advanced beginning. Continued development of all beginning areas and expansion of movement vocabulary. Prerequisites: 103 or permission of instructor for 104, and entry code. Offered for three credits this summer.

## 111, 112A Jazz Technique I (2, max. 4)

Introduction to jazz technique. Prerequisites: 110 or permission of instructor for 111; 111 or permission of instructor for 112.

## 201 Ballet Technique II (*, max. 8) D

Expansion of ballet vocabulary. Prerequisites: 109 or permission of instructor for 201, and entry code. Offered for three credits this summer.

## 204 Contemporary Technique II ( ${ }^{\prime}$, max. 8) D

Intermediate. Expansion of movement vocabulary. Prerequisites: 106 or permission of instructor for 204, and entry code. Offered for two credits this summer.

## 211 Jazz Technique II (2, max. 4)

Intermediate-level jazz technique. Continued development of beginning areas. Expansion of movement vocabulary. Prerequisites: 210 or permission of instructor for 211, and entry code.

## 311 - Jazz Technique III (2, max. 4)

Advanced-level jazz technique. Investigation of jazz styles such as Afro-Cuban, Luigi, and musical theatre. Prerequisites: 310 or permission of instructor for 311, and entry code. Afro-Caribbean featured this summer.
324* Partnering Techniques (1, max. 6)
Study and practice in supported dance work. Prerequisite: entry code.

## Course by special arrangement

Independent Study or Research

Drama (DRAMA)<br>101 Hutchinson Hall, DX-20<br>Telephone: 543-5140

## 101 Introduction to the Theatre (5) D

The theatre as an art form with emphasis on the play in production. The role of the various theatre artists: actors, directors, designers, and playwrights. For nonmajors. Meets Arts and Sciences linked-set requirement when taken with DRAMA 201.

## 201 Dramatic Action (5) D

Play structure through analysis of plays in all genres, with special attention to plotting and the various means used to achieve a unity of action as the basis of all drama. Meets Artand Sciences linkedset requirement when taken with DRAMA 101.

## 302 $\boldsymbol{W}$ W Play Analysis (5)

Analyses of plays, based on leading critical traditions. Illustrates variety of approaches to a play, criteria for choosing best approach for a given play, and ways in which criticism aids in understanding dramatic effect, for both reader and practitioner. Prerequisite: some theatre background.

## 371 Theatre and Society (5) D

Introduction to the history of the theatre from the Greeks to the present day. Development of the theatre as a social institution. Reading of major texts from each period.

## 395* Creative Classroom Computing (5)

Innovative uses of computers in the classroom. Survey of learning styles and teaching strategies, and ways to use the computer as a nontraditional teaching tool. Students develop short courseware demonstrations responsive to instructional needs in their individual disciplines. Teaching and computing experience helpful, but not required.

## 476* Modern American Theatre and Drama (5) D

Major forces shaping modern American theatre, Eugene O'Neill to the present. Leading dramatists; directors and designers of the post-World War II era. Experiments such as the Federal Theatre Project, group theatre, and living theatre.

## 494* Special Studies in Theatre and Drama (5, max. 20) A. Eastern European Theatre and Drama (5)

Surveys major texts in Eastern European drama from nineteenth-century Russia to East Germany up to the Revolution of 1989, supplemented with readings on the work of major Eastern European directors. Readings in English; no previous knowledge of theatre and drama required.

## Courses by special arrangement

Undergraduate Research, Independent Study or Research, Internship, Doctoral Dissertation.

[^6]
## Economics (ECON)

302 Savery Hall, DK-30
Telephone: 543-5955

## 200 Introduction to

 Microeconomics (5) DAnalysis of markets: consumer demand, production, exchange, the price system, resource allocation, government intervention.

## 201 Introduction to Macroeconomics (5) D

Analysis of the aggregate economy: national income, inflation, business fluctuations, unemployment, monetary system, federal budget, international trade, and finance. Prerequisite: ECON 200.
300 Intermediate Microeconomics (5) Choice decisions of individuals and firms: consequences of these decisions in product and factor markets. Consumption, production, cost, and exchange. Prerequisites: 200 and MATH 112, 157 or 124, or equivalent.
301 Intermediate Macroeconomics (5)
Analysis of determinants of the aggregate level of employment, output, prices, and income of an economy. Prerequisites: 201,300.

## 311 Introduction to Economic Statistics (5) $P$

Statistical concepts and their application in eco-; nomics. (Students may receive credit for only one of STAT 220,301,311, and ECON 311 .) Meets withSTAT 311. Prerequisite: 200, MATH 105 or 120 or 111 or. 156 .

## 404A Industrial Organization and Price Analysis (5)

Competition, collusion, monopoly, and oligopoly in regulated and unregulated markets. Economics of firm management, market organization, sales practices, and the antitrust laws. Prerequisite: 300 or equivalent.

## 435 Natural Resource Utilization and Public Policy (5)

Special emphasis on elements of economic theory relating to resource-oriented industries. Case studies in the theory and practice of resource management dealing with both stock and flow. resources. Benefit-cost analysis and the evaluation of multipurpose resource projects. Prerequisite: 300 or permission.

## $451 *$ Public Finance: Tax Policy (5)

Microeconomics of taxation: efficiency, incidence, effect on distribution of income, personal and corporate income taxes, sales and consumption taxes, taxation of property and estates. Prerequisite: 300.

463W Economic History of the United States from the Civil War to the Present (5)
Systematic study of the changing economic conditions since the Civil War and the consequences of these changes for the American society. Prerequisites: 200, 201, or equivalent.

## $471 \triangle$ International Trade (5)

Theory of comparative advantage and different models of intemational trade. Trade and welfare: the theory and practice of commercial policy. Economic integration. Factor mobility and tradeflows. The North-South debate. Prerequisites: 300, 301.

## 472』 Intemational Finance (5)

Monetary problems in international trade and macroeconomics of the open economy. Features of different exchange-rate systems and their adjustment mechanisms. Money and international capital móvements. Pölicies for internal and external balance. Prerequisites: 300, 301.

## 491 Issues in Economic Development (5)

Examines major theories of economic development and the practical experience of developing countries. Prerequisites: $300,301$.

## Courses by special arrangement

Undergraduate Research, Independent Study or Research, Internship, Doctoral Dissertation

## English (ENGL)

A101 Padelford Hall, GN-30
Telephone: 543-2634
The summer program in English offers a wide range of courses in the masterworks of our literature, in the study of language, and in the art of writing in English. All undergraduate courses are suitable for nonmajors as well as majors. The aims of the graduate program are to teach interpretation, writing, and research methods on advanced. levels.

For detailed descriptions of all summer courses, please visit or write the Department of English.

## 111 Composition: Literature (5) P

Study and practice of good writing: topics derived from reading and discussing stories, poems, essays, and plays.

## 121 Composition: Social Issues (5) P

Study and practice of good writing; topics derived from reading and discussing essays and fiction about current social and moral issues.

## 131 Composition: Exposition (5) P

Study and practice of good writing. topics derived from a variety of personal, academic, and public subjects.

## 197W Interdisciplinary Writing/ Humanities (5, max. 15) $P$

 Expository writing based on material presented in a specified humanities lecture course. Assignments include drafts of papers to be submitted in the linked course, and other pieces of analytic prose.
## A. Linked to ENGL 445

## Concurrent registration in ENGL 445 required.

## 198W Interdisciplinary Writing/Social Science (5, max. 15) P

Expository writing based on material presented in a specified social science lecture course. Assignments include drafts of papers to be submitted in the linked course, and other pieces of analytic prose.

## A. Linked to PSYCH 305

Concurrent registration in PSYCH 305 required.

## B. Linked to PSYCH 306

Concurrent registration in PSYCH 306 required.

## 200W Reading Literature (5) D

Techniques and practice in reading and enjoying literature. Examines some of the best works in English and American literature and considers such features of literary meaning as imagery, characterization, narration, and patterning in sound and sense. Emphasis on literature as a source of pleasure and knowledge about human experience.

## 202W Great Books I (5) D

Introduction to literature from a broadly cultural point of view, focusing on major works that have shaped the development of literary and intellectual traditions to the Middle Ages.

## 203W Great Books II (5) D

Introduction to literature from a broadly cultural point of view, focusing on major works that have shaped the development of literary and intellectual traditions from the Middle Ages to the eighteenth century.

## 204W Great Books III (5) D

Introduction to literature from the broadly cultural point of view, fociusing on major works that have shaped the development of literary and intellectual traditions from the eighteenth century to the present.

## 206 Reading Fiction (5) D

Critical interpretation and meaning in fiction. Different examples of fiction representing a variety of types from the medieval to modern periods.

## 2074 Reading Poetry (5) D

Critical interpretation and meaning in poems. Different examples of poetry representing a variety of types from the medieval to modern periods.

## 208A Reading Drama (5) D

Critical interpretation and meaning in plays. Study of different types of drama representing a variety of types from the medieval to modern periods.

## 231 Shakespeare (5) D

Survey of Shakespeare's career as dramatist. Study of representative comedies, tragedies, romances, and history plays.

## 267 Infroduction to American Literafure (5) D

Survey of major writers, modes, and themes in American literature from the beginnings to the present. Specific readings vary, but often included are: Taylor, Edwards, Franklin, Poe, Hawthorne, Melville, Emerson, Thoreau, Whitman, Dickinson, Twain, James, Eliot, Stevens, O'Neill, Faulkner, Hemingway, Ellison, and Bellow.

## 271 Intermediate Expository Writing (5) $P$

Writing papers communicating information and opinion to develop accurate, competent, and effective expression. Recommended: sophomore standing.

## 274 . Beginning Verse Writing (5)

Intensive study of the ways and means of making a poem. Recommended: sophomore standing.
277. Beginning Short Story Writing (5) Introduction to the theory and practice of writing the shortstory. Recommended: sophomore standing.
303 - English Literary Culture: To 1600 (5) D

British literature from Middle Ages to end of sixteenth century. Study of literature in its cultural context, with attention to changes in language, form, content, and style.

## 304 English Literary Culture: 16001800 (5) D

British literature in seventeenth and eighteenth centuries. Study of literature in its cultural context, with attention to changes in form, content, and style.

306 Literature, Literary Study, and Society (5)
Relationship of literature to society with particular emphasis on literary education. What social values determine the educational importance of literature, what segments of society are trained to read and to write literature, and how literature is institutionalized as part of pedagogical methodology. Emphasis varies.

## 311* Chaucer (5) D

Chaucer's Canterbury Tales and other poetry, with attention to Chaucer's social, historical, and intellectual milieu.

## 314 Shakespeare to 1603 (5) D

Shakespeare's career as dramatist before 1603 (including Hamlet). Study of history plays, comedies, and tragedies.

## 315 Shakespeare After 1603 (5) D

Shakespeare's career as a dramatist after 1603. Study of comedies, tragedies, and romances.

## 322 Milton (5) D

Milton's early poems and the prose; Paradise Lost, Paradise Regained, and Samson Agonistes, with attention to the religious, intellectual, and literary contexts.

## $325 \Delta$ English Literature: The Augustan Age (5) D

Selections from wits and satirists; poems by John Dryden and Alexander Pope; plays by Dryden, William Congreve and other wits; the great satires of Jonathan Swift, and the firststirring of the novel.

## 335 English Liferature: The Age of Vicforia (5) D

Literature in an era.of revolution that also sought continuity, when culture faced redefinition as mass culture and found in the process new demands and creative energies, new material and forms, and

## Puget Sound Writing Program

Short intensive summer workshops to improve the teaching of writing for teachers of all subjects and grade levels. Registration for these courses is through UW Extension. You do not have to apply to Summer Quarter to take these courses.

## ENGL 444 Special Topics in English for Teachers

A. Puget Sound Writing Program Institufe (9) May 27, July 13-August 13
B. Puget Sound Literature Program (5) June 22-July 9
C. Porffolio Assessment (5) July 12-29

To request a PSWP brochure, please call (206) 543-2320.
transformations of old ones. Readings range.from works of Tennyson, Browning, Arnold, Shaw, to Dickens, Eliot, Hardy.

## 340 The Modern Novel (5) D

The novel on both sides of the Atlantic in the first half of the twentieth century. Includes such writers as Joyce, Woolf, Lawrence, Stein, Hemingway, Faulkner, and others.

## 352 American Literature: The Early Nation (5) D

Conflicting visions of the national destiny and the individual identity in the early years of America's nationhood. Works by Emerson, Thoreau, Hawthorne, Melville, and such other writers as Poe, Cooper, Irving, Whitman, Dickinson, and Douglass.

## 353 American Literature: Later Nineteenth Century (5) D

Literary responses to an America propelled forward by accelerating and complex forces. Works by Twain, James, and such other writers as Whitman, Dickinson, Adams, Wharton, Howells, Crane, Dreiser, DuBois, and Chopin.

## 359 Contemporary Novel (5) D

Recent efforts to change the shape and direction of the novel by such writers as Murdoch, Barth, Hawkes, Fowles, and Atwood.

## 375 Women and the Literary Imagi-

 nation (5, max. 15) DStudy of the work of women writers in English and American literature.

## 379 Advanced Expository Writing (5)

Concentration on the development of prose style for experienced writers. Reçommended: sophomore standing.

## 386 Intermediate Seminar:

Verse Writing (5, max. 10)
Intensive workshop study of the ways and means of making a poem. Further development of fundamental skills. Emphasis on revision. Meets with ENGL 422. Recommended: 274. Prerequisite: entry code (B25 Padelford, 543-9865).

## 388 Intermediate Seminar: Short Story Writing (5)

Exploring and developing continuity in the elements of fiction writing. Methods of extending and sustaining plot, setting, character, point of view, and tone. Recommended: 277. Prerequisite: entry code (B25 Padelford, 543-9865).

## 390 English Language Study (5) D

Wide-range introduction to the study of written and spoken English. The nature of language; ways of describing language; the use of language study as an approach to English literature and the teaching of English.

394 The Language of Literature (5) D Roles of explicitly describable language feature in the understanding and appreciation of various verbal forms. Emphasis on literature, but attention also may be given to nonliterary prose and oral forms.

## 422 Advanced Seminar: Verse Writing (5, max. 15)

Intensive workshop study of the ways and means of making a poem. Meets with ENGL 386. Recommended: 386. Prerequisite: entry code (B25 Padelford, 543-9865).

## 441 The Composition Process (5)

Consideration of psychological and formal elements basic to writing and related forms of nonverbal expression and the critical principles that apply to evaluation.

## 445 Colloquium in English for Teachers (1, max. 10)

## A. Tutoring At-Risk Children (5)

Study of issues in American education; writing, discussion, and research using UW's online resources; and tutor training combined with tutoring at-risk elementary school children in Seattle. Concurrent enrollment in ENGL 197A required.

## 506 Critical Approaches to Literary Texts (5)

Examination of a range of critical theories and practices appropriate to the study of literature. Prerequisite: entry code (A105 Padelford, 5436077).

## 520 Seventeenth-Century Literature (5, max. 15)

Prerequisite: entry code (A105 Padelford, 5436077).

## 562 Discourse Analysis (5)

Prerequisite: entry code (A105 Padelford, 5436077).

## Courses by special arrangement

Major Conference, Advanced Creative Writing Conference, Advanced Expository Writing Conference, Directed Readings, Independent Study or Research, Internship, Graduate Writing Conference, Master of Arts Essay, Masters of Arts for Teachers, Master's Thesis, Doctoral Dissertation

## Summer Program in English As A Second Language

103 Lewis Hall, DW-12<br>Telephone: 543-6242

Intended primarily for new and continuing University of Washington students who are not native speakers of English, the summer ESL program is designed to prepare such students for college-level academic work by improving their skills in oral and written American English. Other qualified ap-
plicants may be accepted into the program with permission of the ESL Center on a space-available basis only.

Students interested in taking ESL courses should take an Academic English Diagnostic Examination before they enroll. Students should contact the Testing Office in 440 Schmitz Hall or call 543-1170 to register for the examination. The Diagnostic Examination determines which courses the student should take. Without the exam, a student is required to take all ESL courses.

Students may take up to two ESL classes during Summer Quarter. Visit the Special Services Office, 460 Schmitz, for more information. Please contact the ESL Center for further information. Each class requires payment of a $\$ 285$ special fee.

Enrollment in the summer ESL program does not guarantee admission to the University. For information concerning University admission criteria and the application closing date, see the Admission section of this Bulletin. To assure a reservation in the summer ESL program, contact the English As A Second Language Center, 103 Lewis Hall, DW12, Seattle, WA 98195, telephone (206) 543-6242.

## 100 Intermediate ESL for International Students (0)

## A. Reading and Writing

Reading comprehension, vocabulary development, and basic writing skills, including review of grammar. Fee: \$285. CR/NC only.

## B. Speaking and Listening

Listening for increased efficiency in academic lecture comprehension, note taking, oral summarizing, recognition of idioms. Fee: \$285.CR/NC only.

## 101 High Intermediate ESL for International Students (0)

## A. Reading and Writing

Further improvements of reading comprehension and vocabulary; organizing and developing ideas in writing. Prerequisites: diagnostic examination or completion of 100A. Fee: $\$ 285$. CR/NC only.

## B. Speaking and Listening

 Refinement of listening and speaking skills; speaking and listening in academic situations; presenting arguments effectively in an academic setting. Prerequisites: diagnostic examination or completion of 100B. Fee: $\$ 285$. CR/NC only.
## 102 Advanced ESL for International

 Students (0)
## A. Reading and Writing

Writing and reading skills for preparing and writing the academic research paper. Prerequisites: diagnostic examination or completion of 101A. Fee: \$285. CR/NC only.

## B. International Teaching Assistant Training

Lecturing and class discussion skills for ITAs with work on comprehensibility, idea organization, and levels of formality. Prerequisites: entry code,

SPEAK test, and diagnostic examination or completion of all required ESL courses. (No fee for qualified ITAs.) CR/NC only.

## Environmental Studies <br> (ENV S)

203 Engineering Annex, FM-12
Telephone: 543-1812
203 Introduction to Physical Sciences and the Environment (5) D
Climate, water, geological, and soil processes essential to life. Broad picture of physical processes important in Earth's evolution. Not recommended for students with 15 or morecredits of physical science. Joint with GEOG 205.
Courses by special arrangement
Undergraduate Research, Special Topics in Environmental Studies

## General Studies (G ST)

9 Communications Building, DS-60
Telephone: 543-2551

Information about these general studies courses and individual majors in general studies may be obtained from the Undergraduate Advising Center at the above address.

## Courses by special arrangement

Independent Fieldwork, Supervised Study in Selected Fields, Senior Study

## Genetics (GENET)

J205 Health Sciences Center, SK-50
Telephone: 543-1657

## 360 . Introductory Genetics (5) D

Includes transmission of genes and chromosomes, recombination and linkage mapping, genetics of bacteria and viruses, biochemical and molecular genetics, gene regulation and development, population genetics and evolution. Prerequisite: 10 credits in biological or physical sciences. Not open for credit to students who have completed GENET 365.

## 501 Introduction to Research Materials (3, max. 9)

The student undertakes a research project in one of the research groups within the department for a quarter at a time. Prerequisite: graduate standing in the Department of Genetics or permission of Graduate Program Coordinator.

## Courses by special arrangement

Undergraduate Research, Independent Study or Research, Master's Thesis, Doctoral Dissertation

## Geography (GEOG)

408A Smith Hall, DP-10
Telephone: 543-3246
The geography summer offerings include courses meeting social science and natural science distribution requirements and.core courses for geography majors, also open to nonmajors.

## 100 Introduction to Geography (5) D

Basic patterns of human occupancy of the earth; analysis of population, settlement, and resourceuse problems; introduction to geographic theories pertaining to spatial organization, interaction, and environmental perception.

## 205 Introduction to the Physical Sciences and the Environment (5) D

Major atmospheric, hydrologic, and geomorphic processes used to interpret the character, distribution, and human significance of different natural and human-altered environments. Includes laboratory exercises for science and nonscience majors, geography majors and nonmajors. Joint with ENV S 203.

## 207 Economic Geography (5) D

The role of technology in the process of industrial change in the turbulent contemporary world. Emphasis on concepts and theories pertaining to the restructuring of the world economy. Focus on change in the composition and location of sectors and industries.

## 304 Geography of Westem Europe

 (5)Physical and socioeconomic characteristics of western Europe. Contemporary political and economic integration trends in their regional context.

## 308 Canada: A Geographic Interpretation (5)

Study of Canada; emergence of a political-geographic and cultural entity and identity in North America that presents significant contrasts to the United States. Components that have helped shape Canadian earth-space and landscape. Joint with SIS CA 308.

## 326 Introduction to Geographic Research (5)

Approaches to geographic pattern solving. Topics include defining geographic problems; methods of analysis, seeking, organizing, and analyzing spatial data. Provides experience defining a geographic research problem, collecting and analyzing data, and drawing conclusions from that endeavor.

360 Principles of Cartography (5)
Origins, development and methods of cartography. Principles of data representation and map design for thematic and topographic mapping. Students are provided with an introduction to the use of computers for mapping. Previous computer experience is not necessary.

## 366 Regional Development (5)

The process of regional economic development. Theories and conceptualizations of economic growth and structural change, technological change and industrial development, spatial variation in economic activities and government policies. Prerequisite: 207 or ECON 200 or equivalent.

## 370 Problems in Resource Management (5)

Principles and practices of effective conservation and utilization of natural resources. Role of technology in resource use. Physical, political, and economic aspects of resource management for food, population, land, water, air, energy, and timber resources. Recommended: 100 or equivalent.

## 448 Geography of Transporitation (5)

Circulation geography, principles of spatial interaction emphasizing commodity flow, the nature and distribution of rail and water transport, and the role of transport in area development.

## Courses by special arrangement

Internship in Geography, Independent Study or Research, Master's Thesis, Doctoral Dissertation

## Geological Sciences (GEOL)

63 Johnson Hall, AJ-20
Telephone: 543-1190

The department offers courses for majors and graduates as well as for nonmajors who wish some broad training in geological sciences.

## 101 Introduction to Geological Sciences (5) D

Survey of the physical systems that give the earth its form. Emphasizes the dynamic nature of interior and surface processes and their relevance to mankind and stresses the value of rocks and earth forms in the understanding of past events. A course with laboratory for nonscience majors. Not open for credit to students who have taken 205. Field trips to Cascades and Olympics.

## 303- Geologic Hazards (5)

Geologic forces dramatically alter the earth's surface, devastating communities, taking human lives. Uses lectures and field work to examine geological hazards affecting civilizations around the world. Northwest examples illustrate causes and effects of many catastrophic geological processes, including: earthquakes, volcanoes, floods, glaciers,
landslides. Prerequisite: 101 or 205 or permission of instructor. This class emphasizes field work and a hands-on approach to learning. Lectures, labs, and discussion sections provide background for four full-day field trips.

## 308 Geology of the Pacific Northwest (5) D

Geologic history of Washington, Oregon, and Idaho. Emphasis on use of geologic principles in interpreting evidence found in landscapes and rocks. Prerequisite: 101 or 205 or equivalent. Students are required to attend five field trips during Summer Quarter. Fiffeen field trips are offered on both weekdays and weekends to accommodate varying student schedules. Field trips include North Cascades, Mount Rainier, Mount St. Helen's, Columbia Plateau, San Juan Islands, Bainbridge and Whidbey Islands, and the Olympic Peninsula. Three in class labs are required at the beginning of the quarter to review mineral and rock identifications, as well as geology field methods.

## 312 Volcanoes and Glaciers of the Pacific Northwest (3)

Introduction to volcanic and glacial processes, emphasizing examples in the Pacific Northwest. Volcanic products, landforms, hazards, prediction, and history. Relationship to tectonics. Nature and distribution of present and former glaciers in Washington. Two all-day Saturday field trips to Cascade volcanoes required.

## 401. Field Geology (10)

Geologic mapping in diverse areas in the western United States. Development of skills in mapping, field interpretation, and report writing. Students are responsible for their own living expenses while in the field. Prerequisites: 101 or $205,321,340$, and entry code. 306, 311 strongly advised.

## Courses by special arrangement

Undergraduate Research, Independent Study or Research, Undergraduate Thesis, Master's Thesis, Doctoral Dissertation

## Geophysics (GPHYS)

202 Atmospheric Sciences-Geophysics, AK-50 Telephone: 543-8020

## 480 Special Topics in Geophysics (2-6, max. 12) <br> A. Earth Sciences for Teachers (4)

A course for junior and senior earth science and general science teachers. Through a combination of lecture, experiments, and field trips teachers will investigate meteorology and solid earth geology. Emphasis is on learning basic principles through experimentation.

## Courses by special arrangement

Independent Study or Research, Master's Thesis, Doctoral Dissertation

[^7]
## Germanics (GERM)

340C Denny Hall, DH-30

Telephone: 543-4580
The Department of Germanics offers a variety of intensive and regular courses at all levels. Students may take 15 credits of Intensive First-Year German (100), the equivalent of First-Year German (101, 102, 103). In addition, Individualized First-Year German (104), emphasizing the acquisition of reading skills, is offered. Students may also complete the entire second-year program and earn 15 credits by enrolling in Intensive Second-Year German (200). Graduate students may enroll in FirstYear Reading German (121 and 122A). Advanced undergraduate and graduate students can also enroll in literature courses.
100 Intensive First-Year German (15) Accelerated first-year German. Emphasis on speaking and listening. Equivalent to 101,102 , and 103.

## 101 First-Year German (5)

Emphasis on communicative skills. No credit for students who have taken the first five credits of 104. (See credit note following 104.)

103 First-Year German (5)
Emphasis on communicative skills. Prerequisite: 102 or equivalent. No credit for students who have taken the last five credits of 104. (See credit note following 104.)

## 104 Individualized First-Year German (1-15)

Individualized approach to elementary German instruction. Students progress at their own pace. Credits awarded at the end of the quarter vary. Depending upon amount of material mastered, any number of credits up to 15 may be earned per quarter. CR/NC only.
Credit Restrictions: Students may receive credit for only one course in each of the following: 101,111, and the first 5 credits of 104; 102, 111, and the second 5 credits of 104; 103 and the last 5 credits of 104 . They may, however, receive credit for courses in different first-year sequences if the courses are taken in progressively more adoanced order (e.g., the first 5 credits of 104 followed by 102 and 103). 100 is the equivalent of $101,102,103$, or 15 credits of 104 .

## 121* 122』 First-Year Reading German $(5,5)$

Intensive. Special beginning course devoted exclusively to the reading objective. For graduate and undergraduate students. CR/NC only.

## 200 Intensive Second-Year German (15)

Accelerated second-year German. Systematic review of German grammar. Intensive practice in conversation, reading, and writing. Prerequisite: 103 or equivalent.

## 230 Conversational German (5)

Intensive conversational German. Discussion of literary and general topics to develop oral fluency. Prerequisite: 103 or equivalent.

## $390 *$ Germanic Studies in English (3-5, max. 5) D <br> A. German Literature and the Problem of German Identity (5)

The problem of identity has meant more to Germans than to most other countries. It has been a vital subject of debate in politics, philosophy, and sociology and has inspired a body of writings in a wide range of genres. This course will study the problem of identity in German literature against the background of problems, crises, and ambitions playing themselves out in German society and German history. The major texts: Wolfram von Eschenbach, Parzival; Grimmelshausen, Simplicius Simplicissimus; Goethe, Die Leiden des jungen Werthers; Hermann Hesse, Steppenwolf. In addition some lyric poetry and films (Wenders, The American Friend).

## 497* Studies in German Literature (1-6, max. 15) D A. The Artist as "Protagonist" in the German Prose Novella from Romanticism to Kafka and Thomas Mann (3)

The artist's naiveté and complexity in relation to society, the agony, and ecstasy of the creative process, the artist's proximity to madness and realms of dangerous beauty and his contempt for and need of an audience: these and related themes will be explored which will focus on the development of the German prose novella from the perspective of the portrayal and self-reflection of the artist. Other authors include Hoffmann, Möricke, Büchner, Grillparzer, and Storm. Texts and lectures in German. Open to graduate and advanced undergraduate students.

## 4981 Studies in the German

 Language (1-6, max. 15) D
## A. Survey of the Germanic Languages (3)

We first give an overview of the Germanic languages, where they are firstattested and what their modern descendents are. Then we shall consider the major phonological and grammatical developments from Indo-European into the earliest attested Germanic languages: Gothic, Old Norse, Old English, Old Frisian, OldSaxon, and Old High German. Open to graduate and advanced undergraduate students.

## Courses by special arrangement

Independent Study or Research, Master's Thesis, Doctoral Dissertation

261 Survey of the Muslim Near East (5) D

The Middle East (the Arab countries, Israel, Turkey, Iran, and Afghanistan) from the emergence of Islam in A.D. 622 to the present: culture, economics, politics.

## $449 \pm$ Issues in Comparative Labor History (5)

Role of labor in the modern world. Emphasis on the centrality of workers' struggles in the evolution of national societies, on the conceptual, research, and expository strategies of contemporary students of the labor movement, and on differences and relationships between labor in developed and under developed countries.

## 498W Colloquium in History (3-5, max. 15) <br> A. Utopian Visions in the Industrial Age (*)

How have humans conceptualized the ideal society? And to what extent have social ideals changed over time in the English-speaking world? These are the core questions addressed in this seminar course for advanced undergraduates. The assumption of the course is that uto-pian-or, in some cases, "dysutopian"-literature always functions as social criticism. Thus, this course will focus on the critical discourses to be found in four utopian novels, rather than upon their respective literary merits.

## B. Senator Henry M. Jackson and American Foreign Policy (*)

This research course, open to history majors (preferable seniors), will focus on the activities of Senator Jackson (Democrat, WA) in the realm of foreign affairs. Jackson was, among other things, a foe of the Soviet Union, an acknowledged authority in the matter of nuclear strategy, a friend of Israel and latterly of China, an aspirant for the presidency, and the nemesis of Henry Kissinger. His office files and other papers are deposited in the UW Library, and they will serve as the main source for the papers to be written by students in this course. There may also be some opportunities for interviews and oral history projects. Preliminary reading on American foreign policy in the Cold War is advised.

## Courses by special arrangement

Undergraduate Research, Independent Study or Research, Master's Thesis, Doctoral Dissertation

## History of the Americas (HSTAA)

## 201* Survey of the History of the United States (5) D

Supplies the knowledge of American history that any intelligent and educated American citizen should have. Objective is to make the student
aware of his heritage of the past and more intelligently conscious of the present.
3014 Foundations of American Civilization (5) D
Early America from the sixteenth century to the end of the American Revolution: the founding years, social and religious development, race relations, development of the Atlantic world, origins and legacy of American independence.

## 370 Consumer Culture in the Moderm United States (5)

Studies the American attempt in this century to create, sustain, and organize the world's first con-sumer-oriented industrial society. Topics to be considered include: the economy of mass consumption, how a culture of consumption was created, and the ideas of social critics who have rejected consumerism.

## 373 Social History of American Women (5)

A multi-racial, multicultural study of women in the U.S. from the sixteenth century to the present: an emphasis on women's unpaid work, participation in the paid labor force, charitable and reform activities, and feminist movements of the nineteenth and twentieth centuries. Use of primary materials such as diaries, letters, speeches, and artifacts. Joint with WOMEN 383. Prerequisite: WOMEN 200 or WOMEN 283 or HSTAA 201 or permission of instructor.

## 411* The United States During the Era of Civil War and Reconstruction (5)

Conflicting interests, ideologies, and ways of life in the United States from the 1840s to the 1870s.

## 432 History of Washington and the Pacific Northwest (5)

Exploration and settlement; economic development and social institutions; statehood.
462* Diplomatic History of the United States, 1901-Present (5)
Foreign policy of the United States during the twentieth century. International wars and the other major episodes in diplomacy are emphasized. Prerequisite: 202 or graduate standing.

## Ancient and Medieval History (including Byzantine) (HSTAM)

## 205 Military History of the Ancient World (5)

Military history from prehistoric times to the fall of the Roman Empire, with special emphasis on the Greco-Roman period and the campaigns of Alexander the Great, Hannibal, Scipio Africanus, and Julius Caesar.

## 340* Medieval Women (5)

The experience of women in medieval society: public and private power, changing concepts of family and the domestic sphere, ideal and reality in courtly love, women in religious life, women in the workplace, the quarelle des femmes and the beginnings of "feminist" thought.

## 402WA Classical Greece (5)

The classical civilization of ancient Greece, with special emphasis on the legacy of Greece to Western civilization.

## History of Asia (HSTAS)

## 454 History of Modern China (5)

Political, economic, social, and intellectual history of China from 1800 to present. Processes of modernization and revolution and relationship between them.

## Modern European History (HSTEU)

## 412 Europe: 1870-1914 (5)

Impact of population increase and technological change on European society; stresses and strains in European life and outlook.

## 422* The French Revolution and Napoleon: 1789-1815 (5)

Transformation of France under the Revolution of 1789; the Reign of Terror and Napoleon; the impact of the revolution and Napoleon upon Europe.

## The Henry M. Jackson School of International Studies

111 Thompson Hall, DR-05
Telephone: 543-4370

Henry M. Jackson School of International
Studies courses are offered in:

- African Studies
- Canadian Studies
- Chinese Regional Studies
- Comparative Religion
- International Studies
- Japanese Regional Studies
- Jewish Studies
- Korean Regional Studies
- Latin American Studies
- Middle Eastern Studies
- Russian and East European Studies
- South Asian Studies
- Southeast Asian Studies

In addition to the courses listed below, students may register for independent study courses (499, 600, or 700 ) in such other interdisciplinary regional and topical programs of the School as African Studies, East Asian Studies, International Studies,

Jewish Studies, Latin American Studies, Middle EasternStudies, South AsianStudies, Russian and East European Studies, Comparative Religion, Canadian Studies, Southeast Asian Studies, and in program-related undergraduate courses offered by other academic units. Consult the International Studies advisory offices in Thompson Hall for additional information.

## African Studies (SISAF)

Course by special arrangement
Undergraduate Research

## Canadian Studies (SISCA)

## 308 Canada: A Geographic Inter-

 pretation (5)Study of Canada; emergence of political-geographic and cultural entity and identity in North America that presents significant contrasts to the UnitedStates. Components that have helped shape Canadian earth-space and landscape. Joint with GEOG 308.

## 341* Government and Politics of Caniada (5)

Critical analysis of parliamentary institutions, political parties, and the federal system in Canada. Joint with POLS 341 .

## Course by special arrangement

 Undergraduate Research
## Chinese Regional Studies (SISEA)

## Courses by special arrangement

Undergraduate Research, Independent Study or Research, Master's Thesis

## Comparative Religion (RELG)

## 201* Introduction to World Religions: Western Traditions (5) D

History of religions, concentrating on religious traditions that have developed west of the Indus. Primary attention to the Semitic religions (Judaism, Christianity, Islam) and to their ancient world background, with emphasis on basic conceptual and symbolic structures.

## 220* Introduction to the New Testament (5) D

Modern scholarly methods of research and analysisin dealing with New Testament books and their interpretation. Genres of various books (gospel, epistle, sacred history, apocalypse); problems of the relationships among author, material, and intended audience; relationships between theme and image.

## 324A The Emergence of Christianity

 (5) DStudies stages in the development of Christianity as a new religion, during the first to fifth centuries C.E., as the classical forms and institutions of Christian "orthodoxy" gradually achieved definition, and as this emerging Christian tradition became a dominant cultural and socio-political force. Recommended: 201, 220, or HST 307.

## Courses by special arrangement

Undergraduate Research, Independent Study or Research

## International Studies (SIS)

## 330 Political Economy of Development (5)

Growth, income, distribution, and economic development in less-developed countries today. Policies concerning trade, industrialization, the agricultural sector, human resources, and financing of development. Prerequisites: ECON 200, 201.

## 421W* National Security and International Affairs (5)

Major military aspects of contemporary international politics. Uses and limitations of military capabilities for sustaining a stable international order and national security. Processes by which states detect and assess threats to their security; practice of deterrence; transfer of arms among states; pursuit of arms control. Recommended: course work in international relations.

## 426A World Politics (5) D

Nation-state system and its alternatives; world distributions of preferences and power, structures of international authority; historical world societies and their politics. Joint with POL S 426.

## 450* Political Economy of Women and Family in the Third World (5)

Theoretical and empirical aspects of the political economy of women and the family in the Third World during the process of development, with a focus on labor. Main theoretical approaches examined and applied to case studies from Asia and Latin America. Joint with SOC 450.

## 456WA State-Society Relations in Third World Countries (5)

Relationships among political, social, and economic changes in Asia, Africa, and Latin America. Problems of economic and political development, revolution and reform, state-society relations, imperialism, and dependency. Joint with POLS 450.

## 490* Special Topics (1-5, max. 15)

## A. Perspectives on Teaching About

 East Asia and the Middle East (2)Covers both substantive information about East Asia and the Middle East and materials available for teaching K-12. Audio-visual materials are discussed as well.

490^ Special Topics (1-5, max. 15)
B. Mexico, the United States and Canada: Toward a New Partnership (5)
Surveys the international developments and internal domestic factors within Mexico, the U.S. and Canada that explain the decision of the three countries to search for a North American free trade area and the likely implications of such an undertaking to increase deeper cooperation among the three countries in other areas of their relationship.

## Courses by special arrangement

Undergraduate Research, Independent Study or Research

## Japanese Regional Studies (SISEA)

Courses by special arrangement
Undergraduate Research, Independent Study or Research, Master's Thesis

## Jewish Studies (SISJE)

Course by special arrangement Undergraduate Research

## Korean Regional Studies (SISEA)

Courses by special arrangement
Undergraduate Research, Independent Study or Research, Master's Thesis

## Latin American Studies (SISLA)

Course, by special arrangement Undergraduate Research

## Middle Easfern Studies (SISME)

Courses by special arrangement
Independent Study or Research, Master's Thesis

## Russian and East European Studies (SISRE)

## 490* Eastern European Theatre and Drama (5)

Surveys major texts in Eastern European Drama from nineteenth-century Russia to East Germany up to the Revolution of 1989, supplemented with readings on the work of major Eastern European directors. Readings in English;no previous knowledge of theatre and drama required. Meets with DRAMA 494.

## Courses by special arrangement

Undergraduate Research, Independent Study or Research, Master's Thesis

# South Asian Studies (SISSA) 

Courses by special arrangement<br>Undergraduate Research, Independent Study or Research, Master's Thesis

## Southeast Asian Studies (SISSE)

Course by special arrangement Undergraduate Research

## Linguistics (LNG)

A210 Padelford Hall, GN-40
Telephone: 543-2046

The Department of Linguistics offers courses in the method and theory of language analysis and in phonology and syntax.

## 200- Introduction to Linguistic Thought (5) D

Language as the fundamental characteristic of the human species; diversity and complexity of human languages; phonological and grammatical analysis; dimensions of language use; language and writing; impact of historical linguistics on contemporary theory. Not open for credit to students who have taken 400.

## 203 Introduction to Anthropological Linguistics (5) D

Linguistic methods, theories used within anthropology. Descriptive and theoretical linguistics compared; historical linguistics, comparative method; socio-linguistics; language, culture; human language and animal communication compared; survey of history of anthropological linguistics in North America. Joint with ANTH 203. Not open for credit to students who have taken 200 , 201, or 400.

## 400 Survey of Linguistic Method and Theory (4) <br> Major linguistic theories in phonology, syntax and semantics; linguistic analysis and argumentation. Intended for students who plan to pursue further linguistic or language-related study; not open for credit to students who have taken 200 or 201.

## 449 Second-Language Learning (3)

Issues related to the psychological aspects of sec-ond-language learning. Prerequisite: 200 or 400 or permission of instructor.

## 451*451』 Phonology I, II (4,4)

Speech sounds, mechanism of their production, and structuring of sounds in languages; generative view of phonology; autosegmental and metrical phonology. Joint with ANTH 451 $\downarrow$, 452A. Prerequisite: 200 or 400 , either of which may be taken concurrently with 451.

## 461-Syntax I (4)

Study of the structural properties of language; introduction to generative transformational syntax. Joint with ANTH 461 . Prerequisite: 200 or 400 or permission of instructor.

## Courses by special arrangement

Undergraduate Research, Independent Study or Research, Master's Thesis, Doctoral Dissertation

## Mathematics (MATH)

C36 Padelford Hall, GN-50
Telephone: 543-6830
Summer Quarter courses offered in mathematics range from the precalculus level to a selection of advanced courses at the senior and graduate levels. Mathematics majors can take most of the standard senior-level courses during the summer, including 402,407, and 427. Among courses of interest to teachers are Introduction to Modern Algebrafor Teachers (411, 412), History of Mathematics (420) (offered only in Summer Quarter), and Foundations of Geometry (444, 445). Also see Statistics.

Students planning to take MATH 111, 120, 124 must satisfy minimum placement requirements. The current requirements are described in the sheet "Placement Requirements for MATH 107,111, 120, 124 " available at Central Advising, 9 Communications, and Mathematics Advising, C36 Padelford.

## 111 Algebra with Applications (5) DP

Use of graphs and algebraic functions as found in business and economics. Algebraic and graphical manipulations to solve problems. Exponential and logarithmic functions; various applications to growth of money. Prerequisites: one and one-half years of high school algebra and qualifying test or equivalent.

## 112 Application of Calculus to Business and Economics (5) DP

Rates of change, tangent, derivative, accumulation, area, integral in specific contexts, particularly economics. Techniques of differentiation and integration. Application to problem solving. Optimization. Credit does not apply toward a mathematics major. Prerequisite: for sections taught during the day: 111; for evening section: 111 or 120.

## 120 Precalculus (5)

Elementary functions with emphasis on the general nature of function; polynomial, rational, exponential, logarithmic, and trigonometric functions. There is heavy emphasis on story problems and working with graphs. Not open for credit to students who have taken 111. Prerequisites: two years of high school algebra and qualifying test, or 101 or equivalent.

## 124 Calculus with Analytic Geometry I (5) DP

Differentiation, applications of derivative, integration. Calculus for natural sciences and engineering students. Prerequisites: four years of college preparatory mathematics or equivalent (normally including precalculus or mathematical analysis with grades of $B$ or better) and placement test of 2.5 or better in 120, or equivalent.

## 125 Calculus with Analytic Geometry II (5) D

Applications of integration, transcendental functions, methods of integration and improper integrals, introduction to first order ordinary differential equations. Prerequisite: 124.

## 126 Calculus with Analytic Geometry III (5) D

Vectors and vector functions in space, functions of several variables and applications, multiple integrals. Prerequisite: 125.

## 170 Mathematics for Elementary School Teachers (3) D

Development of the systems of whole numbers, integers, and rational numbers; measurement; basic geometric concepts. Ordinarily, credit may not apply toward a major in mathematics. Elementary education majors are required to take 170 . Prenequisites: one and one-half years of high school algebra and one year of geometry. CR/NC only.
205 Elementary Linear Algebra (3)
Systems of equations; vector spaces, matrices, linear transformations, characteristic vectors. Not open for credit to students who have taken 308. Prerequisite: 124 or 157.

## 301 Elementary Number Theory (3)

Brief introduction to some of the fundamental ideas of elementary number theory. Prerequisite: 126 or 136.

## 307 Differential Equations (3)

Taylor series. First and second order ordinary differential equations. Joint with AMATH341. Prerequisite: $125 ; 126$ strongly recommended.

## 308 Linear Algebra (3)

Linear algebra (matrices and linear equations, the vector space Rn , eigenvalues), systems of first order linear ordinary differential equations. Prerequisite: 307, 126 strongly recommended.

## 309 Linear Analysis (3)

Linear algebra (inner products, projections), Fourier series and Laplace transform with applications to partial differential equations. Prerequisite: 126, 307, 308.

## 324 Advanced Calculus I (3)

Vector and scalar fields, line integrals, surface and volume integrals, theorems of Green, Gauss, and Stokes. Prerequisite: 126.

[^8]
## 325 Advanced Calculus II (3)

Sequences, series (tests, absolute convergence, uniform convergence), power series, and real analytic functions. Prerequisites: 126 and 307.

## 390 Probability and Statistics in

 Engineering and Science (4)Concepts of probability and statistics. Conditional probability, independence, random variables, distribution functions. Descriptive statistics, transformations, sampling errors, confidence intervals, least squares, and maximum likelihood. Exploratory data analysis and interactive computing. Joint with STAT 390 . Students may not receive credit for both 390 and STAT 481. Prerequisites: 307 or 328, and 205 or 308.

## 394* Probability I (3)

Sample spaces; basic axioms of probability; combinatorial probability; conditional probability and independence; binomial, Poisson, and normal distribution. Joint with STAT 394↔. Prerequisite: 328.

## 395A Probability II (3)

Random variables; expectations and variance; laws of large numbers; normal approximation and other limit theorems; multidimensional distributions and transformations. Joint with STAT 395A. Prerequisite: 394.

## 402* 403A Introduction to Modern

 Algebra $(3,3)$Intensive. Algebraic systems; elementary theory of groups, rings, and fields; polynomials; topics in linear algebra; reductions of forms. Prerequisites: 308 or 336 for 402; 402 for 403.

## 407 Linear Optimization (3)

Maximization and minimization of linear functions subject to constraints consisting of linear equations and inequalities; linear programming and mathematical modeling. Simplex method, elementary games and duality. Prerequisite: 308.

## 411*412A Introduction to Modern Algebra for Teachers $(3,3)$

Development of the number systems of elementary algebra: groups rings, integral domains, and fields; polynomials. Designed for teaching majors. Not open for credit to students who have taken 402 or 403. Prerequisite: 205 or 308.

## 420 History of Mathematics (3)

Survey of the development of mathematics from its earliest beginnings through the first half of the twentieth centurý. Prerequisite: 402 or 411.

## 427 Topics in Applied Analysis (3)

Some elementary functions of a complex variable, Cauchy integral formula, and applications, Taylor and Laurent series, conformal mapping. Prerequisite: 334 or 329.

## 428- Topics in Applied Analysis (3)

Intensive, Fourier Series, orthogonal functions, and boundary value problems. Prerequisites: 307 and 329, or 336.

## 4291 Topics in Applied Analysis (3)

Intensive. Material selected from the following topics: Fourier transforms, LaPlace transforms, Bessel functions, Legendre functions, and the application of these ideas to the solution of certain ordinary and partial differential equations. Prerequisite: 427 and 428.

## 444 Foundations of Geometry (3)

Axiomatic treatment of the foundations of Euclidean geometry. Introduction to non-Euclidean geometry. Designed for teaching majors. Can be taken concurrently with 445. Prerequisite: 126 or 136; 205 recommended.

## 445 Foundations of Geometry (3)

Axiomatic treatment of the foundations of Euclidean geometry. Introduction to non-Euclidean geometry. Designed for teaching majors. This summer emphasis on Euclidean and non-Euclideangeometry using the LOGO computer language as a tool for understanding geometry. No previous knowledge of LOGO is assumed but students are expected to learn enough LOGO during the course to do geometry projects. Prerequisite: 444 , which may be taken concurrently. Students must also register for two credits of 487.

## 487 Advanced Mathematics Computer Lab (2).

Laboratory activities in the use of computing as a tool for doing mathematics. (May be used by mathematics majors to satisfy the degree requirement for two credits in computing.) Offered only as a companion lab to a designated section of a 400level mathematics course. Prerequisite: enrollment in MATH 445. CR/NC only.

## 498 Special Topics in Mathematics (2-5, max. 15)

Reading and lecture course intended for special needs of advanced students. Prerequisite: permission of instructor.

## 510 Seminar in Algebra (2)

Prerequisite: permission of graduate program coordinator. CR/NC only.

## 530 Seminar in Analysis (2)

Prerequisite: permission of graduate program coordinator. CR/NC only.

## 550 Seminar in Geometry (2)

Prerequisite: permission of graduate program coordinator. CR/NC only.

## 570 Seminar in Topology (2)

Prerequisite: permission of graduate program coordinator. CR/NC only.

## 590 Seminar in Probability (2)

Prerequisite: permission of instructor. CR/NC only.

## Courses by special arrangement

Independent Study or Research, Master's Thesis, Doctoral Dissertation

## Microbiology (MICRO)

G311 Health Sciences Center, SC-42 Telephone: 543-5824

The course in general microbiology with laboratory is recommended for teachers of general science or biology and for students of biology, chemistry, pharmacy, and nursing. Practical experience in a diagnostic laboratory and in media room procedures is available to a limited number of students. Graduate instruction is carried on during the summer through research and seminars.

## 301 General Microbiology (3) D

-Acquaints students with microorganisms and their activities. Topics include microbial cell structure and function, metabolism, microbial genetics, and the role of microorganisms in disease, immunity, and other selected applied areas. Prerequisite: two quarters of chemistry; a course in biological science is recommended.

## 302 General Microbiology Laboratory (2) D

Laboratory course primarily for students taking 301. Covers a variety of microbiological techniques, with experiments designed to illustrate major concepts of microbiology, virology, and immunology. No auditors. Prerequisite: concurrent or previous registration in 301, or permission.

## 320 Media Preparation (2)

Practical work in preparation of culture media. Nutritional requirements of microorganisms and sterilization methods are considered. For students expecting to enter vocations involving laboratory work with bacteria. Prerequisites: 301 and 302 , or equivalent, and entry code. CR/NC only.

## 500 Introduction to Research (*, max. 20)

Introduction to research areas of the faculty and the techniques employed in their investigations. Prerequisite: graduate standing in microbiology. CR/ NC only.

## 555 Advanced Clinical Microbiology (2.5)

Attendance at daily plate rounds of the Division of Clinical Microbiology. Designed to increase understanding of clinical microbiological work and its application to the care of the patient. Prerequisites: 443 and entry code. CR/NC only.

## 556 Clinical Microbiology Training and Research (*, max. 12)

Training in clinical microbiology and research. Attendance at daily laboratory rounds in addition to bench-side training and research. For medical students and microbiology graduate students only. Prerequisites: 443 and entry code. CR/NC only.

## Courses by special arrangement

Honors Undergraduate Research, Undergradua te Library Research, Undergraduate Laboratory Research, Independent Study or Research, Master's Thesis, Doctoral Dissertation

## Music

116 Music Advising, DN-10
Telephone: 543-1239
Music courses are classified as:

- Courses Primarily for Nonmajors
- Courses Primarily for Music Educators and Music Majors
- Ensemble Courses and Applied Music

The School of Music offers a varied program for both the graduate and undergraduate student. Many short workshops are planned. The dates for these workshops are specified before the course description.

Of special interest to the general student are the courses for nonimajors, which, as a group, present a wide spectrum of musical experiences, and the band, orchestra, and choral ensemble groups.
Of particular interest to the music educator are the MUSED 496 courses (Special Topics in Music Education), many of which are special one- or twoweek workshops. Many of these workshops are also available through UW Extension.
Community members are encouraged to participate in the summer band program (MUSEN 302/ 502 offered a term only) under the direction of Tim Salzman, summer choral program (MUSEN 350/ 550) under the direction of Joan Conlon, and summer orchestra program (MUSEN 301/501) under the direction of Johan Louwersheimer. Interested persons should contact the conductor or Music Advising Office.

Entry codes are required for all courses except MUSIC 116,161,162,331, MUSED 200, the MUSED 496 Special Workshops offered jointly with UW Extension (sections I, M, O, Q R, U, V, W), and the MUSEN ensemble courses.

## Courses Primarily for Nonmajors

## Music Education (MUSED)

## 200- 1 Music and the Child (3)

Introductory orientation to music designed to acquaint the student with the structure and esthetic elements in music and those music-related processes of self-expression and communication basic to a child's education.

## Music (MUSIC)

All the following MUSIC courses satisfy the Arts and Sciences Humanities distribution.

## 116*A Elementary Music Theory I (2) D

For people with no hands-on music experience. Rudiments of music; notation of time, pitch, small structures (e.g. some scales, chords, rhythmic patterns), some analysis.

## 120 Survey of Music (5)

Studies in listening with emphasis on the changing components of Western art music.

## 161 American Musical Theater (5) D

Historical and stylistic study of the development of the American musical theater. European roots in opera and operetta. Contributions from jazz and. popular music. Selected musicals studied.

## 162 American Popular Song (5) D

Historical, social, and stylistic study of popular idioms from the late nineteenth century to the present. Most attention to contemporary idioms. Influences of music industry on taste and style.

## 331 History of Jazz (3) D

Survey of the major periods and styles of jazz,New Orleans jazz to the avant-garde and popular jazz of today. Study of the major characteristics of each style.

## Courses Primarily for Music Educators and Music Majors

## Applied Music (MUSAP)

## 2204 M MiDI Techniques (2)

Overview of MIDI (Musical Instrument Digital Interface) technologies in the school environment. Prerequisite: entry code.

## Music Education (MUSED)

## 431* The Curriculum in Music

 Education (3)Principles and practices of curriculum design applied to the development of the musiccurriculum. Individual or group work on elementary and secondary school music curriculum projects. Prerequisite: music teaching, student teaching, or permission of instructor, and entry code.

## 496* Special Topics in Music

 Education (1-3, max. 10)
## X. Instrumental Conducting (2)

Emphasis on beat patterns and their expressive modifications, basic rehearsal techniques, and score study. Suitable for instrumental conductors of intermediate level. Prerequisite: permission of instructor and entry code.

## 496^ Special Topics in Music

 Education (1-3, max. 10)Y. Advanced Choral Conducting (2)

Emphasis on expressive modifications of beat patterns, basic rehearsal techniques, and score study. Prerequisite: undergraduate conducting studies and entry code.

## 523A Tests and Measurements (3)

A survey of standardized tests in music; methods of test construction and validation.

## 550* Proseminar in Music Education

 (3)Examination of the majorliterature in the philosophy, history, psychology, and sociology of formal school music instruction. Prerequisite: entry code.

## Music History (MUHST)

503 Readings in Medieval and Renaissance Music (5)
The history of musical style from ca. 900 to 1600 . Concepts and styles of medieval and Renaissance music. Prerequisite: permission of instructor and entry code.

## Music (MUSIC)

## 379 Junior Recital (1)

## 389, 589 World Music Laboratory

 (2-3, max. 18)The MUSIC $389 / 589$ sections include private instruction and/or ensemble playing in various world music traditions. Prerequisite: entry code.

## A. Sudanese.Gamelan Degung <br> C. Malagasy Valiha (tube zither).

## 428 Music of North India (3)

Survey of the history and performance practices of Hindustani classical music. Lectures are supplemented by selected readings and audio visual materials. The course aims to familiarize students with the historical and social context, the predominant genres, and the melodic and rhythmic materials of vocal and instrumental music.

## 445 Selected Topics in

 Ehnomusicology (3, max. 6)Topics in the performance practice of the sitar. Focuses on the repertoire, techniques, and styles of North Indian sitar playing in the twentieth century. A portion of the course involves demonstration of the fundamental techniques of the sitar, with class participation, if feasible. Lectures center around recordings that exemplify the trends and styles of modern sitar playing.

See the Time Schedule section, pages 68-108, for class dates and times.

## 479 Senior Recital (1)

5234 Seminar in Music and Socialization (3, max. 9)
Thesocialization process and music, including the interaction whereby music culture is learned.

## 544A Preceptorial Readings. in Systematic Musicology (3)

Examines the significant research literature on acoustical psychological and social systems operating in music.

## 555 Systematic Methods of Music Research (3)

Seminar in problem identification and definition, theory development, research design, data analysis, and interpretation; an examination of the philosophy of science in music research.

## 559 Master's Recital (3)

590 Doctoral Recital (*)
599 Advanced Selected Topics (*)
C. Verdi as Theater (3)

Comprehensive analysis of Verdi's theatrical works and their time.

## 599 Advanced Selected Topics (*)

A. Readings in Music (2)

Selected readings of psychological and sociological aspects of music instruction, along with philosophical and historical foundations of music education. Appropriate for MA students seeking guidance in the preparation of topics for examination.

## B. Advanced Topics in Compufer <br> Music and Sound Synfhesis (3)

Covers Phase Vocoders and techniques for processing sampled sounds. Uses variety of software on the NeXT computer and the IRCAM Signal Processing Workstation, a powerful device for realtime computer music. Prerequisite: 402 or permission of instructor.

## 5991 Advanced Selected Topics ( ${ }^{*}$ )

D. Readings in Music (2)

Selected readings of psychological and sociological aspects of music instruction, along with philosophical and historical foundations of music education. Appropriate for MA students seeking guidance in the preparation of topics for examination.

## E. Readings in Music (3)

Ethnomusicological issues informing the teaching/transmission of music from a multicultural perspective.

## Courses by special arrangement

Undergraduate Research, Independent Study or Research, Master's Thesis, Doctoral Dissertation

## Special One- and Two-Week Music Education Workshops

## Music Education (MUSED)

496* Special Topics in Music Education (1-3, max. 10)
A. Assessment of Issues in Music Education (2)
June 21-24 Current issues in evaluation and assessment of public school music programs including program evaluation. Taught by Richard J. Colwell, editor of the Handbook on Research in Music Teaching and Learning.

## B. Removing Fear of Improvisafion (1)

June 21-24 Exercises designed to provide musicians with little or no improvisation experience with opportunities to become more freely expressive on their instruments, or vocally. Techniques are modelled for use by teachers in leading children and adolescents toward the ability to improvise.

## C. Instrumental Rehearsal Techniques (2)

June 21- July 1 Covers topics such as score preparation, rehearsal formats, and error detection. Basic conducting skills required.

## D. Teaching Piano Basics (1)

June 28-July 1 Exercises in chord progressions and simple modulation are featured, leading to the playing of folk tunes and dance rhythms that can be harmonized and transposed.

## E. Jazz Literature and Rehearsal Techniques (2)

June 28-July 8 For those who wish to maintain playing skills and preview new material from junior high through professional-level jazz ensemble charts. Styles, techniques, rehearsal, and performance skills discussed and demonstrated. Those who do not play an instrument have the opportunity to sit in the middle of a band and observe how the material is interpreted in each section (saxophone, trumpet, trombone, rhythm).

## F. High School Band Repertoire (1)

July 6-9 An overview of "cornerstone" band literature for the high school band.

## G. Winds and Percussion Scoring (2)

July 6-15 Introduction to techniques of scoring for the contemporary wind band.

## H. Comparative Music Education Methods (1)

July 12-15 Exploration of the pedagogical methods of Jaques-Dalcroze, Orff, Martenot, Willems, Kodaly, and Schafer through a model of eight parameters. A philosophical grounding of the methods leads to practical applications of their techniques.

## I. Tin Pan Alley (1)

July 12-15 Designed for music educators, this oneweek workshop not only provides an overview of the Tin Pan Alley phenomenon that dominated the American popular music industry for nearly 70 years, but also focuses on cooperative learning strategies and performance considerations in the school environment.

## K. Marching Band Techniques (1)

July 19-22 An examination of the contemporary marching band relative to various styles of drill design, arranging, and administration.

## L. Creative Music Experiences in the Curriculum: Theory and Practice (I)

July 19-22 Considers how to enrich curriculum in elementary and secondary education by stressing composition, improvisation, and creative listening in both performance and non-performance settings. Reviews some historical attempts to do this, together with a look at the philosophical basis. Research findings are reviewed and practical suggestions generated by each seminar member A short final project is required in consultation with the instructor.

## M. Roots of Rock and Roll (I)

July 19-22 Designed for music educators, this one week workshop provides an overview of the musical and cultural roots of American rock and roll as well as exploring teaching strategies and performance possibilities in the school environment.

## N. Instrument Repair (1)

July 19-22 Minor and emergency repairs for clarinet, flute; saxophone, and oboe.

## O. Teaching the Music of Samoa (1)

July 19-22 An overview of Samoan culture, with experiences in Samoan songs and dances for inclusion in teaching about historical and contemporary Samoa and Samoans.

## P. Vocal Techniques in the Choral Classroom (1)

July 12-15 This practical course on vocal techrique is essential for anyone working in the K-12 choral classroom.

## Z. Creative Music Experiences in the Curriculum: Technological Solutions (1)

July 19-22 Extending the practical side of MUSED 496L, this course explores current hardware and software approaches to support creative thinking in music. Product demonstrations are used to explore all facets associated with technology. Practical suggestions about hardware and software purchases are featured. A final project centers on the needs of the individual seminar members.

## 4964 Special Topics in Music

 Education (1-3, max. 10)J. Vocal Jazz: Style and Reperfoire (1)
July 26-29 Review/presentation of current trends in vocal jazz style, techniques and repertoire.

## Q. Teaching Gospel Music (1)

July 26-29 Exploration of the components of contemporary African-American gospel music, through experiences in listening, performance, and analysis. Especially relevant to choral and general music teachers of grades four to 12 .

## R. Teaching the Music of Southeast Asia (1)

August 2-5 An overview of the music cultures of mainland Southeast Asia for music and classroom teachers, with attention to songs, stories, and instrumental pieces from Cambodia, Laos, Thailand and Vietnam that can be brought and taught to children.

## S. Choral and Vocal Jazz Arranging (1)

August 2-5 Faced with unbalanced numbers in your choir? Learn how to arrange for what you have, and experience jazz arranging as well.

## T. Choral Reading Sessions: Standard and Multicultural Choral Music (1)

August 9-12 Standard and multicultural repertoire. One day for elementary and middle school; two days for junior high and high school; one day for multicultural (ethnic, folk, gospel).

## U. Teaching Native American Music (1)

August 9-12 An overview of Native American music and culture, with experiences in song, dance, lore, and legend for teaching in K-12 music and ethic study classes.

## V. Songs Children Sing: A World Sampler (1)

August 16-19 Experiences with a multicultural collection of children's songs (many associated with games, gestures/movements, and dances), with suggestions for their incorporation within the music and general classroom curriculum.

## W. Teaching Music through Folk Dance (1)

August 16-19 Participatory experiences in a selection of international folk dances, with attention to ways of offering to children and adolescents the significance of dance as cultural expressions and the capacity of dance to nurture music listening skills.

## Ensemble Courses and Applied Music (MUSEN)

This summer private instruction in flute, French horn, clarinet, trumpet, violin, cello, harp, piano, and voice are offered. Admission to these courses is by audition before the appropriate faculty. An additional fee of $\$ 55$ is charged for private instruction. Entry codes are required.

A special program in string bass (a term only) is offered by Barry Leiberman of the Seattle Symphony. Instruction is an integrated offering of private lessons, ensemble and master classes. Call the Advising Office at $543-1239$ for more information.

The following ensemble courses are offered for those possessing at least an intermediate level of musicianship. Contact the School of Music Advising Office or instructor for guidance. Entry codes are not required.

## 300, 500 University Orchestra (1) D 302* 502* Symphonic Band (1) D 350, 550 University Chorale (1) D

## Near Eastern Languages and Civilization

229 Denny Hall, DH-20
Telephone: 543-6033
Near Eastern Languages and Civilization
courses are offered in:

- Arabic
- Hebrew
- Kazakh
- Kirghiz
- Tajik
- Uzbek
- Near Eastern Courses in English

The Department of Near Eastern Languages and Civilization is offering intensive language study in Arabic, Hebrew, Kazakh, Kirghiz, Tajik, and Uzbek languages, enabling a student to complete one year of the language during Summer Quarter. Uzbek, Kazakh, Kirghiz, and Tajik are partially funded by grants. Students interested in receiving information about fellowships for Uzbek, Kazakh, Kirghiz, and Tajik, should contact the department.

## Arabic (ARAB)

## 315 Intensive Elementary Arabic (15)

Intensive study of grammar, with oral and written drill and reading of selected texts. Allows students to complete the first year of standard Arabic during Summer Quarter. No credit if ARAB 311, 312, 313 taken.

## 470 . Intensive Arabic Morphology and Syntax (15)

Designed to allow graduate students to complete the first year of Arabic during Summer Quarter. Intensive study of grammar, oral and written drill, and readings of selected texts. Prerequisite: graduate standing.

## Hebrew (HEBR)

## 315 Intensive Elementary Hebrew (15)

Intensive study of grammar, with oral and written drill and reading of selected texts. Modern Israeli Hebrew. Core vocabulary, grammar, conversational text, and oral and written communication. Excerpts from modern Hebrew prose and poetry Allows students to complete the first year of $\mathrm{He}-$ brew during Summer Quarter. No credit if HEBR $311,312,313$ taken.

## 470 Intensive Hebrew Morphology and Syntax (15)

Designed to allow graduate students to complete the first year of Hebrew during Summer Quarter. Intensive study of grammar, oral and written drill, and reading of selected texts. Modern Israeli Hebrew. Core vocabulary, grammar, conversational text, and oral and written communication. Excerpts from modern Hebrew prose and poetry. No credit if HEBR 471, 472, 473 taken. Prerequisite: graduate standing.

## Kazakh (TKISH/TKIC)

## 317 Intensive Elementary Kazakh (15)

Intensive study of grammar, with oral and written drill, and reading of selected texts. Allows students to complete the first year of modern literary Kazakh during Summer Quarter. No credit if 304 , 305, 306 taken.

## 427 Intensive Intermediate Kazakh (15)

Readings of selected texts in modern literary. Kazakh with continuing emphasis on grammar and syntax. Allows undergraduate and graduate students to complete second year Kazakh during Summer Quarter. Prerequisite: 317.

## 477 Infensive Kazakh Morphology and Syntax (15)

Designed to allow graduate students to complete the first year of modern literary Kazakh during Summer Quarter. Intensive study of grammar, oral and written drill, and readings of selected texts. Prerequisite: graduate standing.

[^9]
## Kirghiz (TKISH)

## 479 Intensive Elementary Kirghiz (15)

Intensive study of grammar, with oral and written drill and reading of selected texts. Allows undergraduate or graduate students to complete the first year of Kirghiz instruction during Summer Quarter.

## Tajik (PRSAN)

470 Intensive Elementäry Tajik (15)
Modern literary Tajik. Intensive study of grammar, with oral and written drill and reading of selected texts. Allows undergraduate or graduate students to complete the first year of Tajik during Summer Quarter.

## Uzbek (TKISH/TKIC)

## 316 Infensive Elementary Uzbek (15)

Intensive study of grammar, with oral and written drill and reading of selected texts. Allows student to complete the first year of modern literary Uzbek during Summer Quarter. No credit if 301, 302,303 taken.

## 426 Intensive Intermediate Uzbek (15)

Readings of selected texts in modern literary Uzbek, with continuing emphasis on grammar and syntax. Allows undergraduate and graduate students to complete second year Uzbek during Summer Quarter. Prerequisite: 303 or 316. No credit if 405, 406, 407 taken.

## 478 Infensive Uzbek Morphology and Syntax (15)

Designed to allow graduate students to complete the first year of modern literary Uzbek during SummerQuarter. Intensive study of grammar, oral and written drill, and readings of selected texts. Prerequisite: graduate standing.

## Near Eastern Courses in English (N E)

496, 596 Special Studies in Near Eastern Languages and Civilization (3-5, max. 15)
A. Environmental Issues of Central Asia (3)
Offered as part of Central Asian Languages Summer Program's cultural component. About seven speakers from Central Asia discuss, together with American scholars, major environmental problems which Central Asia inherited from 74 years of Soviet rule. Prerequisite: graduate standing for NE 596.

## Courses by special arrangement

Superoised Study, Independent Study or Research

## Philosophy (PHIL)

345 Savery Hall, DK-50
Telephone: 543-5855
The Department of Philosophy offers a wide range of courses designed to introduce students to various aspects of philosophical thought. This summer, courses are concerned with the clarification of philosophical issues that arise in considering reasoning, epistemology, morality, law, language, literature, art, and religion. In $b$ term only, a philosophy of language course will be taught by a visitor to the department, Professor Steven Wagner, University of Illinois, ChampaignUrbana.

## 100 Introduction to Philosophy (5) D

Major philosophical questions relating to such matters as ethics, the existence of God, the foundations of knowledge, and the nature of reality. Problems studied and works read vary.

## 102 Contemporary Moral Problems (5) D

Philosophical consideration of some of the main moral problems of modern society and civilization, such as abortion, euthanasia, capital punishment, obligation to the poor, and reverse discrimination. Topics vary.

## 114- Philosophical Issues in the Low (5)

Analysis and critical assessment of various philosophical issues in law and legal reasoning. Material drawn from actual law cases, as well as writings by contemporary philosophers of law and lawyers. Topics include legal realism, enforcement of morals, and criminal responsibility. Special legal or philosophical training not required.

## 115 Practical Reasoning (5) P

Introduction to logic emphasizing concepts and methods useful for practical analysis of arguments in everyday contexts. Meaning; syllogisms; logical diagrams; inductive and statistical inference; informal fallacies; argument structure; perhaps some beginning symbolic logic. A wide variety of examples, including logical puzzles, is considered.

## 120, $120 \wedge$ Introduction to logic (5) DP

Elementary symbolic logic. The development, application, and theoretical properties of an artificial symbolic language designed to provide a clear representation of the logical structure of deductive arguments.

## 240 Introduction to Ethics (5) D

Critical study of some typical views of the basis and presuppositions of morality and of moral knowledge. Consideration of such topics as ethical relativism vs. ethical objectivism, ethical egoism, utilitarianism, Kantian ethics, and virtue ethics.

## 267- Introduction to Philosophy of Religion (5) D

Study of religious thought. Examination of the problem of evil, atheism, and theism, and of the relationship between religion and morality, the significance of religious experience, and life after death.

## 320 Ancient Philosophy (5) D

Survey of the history of ancient Greek philosophy. The metaphysical, ethical, and epistemological theories of Plato and Aristotle, their origins in the thought of Socrates and the pre-Socratics.

## 347* Philosophy in Literature (5) D

Study of philosophical ideas expressed in works of literature. Focuses on Heidegger's conception of philosophy and some incitements to philosophical reflection to be found in the works of Rilke and Kafka.

## 410 Social Philosophy (3)

Examination of social ideals such as liberty, the meaning of "liberty," how liberty is to be ranked among other social goods, what role liberty plays in the achievement (or frustration) of other social goods, and whether liberty has any value other than as a means to other individual or social goods.

## 446* Development of.Aesthetic Theory (5) D

Historical development of aesthetics, emphasizing such major figures as Plato, Aristotle, Hume, Kant, Hegel, and such themes as art's relation to morality and elements of aesthetic experience. Recommended: 100 or 445.

## 450 Epistemology (5)

Systematic study of some of the main problems of the theory of knowledge, such as: the definition of "knowledge"; a priori knowledge; perception and knowledge of the external world; the problem of induction; knowledge of other minds; "foundationalism vs. coherentism"; and "internalism vs. externalism." Recommended: 350 or 322.

## 453A Philosophy of Language (5)

Current theories of meaning, reference, predication; and related concepts. Joint with LING 476. Recommended: 120.

## 484 Reading in Philosophy

 (1-5, max. 15)Reading of approved philosophical works. Prerequisites: permission of instructor and entry code.

## 584 Reading in Philosophy (1-4, max. 12)

Intensive reading in philosophical literature. The name of the staff member with whom research will be done must be indicated in registration. Prerequisite: entry code.

## Courses by special arrangement <br> Independent Study or Research, Doctoral Dissertation

## Physics (PHYS)

215 Physics Hall, FM-15<br>Telephone: 543-2770

## 110 Liberal Arts Physics (5) DP

The scientific revolution of the seventeenth century, the conceptual development of classical mechanics, and the Newtonian world picture. Primarily for students in the arts, humanities, and social sciences.

## 114 General Physics (4) D

Mechanics and sound. Basic principles of physics presented without use of college-level mathematics. Suitable for students majoring in technically oriented fields other than engineering or the physical sciences. Concurrent registration in 117 strongly recommended. Prerequisites: working knowledge of algebra and trigonometry, and one year of high school physics.

## 115 General Physics (4) D

Heat and electromagnetism. Concurrent registration in 118 strongly recommended. Prerequisite: 114.

## 116 General Physics (4) D

Light and modern physics. Concurrent registration in 119 strongly recommended. Prerequisite: 115.
117 General Physics Laboratory (1) D
Mechanics laboratory, to be taken concurrently with 114 or 121 . CR/NC only:

## 118 General Physics Laboratory (1) D

Heat and electromagnetism laboratory, to be taken concurrently with 115 or 122 . CR/NC only.

## 119 General Physics Laboratory

 (1) DSound, light, and modern physics laboratory, to be taken concurrently with 116 or $123 . C R / N C$ only.

## 121 Mechanics (4) D

Basic principles of mechanics. Concurrent registration in 131 required. Prerequisites: one year of high school physics or permission, concurrent or previous MATH 124 or 135.

## 122 Electromagnetism and Oscillatory Motion (4) D

Basic principles of electromagnetism, the mechanics of oscillatory motion. Concurrent régistration in 132 required. Prerequisites: 121, concurrent or previous MATH 125 or 135.

## 123 Waves (4) D

Electromagnetic waves, optics, and waves in matter. Concurrent registration in 133 required. Prerequisites: 122, concurrent or previous MATH 126 or 136.

## 131 Experimental Physics (1) D

Experimental topics in physics for science and engineering majors. Prerequisite: concurrent or previous 121.

## 132 Experimental Physics (1) D

Experimental topics in physics for science and engineering majors. Prerequisite: concurrent or previous 122.

## 133 Experimental Physics (1) D

Experimental topics in physics for science and engineering majors. Prerequisite: concurrent or previous 123.

## 224 Thermal Physics (3) D

Introduction to heat, thermodynamics, elementary kinetic theory, and the physics of continuous media. Prerequisites: 122, concurrent or previous MATH 126 or 136.

## 225 Modern Physics (3) D

Special theory of relativity: phenomena of modern physics with emphasis on photons, electrons, and atoms; introduction to quantum physics. Prerequisites: 123, concurrent or previous MATH 126 or 136.

## 227 Elementary Mathematical Physics (3)

Applications of mathematics to physics with emphasis on the mechanics of particles and of continuous systems. Prerequisites: 123 and MATH 307.

## 401 Special Problems ( ${ }^{*}$ )

Supervised individual study. Prerequisite: entry code.

## 407W, 408W, 409W Physics for Teachers $(5,5,5)$

Individualized study of selected topics in basic physics with emphasis on depth of understanding and development of skills essential to the scientific process. Background for teaching physics at secondary school and introductory college levels. Prerequisite: Permission of instructor. Strongly recommended: 407 taken prior to 408.

## 427 Applications of Physics (3)

Current applications of physics to problems in the sciences and technology.

## 434 Application of Computers to Physical Measurement (3)

Laboratory giving specific instruction and experience in interfacing a minicomputer to laboratory equipment. Prerequisites: junior standing and entry code.

## Courses by special arrangement

Independent Study or Research, Doctoral Dissertation

## Political Science (POL S)

101 Gowen Hall, DO-30
Telephone: 543-1824, 543-2780

To meet the needs and interests of both continuing and visiting students, the Department of Political Science offers a varied selection of summer classes. Introductory and advanced courses are offered in political theory, American politics, international relations, and comparative politics. This summer's offerings in international relations and comparative politics include American foreign policy, the Arab-Israeli conflict, and world and European politics. In political theory, courses are offered on feminist politics and American political thought. In American politics, topics to be covered include civil liberty, American constitutional law, environmental and public policy, and American city politics.

Through the department's affiliation with The Washington Center in Washington, D.C., continuing students can apply for a 15 -credit summer internship program in the nation's capital. Information about the program is available in the Political Science Advising Offices, Gowen 115 and 107. The application closing date for summer participants in the internship program is March 1.

## 101 Introduction to Politics (5) D

Political problems that affect our lives and shape the world around us. Recommended for nonmajors, for students who are thinking about political science as a major, and for political science majors who have not decided on an area of specialization.

## 201 Introduction to Political Theory (5) D

Philosophical bases of politics and political activity:Introduction to the study of politics by the reading of a few books in political philosophy. Organized around key concepts: liberty, equality, justice, authority, rights, and citizenship.

## 202 Introduction to American Politics (5) D

Institutions and politics in the American political system. Ways of thinking about how significant problems, crises, and conflicts of American society are resolved politically.

## 203 - Introduction to International Relations (5) D

The world community, its politics, and government.

## 270 Introduction to Political Economy (5) D

Political economy as a tool for understanding and evaluating the political world. Combines theory, methods, and insights derived from economics and political science and applies them to a wide range of substantive issues.

[^10]
## 303W Public Policy Formation in the United States (5)

Policy decision making with emphasis on: how issues arise, the way they become part of the policy agenda of the executive and the legislature, how these institutions organize to handle the policy issues, and the roles of the legislature, the executive, and the bureaucracy. Public policy literature and familiarization with key aspects of policy decision making at the national, state, and local levels.

## 305 .The Polifics of Mass Communication (5)

Role of mass audiences in politics from the standpoint of the communication strategies used to shape their political involvement. Topics include: social structure and political participation, political propaganda and persuasion, the political uses of public opinion, and the mass media and politics.

## 313 Women in Politics (5)

Political theory, historical and contemporary, including writings of the women's liberation movements on the political role of women in society. Empirical studies of the "apolitical" woman, andon the process of political socialization in various cultural contexts. Joint with WOMEN 313. Prerequisite: WOMEN 200 or political science course.

## 318 American Political Thought 1 (5)

Major thinkers and themes in American political and cultural development from Puritan origins to the Civil War.

## 321 * American Foreign Policy (5) D

Constitutional framework; major factors in formulation and execution of policy;policies as modified by recent developments; the principal policy-makers-President, Congress, political parties, pressure groups, and public opinion. Recommended: 101 or 202

## 324 Europe in World Politics (5)

Independent and coordinated efforts of Britain, France and West Germany to adapt to the postWorld War II global system. Creation and development of the Atlantic alliance. Relations with the Soviet bloc. Decolonization and the evolution of relations with the Third World. The movement for European integration. Prerequisite: 203 or equivalent.

## 325 The Arab-Israeli Conflict (5)

The politics of conflicting ideologies; Zionism and Arab nationalism; formation of the state of Israel; development of Palestinian nationalism; ArabIsraeli wars. Reemergence of Palestinian activism; domestic sources of foreign policy; the role of the superpowers.

## 341*Government and Politics of Canada (5)

Critical analysis of parliamentary institutions, political parties, and the federal system in Canada. Joint with SISCA 341.

## 346 Government of Western Europe (5)

Modern government and politics of Great Britain, France, Germany, and Italy.
360 Introduction to United States Constitutional Law (5)
Growth and development of constitutionally guaranteed private rights, with particular reference to the period since 1937.

## 361 United States Courts and Civil Liberty (5)

Cases and literature bearing on protection of constitutionally guaranteed private rights, with particular reference to the period since 1937.

## 383 Environmental Politics and

 Policy in the United States (5)Interrelation between technology and environmental change and policy formation. Consideration of political behavior related to these phenomena and the capacity of urban public organizations to predict change and to formulate policies that can take future states into account.

## 426A World Politics (5) D

The nation-state system and its alternatives, world distributions of preferences and power, structure of international authority, historical world societies and their politics. Joint with SIS 426.

## 428 Military Intervention (5)

Historical and theoretical analysis of military intervention in the post-World War II era. Considers how and why interventions occur and evaluates intervention as a foreign policy response.

## 450WA State-Society Relations in Third World Countries (5)

Relationships among political, social, and economic changes in Asia, Africa, and Latin America. Problems of economic and political development, revolution and reform, state-society relations, imperialism and dependency. Joint with SIS 456.

## .481 Big City Politics (5)

Contemporary big city politics, focusing on Seattle and the largest 25 cities. Social, economic, and the political trends that have shaped characteristics of large American cities. Distribution and use of economic and political power among parties and groups. Future of largecities and politics of change. Recommended: 202.

## 572 Administrative and Executive Leadership (3)

Nature of executive life in the public sector, the function of leadership in implementing, making and changing policy. Leadership styles, the relation of leadership to its constituencies and communities. Joint with PB AF 503.

## 598 Independent Writing I (3-5)

Supervised research and writing for graduate students completing the M.A. Essay of Distinction.

599 Independent Writing II (3-5)
Supervised research and writing for graduate students completing the Ph.C. Essay of Distinction.

## Courses by special arrangement

Undergraduate Internship, Indioidual Conference and Research, Independent Study or Research, Master's Thesis, Doctoral Dissertation

## Psychology (PSYCH)

119 Guthrie Hall, NI-25
Telephone: 543-2640

## 101 Psychology as a Social Science (5) D

Behavior from a social-science viewpoint. Emphasizes personality, individual differences, attitudes, and social behavior and influence. Includes related aspects of cognition, behavior disorders, states of awareness, motivation and emotion, learning development, and research methods.

## 102 Psychology as a Natural Science (5) D

Behavior from a biological-science viewpoint. Emphasizes sensation and perception, brain and behavior, evolution, and animal behavior. Includes related aspects of cognition, behavior disorders, states of awareness, motivation and emotion, learning, development; and research methods.

## 200 Comparative Animal Behavior (5) D

Research methods and findings of comparative animal behavior and their importance to an understanding of human behavior; rationale for study of behavioral differences and similarities between animal species; behavior viewed as part of the adaptation of each species to its natural habitat. Prerequisite: 102 or BIOL 210.

## 205 Introduction to Personality and Individual Differences (4) D

Basic concepts, methods, and background for more intensive study in the field of personality. Prerequisite: 101 or 102, or equivalent.

## 209 Fundamentals of Psychological Research (4)

Psychological research methodology and techniques. Topics include the logic of hypothesis testing, experimental design, research strategies and techniques, fundamentals of scientific writing, and ethical issues in psychological research. Required for all psychology majors. Prerequisite: 101 or 102, or equivalent.

## 210 Introduction to Human Sexuality (4)

Broad survey of biological, psychological, and social determinants of human sexuality and sexual behavior: empirical data (e.g., survéy data, experimental findings) and major theoretical approaches.

## 213 Elementary Psychological Statistics (6) P

Description and reporting of data; probability theory. Psychological hypotheses; statement, testing, and evaluation in terms of numerical outcomes; calculation and interpretation of more commonly used statistical tests. Required for majors in the psychology Bachelor of Arts program. Prerequisites: 209 and $11 / 2$ years of high school algebra, or permission.

## 222 Survey of Physiological Psychology (3) D

The nervous system and how it works. Learning, memory, sleep, the senses, and the emotions. For students who do not intend to specialize in physiological psychology. Prerequisite: major standing in biological sciences or either 101 or 102.

## 231W Laboratory in Human Performance (3)

Selected aspects of human learning, perception, and performance. Prerequisites: 209, and 213 or 217.

## 232W Laboratory in Animal Learning (3)

Selected aspects of animal learning emphasizing operant techniques with the rat. Prerequisite: 209.

## 233W Laboratory in Animal Behavior (5)

Experience with a variety of animal species and experimental procedures and instrumentation. Prerequisites: 101 or 102, 209, and 200 or BIOL202, or equivalents.

## 240 Behavior Modification (4)

A survey of behavior modification application for students who plan careers in human services. A behavioral approach and associated research is presented on such topics as sexual dysfunction, stress, athletic performance, phobias and anxieties, depression, marital discord, weight control, energy conservation, pollution, health, addictions, interpersonal relationships, creativity, industrial safety. Prerequisite: introductory psychology.

## 250 Racism and Minority Groups (4)

Problems of racism and their effects upon minority groups, with emphasis on the condition related to the development of mental health. Emphasis on the situation of the Black, Chicano, American Indian, and Asian groups.

## 257 Psychology of Sex Differences (5) D

Major psychological theories of sex-role development; biological and environmental influences that determine and maintain sex differences and behavior; roles in children, sex differences in aggression, cognitive abilities, achievement motivation, affiliation, and sexuality. Joint with WOMEN 257. Recommended: 101 or 102.

## 305 Abnormal Psychology (5) D

An overview of major categories of psychopathology, including description and classification, theoretical models, and recent research on etiology and treatment. Prerequisite: 10 credits in psychology including 101 or 102, or equivalent.

## 306 Developmental Psychology

 (5) DAnalysis of psychological development of the child in relation to biological, physical, and sociological antecedent conditions from infancy to adolescence. Prerequisite: 101 or 102, or equivalent.

## 322 Introduction to Drugs and Behavior (3)

Basic concepts of drug action emphasizing the behavioral consequences of the intake of a variety of drugs. Prerequisite: 222.

## 335 Human Factors Psychology (4)

Consideration of human performance factors in the design of tools/equipment, tasks/jobs, and work and living environments. Emphasis on the importance of human perception, memory, attention, and motor control for understanding ways to optimize the relationship between people and technology. Prerequisite: 101 or 102 and 209 or equivalent.

## 345 Social Psychology (5) D

Effects of the social environment upon the formation of individual attitudes, values and beliefs, and upon individual and group behavior; major theoretical approaches; field and experimental research findings. Prerequisite: 101 or 102, or equivalent.

## 355 Survey of Cognitive Psychology

 (5) DCurrent theory and research in perception, attention, memory and learning, attitudes, thinking and decision making, and language. For student who wishes a survey or who intends additional work in any of the above content areas. Prerequisite: introductory psychology course.

## 357 Psychobiology of Women (5) D

Physiological and psychological aspects of women's lives; determinảnts of biological sex; physiological and psychological events of puberty and menopause; sexuality; contraception, pregnancy, childbirth, and lactation; role of culture in determining psychological response to physiological events. Joint with WOMEN 357. Prerequisite: 101 or 102 or 257 , or WOMEN 200 or 257.

## 410 Child and Adolescent Behavior Disorders (5)

Introduction to psychopathology in children and adolescents, and an overview of principal modes of intervention. Particularly for students interested in advanced work in clinical psychology, social work, or special education. Prerequisites: 305,306 or equivalents.

## 414 Cognitive Development (5)

Structural and information-processing approaches to cognitive and language development from infancy through adolescence. Object permanence, language development, imitation, logical reasoning, moral development, intelligence, and educational implications. Prerequisite: 306.

## 419W Behavioral Studies of Zoo Animals (4, max. 8)

Observational studies of behavior of 200 animals to expand basicknowledge of animal behavior and research methodology with discussions and tours focusing on zoo philosophy operations. Offered in cooperation with Woodland Park Zoo. Recommended: 200; or $231,232,233$; or 361 ; or equivalent.

## 421 Neural Basis of Behavior (5)

Anatomical and physiological principles and resultant behavior involved in the integrative action of the nervous system. Prerequisite: 101 or 102, or 10 credits in biology or zoology.

## 434 Laboratory in Vision (2)

Techniques of research in visual psychophysics: alignment and calibration of basic optical systems; replication of some classical vision experiments and/or design and completion of original vision experiments. Prerequisites: 424 and permission of instructor.

## 435 Laboratory in Vision (3)

Techniques of research in visual psychophysics: alignment and calibration of basic optical systems; replication of some classical vision experiments and/or design and completion of original vision experiments. Prerequisites: 434 and permission of instructor.

## 436 Developmental Aspects of Sport Competition (4)

Analysis of biophysical and psychosocial influences of sport participation on growth and development of children and youth. Topics include competition readiness, injuries, stress, aggression, roles, and responsibilities of parents and coaches. Prerequisites: 101 or 102 or equivalent.

## 437 Applied Sport Psychology (3)

Application of psychological theories, research, and intervention strategies to sport settings. Topics include stress and emotional control; attention control and concentration skills; mental rehearsal techniques; goal setting strategies; leadership skills; psychological factors in injuries and rehabilitation; and cognitive pain-control procedures. Students participate in various psychological training procedures. Prerequisite: 101 or 102.

## $447^{\text {• Psychology of Language II (4) }}$

Study of language as a perceptual and cognitive process, with particular focus on theory and data as they relate to comprehension, production, acquisition, and speech perception. Critical examination of contributions from areas such as linguistic theory, developmental and adult psycho-

[^11]linguistics, and neuropsychology and cognitive electrophysiology. Prerequisites: PSYCH/LING 347, graduate standing, or permission of instructor. Joint with LING 447.

## 451 Health Psychology (5)

Overview of the psychological and behavioral factors in health and disease. Includes research on both psychological causes and treatments. Topics include stress, risky behaviors, patient-provider interactions, pain, behavioral/medical treatments, and lifestyle interventions. Prerequisites: 101 or 102 or equivalent, 209 and one course from 205, 222, 305 or 345.

## 466 Psychology of Judgment and Decision Making (5)

An examination of the cognitive underpinnings of human judgment and decision making. Emphasis is upon the processes that shape judgment and decision and their relation to prescriptive models from other disciplines. Recommended: 464, PHIL 460. Prerequisites: introductory statistics or permission of instructor.

## 490 Stress Management (3)

Nature of stress. Physiological responses to stress and relaxation. Techniques of stress management with training in relaxation, biofeedback, meditation, cognitive restructuring, exercise, nutrition, interpersonal communication skills, and time management. Prerequisites: 101 and 102 or equivalent.

## 496 Undergraduate Teaching Experience in Psychology (2-3, max. 6)

Students are trained as assistants in quiz sections or as supplemental tutors for undergraduate psychology courses. Designed especially for those students planning graduate work or education certification. Prerequisites: upper division, major standing and permission of instructor.

## 498 Readings in Psychology

 (1-3, max. 18)Prerequisite: entry code. Section A is graded; Section $B$ is $C R / N C$ only.

560 Seminar ( ${ }^{*}$ )

## A. How to Survive Academia (3)

Prerequisite: psychology graduate students only.

## B. Suicide and Crisis Intervention (3)

Prerequisite: clinical psychology graduate students only.
C. Behavioral Instrumentation (3)

## 586 Clinical Personality Assessment (3)

Use of objective personality inventories in the description of normal and abnormal personality and use of such information in case conceptualization and treatment planning. Minnesota Multiphase Personality Inventory, Millon Clinical Multiaxial Inventory. Prerequisite: clinical psychology graduate standing.

593 Clinic Practicum (1-6, max. 24)
Required of all clinical psychology graduate students seeing clients in the clinic. Clinical colloquium required of all second-year students, optional for others. Prerequisite: limited to clinical psychology graduate students.

## 597 Field Work in Clinical Psychology (1-5; max. 36)

Section $A$ is graded; Section $B$ is CR/NC only.
598 Advanced Clinical Practicum (4)
Prerequisites: clinical psychology graduate student status, permission of instructor.
599 Readings in Psychology ( ${ }^{*}$ )
Prerequisite: entry code. One section is CR/NC only.
Courses by special arrangement
Undergraduate Research, Independent Study or Research, Master's Thesis, Doctoral Dissertation

## Quantifative Science

See Interschool or Intercollege Programs, page 55.

## Romance Languages and Literature

C104 Padelford Hall, GN-60
Telephone: 543-2020
Romance Languages and Literature courses are offered in:

- Romance Literature
- Romance Linguistics and Literature
- French
- Italian
- Spanish

Courses at the elementary, intermediate, and advanced levels are offered in both French and Spanish and at the elementary level in Italian.

Students who have high school language background only, including nonmatriculated students enrolling for the summer only, should see an Arts and Sciences adviser or the departmental adviser prior to registration. Students who have taken French or Spanish language study at the college level may register for first- or second-year language courses subject to fulfillment of prerequisites.

## Romance Literature (ROMAN)

## Courses by special arrangemient

Independent Study or Research, Master's Thesis, Doctoral Dissertation

## Romance Linguistics and Literature (ROM)

## 531* Problems in Romance Linguisfics (2-5, max. 15)

## A. Romance Linguistics and Literature (5)

Group seminars or individual conferences are scheduled under this number to meet special needs. Prerequisite: permission of graduate program coordinator.

## Courses by special arrangement

Special Topics, Special Seminar and Conference, Independent Studiy or Research

## French (FREN)

## 101 Elementary (5)

Methods and objectives are primarily oral-aural. Oral practice in the language laboratory required.
101* 102^ Elementary $(5,5)$
Intensive. Methods and objectives are primarily oral-aural. Oral practice in the language laboratory is required. Students are advised not to register for more than three additional credits each term. Prerequisite for 102: 101 or college equivalent, or placement.

## 103 Elementary (5)

Methods and objectives are primarily oral-aural. Oral practice in the language laboratory is required. Prerequisite: 102 or equivalent, or placement.

## 134 French in Action (15)

Equivalent of $121,122,123$. Not open for credit to students who have taken $121,122,123$, or 101,102 , 103. (Offered Summer Quarter only.)

This "total immersion" approach covers the equivalent of the first year of elementary French in nine weeks. Following the highly successful and engaging video-based French in Action series developed by Yale University's Pierre Capretz, students learn French in the context of real-life situations and settings in France. This method takes full advantage of educational technology, incorporating audio-visual materials for aural-oral learning and Computer-Aided Instruction (C.A.I.) to supplement written practice. (In order to fulfill UW language requirements for this course, the student must complete a proficiency exam administered by the University upon completion of the course.)

## $201 *$ Intermediate (5)

Intensive. Systematic review of French grammar. Intensive practice in writing and conversation. Readings in literature, culture, and the sciences. Prerequisite: 103 or college equivalent, or placement.

## 202A Intermediate (5)

Systematic review of French grammar. Intensive practice in writing and conversation. Readings in literature, culture, and the sciences. Prerequisite: 201 or college equivalent or placement.

## 203 - Intermediate (5)

Systematic review of French grammar. Intensive practice in writing and conversation. Readings in literature, culture, and the sciences. Prerequisite: 202 or college equivalent or placement.

## 234 Intermediate French Immersion (15)

This "planned immersion" approach covers the equivalent of the second year of elementary French $(201,202,203)$ through an alternative method. It is the continuation of the first. year immersion courses 121, 122, 123/134 (the 15 credit summer intensive). Prerequisite: $103,123,134$ or equivalent.

## 301W Advanced French (5)

Prerequisite: 203 or college equivalent, or placement.

## 302WA Advanced French (5)

Prerequisite: 301 or college equivalent, or placement.

## 412 Topics in Sixteenth-Cenfury French Literature (5)

An introduction to major French literary texts of the sixteenth century. Prerequisites: 301,302, 303, and 304; recommended: 305 and 306.

## Courses by special arrangement <br> Independent Study or Research, Special Topics, Special Seminar and Conference, Supervised Study

## Italian (ITAL)

101*102』 Elementary $(5,5)$
Intensive. Methods and objectives are primarily oral-aural. Language laboratory required. Students are advised not to register for more than three additional credits each term. Prerequisite for 102: 101 or college equivalent, or placement.

## Courses by special arrangement

Special Topics, Special Seminar and Conference, Independent Study or Research, Superoised Study

## Spanish (SPAN)

## 101-102A Elementary $(5,5)$

Intensive. Students are advised not to register for more than three additional credits each term. Prerequisite for 102: 101 or college equivalent, or placement.

## 103• Elementary (5)

Methods and objectives are primarily oral-aural. Language laboratory is required. Prerequisite: 102 or college equivalent or placement for 103.

## 134 Intensive First Year Spanish (15)

Equivalent of $121,122,123$. Not open for credit to students who have taken $121,122,123$ or 121, 102, 103. (Offered Summer Quarter only.)

This "planned immersion" approach covers the equivalent of the first year of elementary Spanish (101, 102, 103) through an alternative method, essentially similar to the one developed by Yale University's Pierre Capretz for French. It is an approach in which students learn the foreign language in its cultural context. Through use of video as the central medium of presentation, students experience the language as it occurs in real-life situations and settings throughout the Span-ish-speaking world. This inductive method follows the premise that the four languageskills are most effectively developed when acquired in a specific order: listening, speaking, reading, writing.

## 201 - 202A Infermediate $(5,5)$

Intensive practice in speaking, reading, and writing. Systematic review of Spanish grammar. Oral practice based on selected pieces of Spanish literature. Students are advised not to register for more than three additional credits each term. Prerequisite for 201: 103 or college equivalent, or placement; for 202: 201 or college equivalent, or placement.

## 203* Intermediate (5)

Intensive practice in speaking, reading and writing. Review of Spanish grammar. Oral practice based on selected pieces of Spanish literature. Prerequisite: 202 or college equivalent, or placement for 203.

## 301 302WA Advanced $(3,3)$

Prerequisite: 203 for 301,301 for 302.

## 464- Chicana Expressive Culture (5)

Expressive culture of Mexican women in the United States. Cultural and artistic practices in home, film literary (print, oral), performing and visual arts. Focuses on ways Chicana visual artists re-vision traditional iconography. Joint with WOMEN 464. Prerequisites: SPAN 303, 322, one additional 300 -level course beyond 303 or permission of instructor.

## 484A Latin American Literature: Modernismo to the Present (5)

Principal literary movements of Latin America, late nineteenth century to the present, with particular emphasis on poetry and narrative: modernismo, postmodernismo, the vanguard, nueva, and novisima narrativa. Includes essays and autobiographical writings to help place the literary works in sociohistorical perspective. Prerequisites: 303, 321, and one additional 300 -level course beyond 303.

## Courses by special arrangement

Special Topics, Special Seminar and Conference, Independent Study or Research, Supervised Study
compare and contrast how Norway, Finland,Sweden, Denmark, and Iceland have responded to the integration of their largest trading partner.

## Scandinavian (SCAND)

## Course by special arrangement

Independent Study or Research

## Swedish (SWED)

## 150 Intensive First-Year Swedish (15)

Fundamentals of oral and written Swedish. Intensive practice in speaking, reading and writing. Interactive classroom, computer-assisted learning, language, and reading laboratories. Emphasis on contemporary Swedish culture and society.

## Slavic Languages and Literature (SLAVC)

M253 Smith Hall, DP-32
Telephone: 543-6848
Slavic Languages and Literature courses are offered in:

- Czech
- Russian
- Slavic (Directed Study or Research)

The Department of Slavic Languages and Literature offers intensive Russian at all levels (firstthrough fourth-year), and intensive first-year Czech. The Department sponsors the Russian House Dorm, where students may live in a Rus-sian-speaking environment. Application forms for Russian House must be requested from the Department.
Forinformation on the Russian Language Program in Leningrad (for selected participants only), contact the Office of International Programs and Exchanges, 516 Schmitz Hall, PA-10, 543-9272.

## Courses by special arrangement

Independent Study or Research, Doctoral Dissertation

## Czech (CZECH)

401, 402, 403 Elementary Czech $(5,5,5)$
Recommended for students who want to rapidly acquire the basics in reading, writing, and speaking Czech. Concurrent registration required.

## Russian (RUSS)

Placement policy: While students may enroll for whatever language level seems appropriate, final placement in a language course is determined by their score on a diagnostic test administered at the beginning of the quarter. The Russian Program reserves the right to place students in a higher or lower course, according to the test results.

Credit note: Credit is not allowed for overlapping courses in two sequences (e.g., a student may receive a maximum of 15 credits for 101, 102, 103, and 150). Credit is allowed for courses in different sequences, though, if the courses are taken in progressively more advanced order (e.g., 150 followed by 201).

## 150 Intensive First-Year Russian (15)

Covers material of $101,102,103$ in one quarter. Recommended for students who want to rapidly acquire the basics of reading, writing, and speaking. For continuation, see 250 or 201,202, 203.See credit note above.

## 250 Intensive Second-Year Russian (15)

Continuation of 150 . Covers all the basic grammar of Russian. Extensive written and oral practice. Practical use of Russian emphasized. Prerequisite: 150 or 103, or permission of instructor. See credit note above.

## 350 Intensive Third-Year Russian (15)

Covers $301,302,303$ in one quarter. Recommended for those desiring intensive grammar review and to increase vocabulary and oral facility in Russian. Prerequisite: 203, 210, or 250 , or permission of instructor. See credit note above.

## 450 Intensive Fourth-Year Russian (15)

Advanced grammar. Intensive practice in conversation, composition, and reading. Equivalent to 401, 402, 403. Prerequisite: 303,350 , or permission of instructor. See credit note above.

## Courses by special arrangement

Directed Study or Research, Independent Study or Research

## Slavic (SLAV)

Directed Study or Research

## Society and Justice (SO JU)

203 Smith Hall, DP-35
Telephone: 543-6523

## 450- Special Topics in Society and Justice (1-5, max. 15) <br> A. Crime and Law Enforcement in Natural Settings (5)

Seminar designed to be a forum for presenting and discussing the nature and implications of crime and law enforcement in natural settings such as national parks, forests, and waters. Students participate on discussion-research teams examining practical and theoretical implications of relevant issues in this area. Prerequisite: instructor permission.

## Course by special arrangement

Research in Society and Justice

## Sociology (SOC)

210 Savery Hall, DK-40<br>Telephone: 543-5396

The Department of Sociology offers a full range of courses comparable in scope and variety to those taught in other quarters. Three of this summer's courses may serve as an introduction to the field: 110, 240, and 271. Upper-division courses focus on specific topics of interest to students.

## 1 10W Survey of Sociology (5) D

Human interaction,social institutions,social stratification, socialization, deviance, social control, social and cultural change.Course content may vary, depending upon instructor. Only sections $D$ and $U$ fulfill the W-course requirement. Please refer to Time Schedule section.

## 240W Introduction to Social Psychology: Perspectives on Individual Behavior (5) D

Major theoretical perspectives on individual behavior in social settings. Includes social cognition, behaviorism, symbolic interaction, and attitudes. Emphasizes the ways people develop as social beings.

## 271 Introduction to the Sociology of Deviance (5) D

Examination of deviance, deviant behavior, and social control. Deviance as a social process; types of deviant behavior (e.g. suicide, mental illness, drug use, crime, sexual deviance, delinquency); theories of deviance and deviant behavior; nature and social organization of societal reactions; and social and legal policy issues.

## $328-329$ A Methodology of Sociological Research $(5,5)$

Logic of formulating, testing, and modifying hypotheses. Methods of producing social data (survey research, evaluation research, field observation) and utilizing stored data (census tapes, historical materials). Methods of quantitative data analysis techniques commonly used in contemporary sociological analysis. Prerequisite: at least two prior courses in sociology.

## 331 Population and Society (5)

Population growth and distribution, population composition, population theory, urbanization. Determinants and consequences of fertility and mortality trends and migration in economically developed and underdeveloped areas.

## 352W The Family (5) D

The family as a social institution. Historical changes and societal variation in family patterns. Changes over the life cycle. Alternative family forms.

## 362* Race Relations (5)

Interracial contacts and conflicts. Joint with AES 362.

## 371 Criminology (5) D

Survey of legal definitions, types of criminal behavior, trends and patterns, recidivism, characteristics of offenders, environmental influences, diagnostic methods, prediction, theories of crime and delinquency prevention, social policy. Recommended: 271.

## 401 Special Topics in Sociology (5, max. 15)

## B. Sociology of Murder (5)

To develop a sociological understanding of murder, with emphasis on the characteristics of homicide (demographic, social, psychological, offenders, victims, and events). Theories of homicide are offered with the objective of creating a more valid theoretical model. Organized as a seminar with active student participation. A couple of experts on murder will speak to the class.

## 450* Political Economy of Women and Family in the Third World (5)

Theoretical and empirical aspects of the political economy of women and the family in the Third World during the process of development, with a focus on labor. Main theoretical approaches examined and applied to case studies from Asia and Latin America. Joint with SIS 450.

## 451 Theory and Process of Social Change (5)

Basic trends in American life; frames of reference for analysis of social change; forces causing social change. Prerequisite: 15 credits in social sciences.

## 461 Comparative Ethnic Relations in the Americas (5)

Sketches the ethnoracial systems operating in American society. Studies these systems as systems, and examines their institutional and interpersonal dynamics. Compares ethnoracial systems in order to arrive at empirical generalizations about race/ethnorelations in the Americas. Joint with AES 461.

## 472 Juvenile Delinquency (5)

Factors in delinquency, juvenile courts. Explanation of delinquent behavior and legal reaction to delinquency. Programs of treatment and prevention. Recommended: 371 or equivalent.

## Courses by special arrangement

Independent Study or Research, Master's Thesis, Doctoral Dissertation

## Speech and Hearing Sciences (SPHSC)

205 Eagleson Hall, JG-15
Telephone: 543-7974

The Department of Speech and Hearing Sciences provides opportunities for study at the undergraduate and graduate levels in areas dealing with the normal aspects of language, speech production, and audition, and with the nature and treatment of disorders of language, articulation, voice, fluency, and hearing in both children and adults.
A variety of full-term and intensive short courses at all levels are being offered to meet the needs of both continuing and visiting students. Courses are available for majors and nonmajors, and for professionals seeking continuing education opportunities. Practicing speech-language pathologists and audiologists, and professionals from related fields such as education, rehabilitation and nursing will find many of the offerings beneficial. In addition, some offerings are appropriate for consumers of speech-language pathology or audiology services, or for their friends and family members. Offerings include special courses not usually available during the academic year, as well as courses from the Department's core curriculum.

The Department is accredited in both Speech-Language Pathology and Audiology by the Educational Standards Board of the American Speech-Language-Hearing Association (ASHA). Many of the courses listed are eligible for Continuing Education Units through ASHA.
During afternoons of the first week, Dr. Lesley Olswang is offering Treatment Efficacy in Practice (449A), which provides participants with strategies and tools for evaluating treatment effectiveness in applied settings. This timely new course provides valuable information that help practitioners choose, modify, and defend their treatment approaches with greater confidence.
Two full-term special offerings are also available. Children's Language Disorders: An Overview of Service Delivery (449D) provides an overview of child speech and language disorders, and the various ways the profession of speech-language pathology can provide appropriate services. Introduction to ASLand the Deaf Community (449E) introduces students to the Deaf Community and culture, including ASL, bonds of experience, values and political aims. The course is open to and suitable for all types of students including majors, nonmajors, professionals and others.
Dr. Marie Thompson is again offering her course Management of Hearing Impaired Children which provides information about birth to five year-old hearing impaired children and their families. Sign systems, federal and state laws and the grieving process are among the topics discussed.

[^12]Two courses of particular interest to undergraduates include the American English Sound System (111) and Speech Science (300). Individuals interested in studying and altering their own patterns of speech may wish to consider SPHSC 111. In SPHSC 300, scientific methods and principles are examined and explored from a non-mathematical perspective by using the human speech and hearing systems for clear and familiar illustrative examples. This course meets the natural science distribution requirement. Students taking 111 may find it beneficial to take 300 concurrently.
Additional courses of interest may be available through the Department of Rehabilitative Medicine, especially through their "Assistive Technology Series."

## 111, 111 The American English Sound System (2, max. 4)

For persons for whom English is not the primary language. Speech sounds of American English. Practice in listening and using American phonetic features. Prerequisite: college-level reading knowledge of English. CR/NC only.

## 300- Speech Science (5) D

Basic physiology and acoustical attributes of speech. For nonmajors.

## 350W Clinical Processes II: Treatment (4)

Principles and procedures for planning the effective treatment of speech and language disorders. Prerequisites: 330,332, and entry code.

## 370 Basic Audiometry (5)

Theory and practice of the assessment of hearing function, including standard puretone audiometry, speech audiometry, and basic impedance audiometry. Prerequisites: 315 and entry code.

## 380 Introduction to Aural Rehabilitation (4)

Principles and methods of amplification and use of residual hearing, speech reading, speech conservation, and general counseling toward acceptance of hearing impairment. Considerations for education and special problems. Prerequisites: 315 and entry code.

## 401 Neural Bases of Speech and Language (4)

Neuroanatomical and neurophysiological bases of motor speech production and language processes. Laboratory. Prerequisite: 201 or permission.

## 449* Special Studies in Speech Pathology and Audiology (*)

## A. Treatment Efficacy in Practice (2)

June 21-25 Explores ways in which the effectiveness of treatment can be evaluated in applied settings. Practical methods for examining and documenting the validity of new and "traditional" treatment techniques for individuals with communication disorders are covered. Designed for all speechlanguage pathologists and audiologists who pro-
vide intervention for children or adults, in schools, medical settings or private practice. Also appropriate for speech and hearing sciences graduate students who have had clinical practicum experience. Information presented is practical and "real world" oriented. Sessions include lectures, demonstrations, video tapes, small group discussions, and an opportunity to design accountability protocols to be implemented with individual clients.

## B. Counseling and Interaction Skills Part I (2)

June 21-25 Asystems-based counseling approach is presented. Covers basic theory and framework, a core set of skills for a variety of counseling tasks, and a problem-solving approach for resolving counseling concerns. Clinical examples are presented to illustrate counseling approaches. Role playing is used to practice skills and to identify personal styles and preferences. The course is most appropriate for speech-language pathology and audiology professionals, as well as other professionals who counsel as part of educational and rehabilitative services. Also appropriate for students who have had some clinical experience. Approaches presented are applicable to adults (parents of handicapped or at-risk children, adult clients, spouses) and older children and adolescents.
449 Special Studies in Speech Pathology and Audiology (*)

## C. Counseling and Inferaction' Skills Part II (1)

June 28-August 20 Participants continue to develop their counseling skills through in-depth case consultation, role playing, and group discussion - and feedback. Prerequisite: entry code.
D. Children's Language Disorders: An Overview of Service Delivery (2)
Individuals interested in speech and language impaired children learn about the different ways and places these children may be served. Includes a review of how children learn language and how that learning can go awry with different types of childhood disorders. The goals speech-language pathologists might have for altering speech and language development, and the service delivery models available for reaching these goals are also covered. Lectures, small group discussions, student presentations, and opportunities to observe assessment and therapy sessions on campus and in the community. Open to all regardless of background.

## E. Introduction to ASL and the Deaf Community (5)

Asurvey of the Deaf Community, including bonds of experience, values, political aims, culture, and language. Current research in ASL and issues dealing with the Deaf Community are explored. Emphasis on understanding ASL as a natural and dynamic language. Open to all regardless of background. CR/NC only.

## 535A Voice Disorders (4)

Examination of the physiology, acoustics, and perception of the normal and distorted human voice. Etiology, evaluation, and treatment of phonatory disorders. Prerequisites: 201, 250, and 311.

## 536 Assessment of Language Impairment in Children (5)

June 29-August 12 Principles and procedures used in the assessment of speech- and language-disordered children and adolescents. Prerequisites:332, 431, and permission of instructor.
551 Advanced Practicum in Speech Pathology Evaluation (1-9, max. 10)

## A. UW Speech and Hearing Clinic (4)

Prerequisites: 536 and permission.

## B. Child Development and Mental - Retardation Ceniter (4)

Prerequisites: 536 and permission.
552 Advanced Practicum in Speech Pathology Management (1-9)

## A. Clinical Processes

Prerequisite: 350.

## B. Child Language

Prerequisites: 431 and permission.

## C. Stuffering

Prerequisites: 430, 537, and permission.

## D. Advanced Adult Speech

Prerequisite: permission.

## E. Advanced Child Speech

Prerequisite: permission.

## F. Neurogenic Disorders

Prerequisites: 401,531,532, and permission.

## G. Voice

Prerequisites: 535 and permission.

## 555 Preinternship (1-3)

Practicum in speech pathology or audiology designed to teach the clinical regimen of a participating professional center prior to assuming a full internship assignment. Prerequisite: 150 hours of su? pervised practicum and entry code.

## 575 Medical Backgrounds in Audiology (3)

Diseases and injuries of the ear resulting in reduced audition. Prerequisite: 571 or permission of instructor.

## 581* Management of HearingImpaired Children (3)

Management of hearing-impaired children, including identification of target behaviors and methods for modification such as individualized therapy programs and parent and teacher involvement.

591 Advanced Practicum in Audiology (1-9, max. 10)
A. UW Speech and Hearing Clinic
B. Pediafric Assessment
C. Aural Rehabilifation, Adult
D. Aural Rehabilitation, Child
E. Selection of Hearing Aids
G. General Assessment '?
H. ABR Assessment

Prerequisites: 40 hours of practicum and permission for all sections.

## 599 Research Practicum (", max. 12)

Supervised laboratory experience in experimental approach to problems in speech and hearing sciences. Prerequisite: entry code.

## Courses by special arrangement

Undergraduate Research, Independent Study or Research, Internship, Master's Thesis, Doctoral Dissertation

## Speech Communication (SPCH)

## 205 Raitt Hall, DL-15 <br> Telephone: 543-4860

The Department of Speech Communication offers courses at all levels, undergraduate and graduate, and provides a program of advanced and professional training for graduate students pursuing a degree program and for teachers and others who wish specialized work in the field.
Of special interest to language arts teachers is Oral Interpretation of Children's Literature (341*) and Oral Interpretation of Plays for Children (498*). Persons interested in business-related topics may wish to consider 301, 373, and 474.

## 102 Speech, the Individual, and Society (5) D

Provides a basic understanding of human speech communication. Covers three major areas: (1) the nature of human communication, including models, principles, settings; (2) elements of verbal and nonverbal communication; and (3) approaches to and functions of human communication, including persuasion, interpersonal.communication, argument, propaganda, free speech.

## 103, 103 Interpersonal Communication (5)

Emphasizes analyzing and understanding communication variables affecting human relationships, such as person perception, feedback, idea development, nonverbal cues. Focus on informal communication settings.

## 220, 220* Introduction to Public Speaking $(5,5) \mathrm{D}$

Emphasizes choice and organization of material, sound reasoning, audience analysis, oral style, and delivery. Overview of history of rhetoric. Classroom speeches followed by conferences with instructor.

## 301 Interviewing (5)

Interviewing principles and practices, with emphasis on information gathering and persuasive interviews. Purposes and types of interviews, structure of interviews, and influence of communication patterns on interview outcomes.

## 334 Essentials of Argument (5) D

Argument as a technique in the investigation of social problems; evidence, proof refutation, persuasion; training in argumentative speaking.

## 341* Oral Interpretation of Children's Literature (3)

Study and performance of children's literature, emphasizing oral interpretation as a method of experiencing literature. Emphasis is on the development of performance abilities.

## 373 Principles of Group Discussion (5) D

Discussion as an everyday community activity, with emphasis on the informal cooperative deci-sion-making methods of committee, conference, and round-table groups.

## 474 Communication, Conflict and Cooperation (5)

Role of communication in resolving informal conflicts and in facilitating interpersonal and intergroup cooperation. Review of empirical literature. In-class simulations and exercises.

## 498* Special Topics in Speech Communication (2-5, max. 15) <br> A. Oral Interpretation of Plays for Children (3)

Solo and group performances and analyses of drama for children, featuring plays written to be performed by children and plays written to be performed by adults for children.

## 498土 Special Topics in Speech Communication (2-5, max. 15) <br> B. Communication and the Family (3)

Exploration of two major questions: 1) What is a family? and 2) How do families communicate? Examines multiple models of families, including those from other cultures, television, and other historical time periods. Communication between partners and between parents and children as a child develops also examined.

## Courses by special arrangement

Undergraduate Research, Media Internship, Independent Study or Research, Master's Thesis, Doctoral Dissertation

## Statistics (STAT)

B313 Padelford Hall, GN-22
Telephone: 543-7237

The Department of Statistics was established to coordinate teaching and research in statistics on the upper campus. During the summer, in addition to the instructional program, an active research program and seminar series are maintained, featuring a number of eminent visiting professors as well as the regular faculty. For further information, contact the department.

## 220 Basic Statistics (5) DP

Objectives and pitfalls of statistical studies. Structure of data sets, histograms, means, and standard deviations. Correlation and regression. Probability theory, binomial, and normal. Interpretation of estimates, confidence intervals, and significance tests. (Students may receive credit for only one of 220 and 311 .) Prerequisite: $11 / 2$ years of high school algebra.

## 311 Elements of Statistical Mefhod (5) DP

Elementary concepts of probability and sampling, the binomial and normal distributions. Basic concepts of hypothesis testing, estimation, and confidence intervals, $t$-tests, and chi-square tests. Linear regression theory and the analysis of variance. (Students may receive credit for only one of 220 and 311.) Meets with ECON 311. Prerequisite: MATH 111 or 120.

## 390 Probability and Statistics in Engineering and Science (4)

Concepts of probability and statistics. Conditional probability, independence, random variables, distribution functions. Descriptive statistics, transformations, sampling errors, confidence intervals, least squares, and maximum likelihood. Exploratory data analysis and interactive computing. Not open for credit to students who have taken 481. Joint with MATH 390. Prerequisites: MATH 324 or 307, and MATH 205 or 308.

## 394- Probability I (3)

Sample spaces; basic axioms of probability; combinatorial probability; conditional probability and independence; binomial, Poisson, and normal distributions. Joint with MATH $394 \star$. Prerequisite: MATH 324.

## 3954 Probability II (3)

Random variables; expectation and variance; laws of large numbers; normal approximation and other limit theorems; multidimensional distributions and transformations. Joint with MATH 395A. Prerequisite: 394.

578 Special Topics in Advanced Biostatistics (*, max. 3)

## A. Spatial Statistics (3)

Joint with BIOST 578A. Prerequisite: entry code. CR/NC only.
B. Spatial Statistics Seminars (1) Joint with BIOST 578B. Prerequisite: entry code. CR/NC only.
C. Drug Evalugtion (3)

Joint with BIOST 578C. Prerequisite: entry code. CR/NC only.

## 599 Statistical Consulting (*, max. 12)

Consulting experience in data analysis, applied statistics, etc. The student is required to provide consulting services to students and faculty. Prerequisites: permission of graduate adviser, entry code. CR/NC only.

## Courses by special arrangement

Undergraduate Research, Independent Study or Research, Special Topics, Master's Thesis, Doctoral Dissertation

## Women Studies (WOMEN)

B110K Padelford Hall, GN-45
Telephone: 543-6900

Women studies is an interdisciplinary program that offers students the opportunity for intensive, cross-cultural and theoretical study of women. This summer, a variety of our most popular courses are being offered. All courses count toward. the Bachelor of Arts degree in women studies.

## 200 Introduction to Women Studies

 (5) DFeminist study of women, society and culture, looking at how gender, race, class, and sexuality create similarities, differences, and connections across women's experience. Topics include women's histories and identities, family, sexual choices, work, violence against women, creativity, empowerment, and social change. Course is both a survey of women in society and an introduction to methods and concepts of women's studies across the disciplines. Guest lectures, films, music, small-group discussions.

## 257 Psychology of Sex Differences (5) D

Major psychological theories of sex-role development, biological, and environmental influences that determine and maintain sex differences in behavior; sex roles in children, sex differences in aggression, sexuality. Joint with PSYCH 257. Recommended: PSYCH 101 or 102.

## 313 Women in Politics (5)

Political theory, historical and contemporary, including writings of the women's liberation movement on the political role of women in society. Empirical studies of the "apolitical" woman; process of political socialization in various cultural contexts; women's participation in political decision making. Joint with POL S 313. Prerequisite: 200 or a political science course.

## 353- Anthropological Studies of Women (5) D

Cross-cultural and comparative survey of the varieties of women's cultural experiences, statuses, and roles in cultural context and the anthropological theories used to account for them. Topics include: biological factors, studies of primates, woman the gatherer, work in pre-industrial and industrial societies, matriarchy and matrilineal kinship, childbirth, and women's roles in economic development. Joint with ANTH 353. Prerequisites: 200 and ANTH 202, or permission of instructor.

## 354 Lesbianism (3)

Position and concerns of lesbians in our society; the biological, cross-cultural, and psychosocial evidence. Historical and current information and discussion of the nature of lesbianism. Prerequisite: 200 or 257 ; or ANTH 100 or 353 ; or PSYCH 101 or 210 or 257 or 305 ; or SOC 110 or 271 or 347 ; or permission of instructor.

## 357 Psychobiology of Women (5) D

Physiological and psychological aspects of women's lives; determinants of biological sex; physiological and psychological events of puberty and menopause; sexuality; contraception; pregnancy, childbirth, and lactation; role of culture in determining the psychological response to physiological events. Joint with PSYCH 357. Not open for credit to students who have taken GIS 357. Prerequisites: 200 or 257 , or PSYCH 101, 102 or 257, or permission of instructor.

## 383 Social History of American Women (5)

A multi-racial, multicultural study of women in the U.S. from the sixteenth century to the present: an emphasis on women's unpaid work, participation in the paid labor force, charitable and reform activities, and feminist movements of the nineteenth and twentieth centuries. Use of primary materials such as diaries, letters, speeches, and artifacts. Joint with HSTAA 373. Prerequisite: 200 or 283 or HSTAA 201 or permission of instructor.

## 464* Chicana Expressive Culture (5)

Expressive culture of Mexican women in the United States. Cultural and artistic practices in home, film, literary (print, oral), performing, and visual arts. Focuses on ways Chicana visual artists re-vision traditional iconography. Joint with CHSTU/SPAN 464. Prerequisites: SPAN 3Q3, 322, one additional 300 -level course beyond 303 or permission of instructor.

## 495 Tuforing Women Studies (5)

Trains students to serve as tutors in designated courses. Tutors facilitate weekly group discussions, assist with writing assignments, explain course materials. Prerequisites: 200 or 206, junior or senior standing, one or more upper-division course relevant to women studies, prior completion of the course (or equivalent) to be tutored, permission of instructor. CR/NC only.

## 497 Fieldwork in Women Studies (3-5, max. 15)

Internships in local agencies or other places of work appropriate to the student's field of interest. Allows development of specific skills in area of specialization. Prerequisites: 200, junior standing or permission of instructor. CR/NC only.

## Course by special arrangement Undergraduate Research

## Zoology (ZOOL)

106 Kincaid Hall, NJ-15
Telephone: 543-1620
Courses offered for nonmajors include BIOL 100 and ZOOL 118 and 119. Opportunities for research and graduate instruction in marine biology are offered at the Friday Harbor Laboratories in the San Juan Islands. For information and bulletin, write: Director, Friday Harbor Laboratories, 620 University Road, Friday Harbor, WA 98250. Also see Biology, page 15.

## 118 Survey of Physiology (5) D

Human physiology, for nonmajors and health sciences students.

## 119 Elementary Physiology Laboratory (1)

Optional laboratory experiments designed to accompany 118. Prerequisite: 118 (may be taken concurrently).

## 362 Natural History of Vertebrates (5)

Field and laboratory course on the classification, ecology, adaptations, and natural history of fishes, amphibians, reptiles, birds, and mammals. Several field trips taken during laboratory time and on two or three Saturdays. Students may be required to share a portion of the transportation costs of field trips.

## 498 Special Problems in Zoology

 (1-5, max. 15)Prerequisite: entry code.

## Courses by special arrangement

Independent Study or Research, Master's Thesis, Doctoral Dissertation

# School of Business Administration 

Graduate Program Office<br>110 Mackenzie Hall, DJ-10<br>Telephone: 543-4660<br>Undergraduate Program Office<br>137 Mackenzie Hall, DJ-10<br>Telephone: 543-4350

Registration priority in business administration courses (200-level courses excepted) during Summer Quarter is given to University of Washington business majors. Other students can be accommodated on a space-available basis only; consult the Undergraduate Program Office for courses numbered 300 and 400; consult the Graduate Program Office for courses numbered 500 and 600.

## Accounting (ACCTG)

Students who graduate with the degree of Bachelor of Arts in Business Administration and who complete the following courses in accounting with a minimum grade-point average of 2.0 will have the notation "accounting" included on their transcripts: $301,302,303,311,330,411,421$, and six elective credits in 400-level accounting courses except 401,490 , and 499 ; a total of 27 credits is required. ACCTG 505 is a concentrated, 10 -week program offering the equivalent of $301,302,303,311,411$ and 421 for graduate students.

## 210 Introduction to Accounting (3)

Nature and social setting of accounting; uses of accounting information; introduction to basic accounting concepts and some accounting techniques. Prerequisite: sophomore standing or above.

## 220 Fundamentals of Financial Accounting (3)

Principal procedures and concepts utilized in contemporary financial accounting and reporting. Preparation and interpretation of financial statements. Prerequisite: 210.

## 230 Fundamentals of Managerial Accounting (3)

Analysis and evaluation of accounting information as part of the managerial process of planning, decision making, and control. Emphasis on types of economic decision making in enterprises and on accounting information useful to enterprise managers. Prerequisite: 220.

## 301 Intermediate Accounting I (3)

Concepts and principles of financial accounting. Analysis of controversies and problems related to measurement of enterprise income. Prerequisites: 230 and admission to accounting concentration.
302 Intermediate Accounting II (3)
Continuation of 301. Prerequisites: 301 and admission to accounting concentration.

## 303 Intermediate Accounting III (3)

Continuation of 302. Prerequisites: 302 and admission to accounting concentration.

## 311 Cost Accounting (3)

Introduction to theory of cost accounting; job order, process, and standard cost systems; overhead accounting; problems in accumulation and allocation of costs; decision making with cost data. Prerequisites: 301 and admission to accounting concentration.

## 330 Introduction to Accounting Information Systems (3)

Concepts of accounting information systems in organizations. Process of analyzing and designing accounting information systems, with emphasis on those using computer facilities. Issues of internal controls and auditing considerations. Prerequisite: admission to accounting concentration or prior departmental approval.

## 411 Auditing Standards and Principles (3)

Intensive introduction to the attest function in society today. The environment, the process, and the report of the public auditor are analyzed. Potential extensions of the attest function are examined. Prerequisites: 303, 311, 330, and admission to accounting concentration.

## 421 Tax Effects of Business Decisions (3)

Issues in taxation, including tax considerations in business decision making, tax effects of business transactions, taxation of compensation, fringe benefits, capital gains, fixed asset transactions, disposition of business distribution from corporations. Prerequisites: 303 and admission to accounting concentration.

## 450 Business Taxation (3)

Issues of taxation for entities other than individuals, including corporations, sub-chapter S corporations, partnerships, estates and trusts, corporate distributions, liquidations, and reorganizations. Prerequisites: 421 and admission to accounting concentration.

451 Individual Income Taxation (3)
Political, economic and social forces influencing federal income taxation, role of taxation in personal decisions. Coverage of individual income tax matters, including business and investment income, business and personal deductions, property transactions, and tax issues of employees. Prerequisites: 421 and admission to accounting concentration.

## 485 Advanced Financial Accounting (3)

Accounting for partnerships, accounting for business combinations, parent-subsidiary and branch relationships, foreign exchange. Prerequisites: 303 and admission to accounting concentration.

## 505 Intensive Analysis of Accounting Principles and Practices (15)

Covers the subjects in the required core for undergraduate accounting majors: intermediate accounting, advanced accounting, cost accounting, auditing, and tax accounting. Credits do not count toward the M.B.A. degree. Prerequisites: 210, 220, 230, or equivalent, and entry code.

## 530 Tax Issues in Property Ownership (4)

Analysis of gain and loss realization, recognition and characteristics of such. Detailed exploration of statutory and case law regarding acquisition, ownership, and disposition of assets. Treatment of capital and ordinary gains and losses. Timing issues regarding deferral transactions and installment reporting are analyzed. Prerequisite: undergraduate accounting concentration or equivalent.

## 571-572 Research Reports (3-3)

Independent study in business administration; critical evaluation of business analysis and research methods. Effective communication of ideas is emphasized. Methods and content of independent research studies being completed by the students are subjected to critical evaluation. Open only to M.B.A. students. Prerequisites: instructor's approval of preliminary research topic outline for 571; 571 for 572.

## 590 Special Topics in Accounting (3)

 Accounting topics of current concern to faculty.and students. Offered only when faculty are available and sufficient student interest exists. Seminar content. Topics for each section are: A: Income Taxation of Conduits I; B: Fundamentals of International Taxation; C: Employee Tax Problems and Deferred Compensation. Prerequisite: permission of instructor; entry code for nonmajors.
## Courses by special arrangement

Auditing or Industrial Internship, Undergraduate Research, Independent Study or Research

## Administration (ADMIN)

510 Integrative Administration (15) Includes materials basic to the study and analysis of administration in organizations: organization theory and administrative behavior; human resources management; resource allocation, accounting, and financial control, systems operation and analysis; marketing; governmental-societal framework; and policy formulation and strategic planning. Faculty team-teaching approach. Not open to business administration majors. CR/NC only. Prerequisite: entry code.

## Business Administration (BA)

## Course by special arrangement

Doctoral Dissertation

## Business Communications (B CMU)

## 301 Basic Written Business Communications (4).

Broad analytical approach to written communications as a management tool. Analysis of the psychology, semantics, planning and principles of effective business writing. Practical application through messages that inform and persuade, grant and refuse, plus short business reports and applications for positions. Prerequisite: junior standing or above. Enrollment is open only to UW business majors until May 29.

## Business Economics (B ECN)

## 300 Managerial Economics (3)

Analysis of economic factors affecting decisions made by business firms. Demand and cost analysis and alternative policies from the firm's point of view. Prerequisites: ECON 200 and admission to business administration or permission.

## 301 Money, National Income, and Prices (4)

Measurement and analysis of business activity in the commodity and money markets; static and dynamic models of income and interest rate determination; problems and policies in the stabilization of business conditions. Prerequisites: ECON 200, 201, and admission to business administration or permission.

## 420. Financial Markets (4)

Analysis of the structure and functions of the money and capital markets; the saving-investment process and financial intermediaries; supply and demand for lendable funds and the level and structure of interest rates; role of the Federal Reserve and Treasury in money market developments. Pre-, requisites: 301 and admission to business administration or permission. Enrollment is open only to non-accounting seniors and above until May 29.

## 427 International Finance (4)

Asset choice and institutional operations in international finance; foreign-exchange problems; the impact of international financial problems and operations on business; short- and long-term international financing. Prerequisite: 301 and admission to business administration or permission. Enrollment is open only to non-accounting seniors and above until May 29.
571-572 Research Reports (3-3)
See ACCTG 571-572 for description.

## Courses by special arrangement

Undergraduate Research, Independent Study or Research

## Business Policy' (B POL)

## 470 Business Policy (4)

Policy making and administration from a general management point of view. Emphasis on problem analysis, the decision making process, administration and control, and continuous reappraisal of policies and objectives; integrates and builds upon the work of the core curriculum. Prerequisites: admission to business administration, senior standing or above, and FIN 350, MKTG 301, OPMGT 301, and HRMOB 400, or permission of undergraduate office.
471 Small Business Management (4)
Policy formulation and implementation in smaller firms from the top manager's point of view. Integrates and builds upon work of the core curriculum. Includes analysis of cases and field projects related to small firms. Prerequisites: admission to business administration, senior standing or above, and FIN 350, MKTG 301, OPMGT 301, and HRMOB 400, or permission of undergraduate office.

## 505 Business Policy and Strategy (3)

Policy decisions and strategic leadership from the general management point of view. Determination of corporate product-service objectives, development of a network of internal operating policies and methods to achieve objectives at a cost satisfactory to the consumer and to society. Prerequisites: all first-year required courses in M.B.A. curriculum and entry code for nonmajors.
571-572 Research Reports (3-3) See ACCTG 571-572 for description.

## 590 Special Topics in Business Policy (3)

See ACCTG 590 for description. For a list of topics, contact the graduate program office. Prerequisite: entry code for nonmajors.

## Courses by special arrangement

Undergraduate Research, Independent Study or Research

## Finance (FIN)

## 350 Business Finance (4)

Sources, uses, cost, and control of funds in business enterprises. Internal management of working capital and income; sources and cost of long-term funds; capital budgeting; financing of the growth and expansion of business enterprises; government regulation of the financial process. Prerequisites: BECN 300 and admission to business administration or permission of undergraduate office.

## 453 Financial Theory and Analysis (4)

Determination of liquidity needs subject to firm constraints and longer-term capital budgeting problems involving cost of capital and capital rationing considerations; analytical approach. Prerequisites: 350 ;QMETH 201 and admission to business administration. Enrollment is open only to non-accounting seniors and above until May 29.

## 460 Investments (4)

Introduction to the nature, problems, and process of evaluating particular securities and portfolio construction and administration. Special attention to the risk and rate of return aspects of particular securities portfolios and total wealth. Prerequisites: 350 and admission to business administration. Enrollment is open only to non-accounting seniors and above until May 29.

## 560 Investments (3)

Introduction to the nature, problems, and process, of evaluating particular securities and portfolio construction and administration. Special attention is directed to the risk and rate-of-return aspects of particular securities, portfolios, and total wealth. Prerequisite: 502 and entry code for nonmajors.

## 571-572 Research Reports (3-3) <br> See ACCTG 571-572 for description.

## Courses by special arrangement

Undergraduate Research, Independent Study or Research

## Human Resources Manage-: ment and Organizational Behavior (HRMOB)

## 301 . Personnel Systems and Industrial Relations (3)

Personnel/industrial relations function from a managerial perspective. Topics include selection, compensation, performance appraisal, and training.and development. Special emphasis on union/
management relations and relevant behavioral science research. Prerequisite: junior standing or above. Enrollment is open only to UW business majors until May 29.

## 400 The Management of Organizational Behevior (4)

Behavioral aspects of management in organizations with emphasis on leadership, motivation, communication, conflict resolution, group dynamics, and organization development. Prerequisite: admission to business administration or permission of the undergraduate office.

## 410 Staffing (4)

Affirmative action, recruitment, testing, interviewing, placement; promotion, and overall human resource planning. Prerequisite: junior standing or above. Enrollment is open only to UW business majors until May 29.

## 515 Performance Appraisal and Compensation (3)

Strategies, procedures, and problems in evaluating and rewarding employees. Performance measurement methods, different appraisal systems, and ways of coaching employees. Ways to integrate performance appraisal into compensation systems. Prerequisite: entry code for nonmajors.

## 520 Collective Bargaining (3)

Traditional labor-management relations in private, public, and non-profit sectors with special emphasis on grievance arbitration and collective bargaining processes. Simulations and case studies. Prerequisite: entry code for nonmajors.

## 550 Leadership (3)

Various theories of leadership. Trait theories, leader behavior theories, and situational theories. Concept of leadership within the broader framework of power-how power is gained, lost, and distributed within organizations. Prerequisite: entry code for nonmajors.

## 560 Negotiations (3)

Strategy used in negotiations other than labormanagement bargaining to develop skills necessary to devise a negotiating strategy appropriate to situation. Negotiation of contracts in simulated business settings, case studies, readings. Prerequisite: entry code for nonmajors.

## 571-572 Research Reports (3-3)

See ACCTG 571-572 for description.

## Courses by special arrangement

Undergraduate Research, Independent Study or Research

## Information Systems (IS)

## 300 Management Information Systems (4)

Fundamentals of information systems, what they are, how they affect organizations. Technical and organizational foundations of information systems, building information systems, managing information system resources. Laboratory emphasis using computers to analyze, coordinate, solve organizational decision making problems. Prerequisite: admission to School of Business Administration or permission of undergraduate office.

## 320 Data Structures and File Systems (4)

Concepts of data and file management. Data types and data structures; organizing data on external storage devices; sequential, direct, and indexed access methods; multilist and inverted files; sorting and searching algorithms. Instruction in, and use of, a programming language using structured techniques to implement these concepts. Prerequisites: 300 (or equivalent) and junior standing or above. Enrollment is open only to UW business majors until May 29.

## 409 Applications Programming for Information Systems (4)

Introduction to business systems concepts. Use of structured design and programming techniques. Application system development using COBOL for creating and managing sequential, indexed, and relative files. Sorting, merging, and table processing. Report generation. Introduction to screen management programming. Prerequisite: 320. Enrollment is open only to UW business majors until May 29.

## Course by special arrangement <br> Undergraduate Research

## International Business (I BUS)

## 300 The International Environment of Business (3)

Prepares students to understand the most important aspects of the international political economy. Emphasis on the important relationships among nations and business and economic institutions that influencestudents' performance as managers, consumers, and citizens. Prerequisites: ECON 200, 201. Enrollment is open only to UW business majors until June 21.

## 440 Business in Japan (4)

Problems of doing business in the Japanese market. Causes of economic growth in the postwar period; Japanese business practices and institu-
tions. Japanese and U.S. marketing and investment strategies. Available for graduates as a part of an international business concentration. Prerequisite: 300 or 550 or permission of instructor. Enrollment is open only to UW business majors until May 29.

## 470 Management of International

 Trade Operations (4)Applicable for students interested in exporting and importing activities, but especially relevant to small companies. Emphasis on the management of import-export operations and the application of relevant functional tools. Cases and class projects are drawn from service companies, as well as from manufacturers. Prerequisites: 300 and junior standing or above. Enrollment is open only to UW business majors until May 29.

## 550 Infernational Business Environment (3)

Understanding the underlying economic, political and social forces in the international business environment and assessing impact of these forces on international trade and investment. Theories of international trade, foreign investment, international monetary relations and economic integration, and national policy response to international market forces. Prerequisites: BECN 500 and 501 or equivalent are recommended.

## 571-572 Research Reports (3-3) <br> See ACCTG 571-572 for description.

## Courses by special arrangement

Undergraduate Research, Independent Study or Research

## Marketing (MKTG)

## 301 Marketing Concepts (4)

Tools, factors, and concepts used by management in planning, establishing policies, and solving marketing problems. Marketing concepts, consumer demand and behavior, location analysis, marketing functions, institutions, channels, prices, and public policy. Prerequisites: ECON 200. Open to nonmajors Summer Quarter only. Enrollment is open only to UW business majors until June 21.

## 310 Product and Price Policies (4)

Examines important aspects of product planning development, product line decisions, packaging, brand policies, guarantees, and services. Price theory is considered but emphasis is placed on special pricing policies and problems and legal constraints on pricing activity. Prerequisites: 301 and B ECN 300 . Enrollment is open only to UW business majors until May 29.

## 330 Sales Force Management (4)

Sales and distribution planning; sales organization and training; management of the sales force; methods of sales, cost, and performance analysis. Prerequisites: 301 and junior standing or above. En-
rollment is open only to UW business majors until May 29.

## 340 Advertising (4)

Management of the advertising function and its integration with other forms of promotion. Planning the program, determining the most effective approach, evaluation of media and budget, advertising research, advertising institutions, economic, and social aspects. Prerequisites: 301 and junior standing or above. Enrollment is open only to UW business majors until May 29.

## 450 Consumer Behavior (4)

Theory and practice pertinent to marketing decisions of individuals and business firms; utilization of theories from behavioral sciences in marketing research; theories of fashion, characteristics of goods, shopping behavior, product differentiation, market segmentation, and opinion leadership; application of concepts to management of advertising, personal selling, pricing, and channels of distribution. Prerequisites: 301 and junior standing or above; recommended: QMETH 201. Enrollment is open only to UW business majors until May 29.

## 510 Product and Price Management (3)

Identification of market opportunities, choice of which goods and services in what combinations to market and prices at which to offer them. Considers product and price interrelationships in prod-uct-line management; product differentiation; the marketing mix; and multiple-market, oligopoly, and monopoly contexts. Includes policy considerations. Prerequisites: 501, entry code for nonmajors.

## 571-572 Research Reports (3-3) <br> See ACCTG 571-572 for description.

## Courses by special arrangement

Undergraduate Research, Independent Study or Research

## Operations Management (OPMGT)

## 301 Principles of Operations

 Management (3)Introduces application of quantitative analysis to problems in planning, operating, and controlling production function. Problems of distribution and allocation, management of inventory systems, production scheduling, improvement curves, and service systems. Uses computer and quantitative models in formulating managerial problems. Prerequisites: QMETH 201 and admission to business administration or permission of undergraduate office.

[^13]402 Introduction to Logistics (4)
Logistics studies the efficient delivery of goods and services. A total-cost approach recognizes this involves not only the obvious vehicle-routing issues but also shipment size and mix, warehouse location, product design, customer services, and others. Includes study of real companies' logistics problems. Prerequisites: 301 and QMETH 201. Enrollment is open only to UW business majors until May 29.

## 550 Project Management (3)

Management of complex projects, and tools and techniques (i.e., CPM and PERT) developed to aid the planning, scheduling and control of projects. Includes work breakdown structures, precedence networks, Gantt charts, resource leveling and al location, and the use of microcomputer programs. Prerequisite: 502 and entry code for nonmajors.
571-572 Research Reports (3-3)
See ACCTG 571-572 for description.
Courses by special arrangement
Undergraduate Research, Independent Study or Research

## Organization and Environment ( O E )

200 Introduction to Low (5)
Legal institutions and processes; law as a system of social thought and behavior and a frame of order within which rival claims are resolved and compromised; legal reasoning; law as a process of protecting and facilitating voluntary arrangements in a business society. Prerequisite: sophomore standing or above. Taught with LAW 300.

## 302 Organization and Environment (4)

Political, social, legal environment of business. Critical managerial issues from historical, theoretical, and ethical perspectives; their impact on the organization. Includes: corporate political power, boards of directors, capitalism, industrial policy, business ethics and social responsibility, alternative corporate roles in society. Prerequisite: admission to business administration or permission of undergraduate office.

## 403 Commercial Law (5)

Principles of the law of property, sales, negotiable instruments, and security transactions. Prerequisites: 200, junior standing or above. Open only to UW business majors until June 21.

## 440 Organization Structure (3)

Concepts of formal organization structures, power, authority, and influence; delegation and decentralization, strategic planning, decision making; philosophy and values in management, and the organization in the context of the environment and
its impact on the organization's subsystems. Prerequisite: HRMOB 400 , and admission to business administration or permission of undergraduate office.
571-572 Research Reports (3-3) See ACCTG 571-572 for description.

## Courses by special arrangement

Undergraduate Research, Independent Study or Research

## Quantitative Methods (QMETH)

## 201 Introduction to Statistical Methods (4)

Survey of principles of data analysis and their applications for management problems. Elementary techniques of classification, summarization and visual display of data. Applications of probability models for inference and decision making are illustrated through examples. Prerequisites: MATH 157, and sophomore standing or above.

## 300 Quantitative Analysis for Business (4)

Introduction to mathematical tools utilized for analysis of business problems; appreciation of the use of these tools in business situations; calculus; linear algebra. Prerequisites: MATH 157 and junior standing or above. Open only to UW business majors until May 29.

## 520 Statistical Application of Linear Models (4)

Exploration and inference using linear models. An advanced treatment of simple and multiple regression, use of dummy variables, analysis of covariance, selection of variables to be included in the equation. Prerequisites: 500 and entry code for nonmajors.

## 530 Stochastic Series Analysis and Forecasting (4)

Introduction to modem time series analysis and forecasting. Autoregressive, moving average, and mixed models. Practical methods for model identification, estimation, diagnostic checking, and adaptive forecasting. Oriented toward data and application. Prerequisites: 500; strongly recommended: 520 or equivalent; and entry code for nonmajors.

## 571-572 Research Reports (3-3)

See ACCTG-571-572 for description.

## Courses by special arrangement

Undergraduate Research, Independent Study or Research

## College of Education

See page 46 for a guide to courses for educators.
The summer program offered by the College of Education consists of courses designed to meet requirements for teacher certification in the state of Washington and elsewhere, to provide continuing academic training for teachers in the basic subjectmatter fields, to serve prospective and practicing school administrators and other specialized school personnel, and to lead to various advanced degrees in the field of education.

Admission to the College of Education or to any of the programs within the College of Education assumes, and is dependent upon, the student's eligibility for admission, enrollment, and registration at the University of Washington. This applies not only to regular programs but also to all special institutes, special projects, or programs, whether such courses are taught on or off campus. (See the "Admission" and "Registration" sections of this Bulletin.)

## Independent Study, Research, and Field Experiences (EDUC).

Independent study courses may be used for continuing certification and endorsements.

## 401 Practicum in Community Service Activity (3-5)

Opportunity is provided for tutoring and teaching experiences in a specific community service organization, placement made according to participant interests and needs. Approximately 20 hours of participation on a predetermined schedule plus scheduled seminars are required for each credit earned. Participants wishing to utilize community service experience to satisfy, in part, certification requirements should make arrangements prior to enrollment with the Assistant Director of Certification. Prerequisites: application during quarter prior to participation and permission of instructor ( 211 Miller). CR/NC only.

## 423A Educating Diverse Groups (3)

Background information is provided on socioethnic/cultural diversity; its impact on school structure, programming, and administration. Focuses on socioeconomic, ethnic minority, women, handicapped groups. Educational implications of discrimination based on these factors are emphasized. Prerequisite: admission to Teacher Education Program.

## 501 Advanced Practicum in Community Service Activity (3-5)

Opportunity is provided postbaccalaureate students with selective, in-depth participation and teaching experiences in a specific community ser-

Continued on the next page


- Nearly 100 College of Education courses and workshops to choose from.
- Classes provide continuing academic training for teachers in the basic subject matter fields.
- Courses for prospective and practicing school administrators and other specialized school personnel
- Courses leading to various advanced degrees in the field of education, if taken while in a graduate or graduate nonmatriculated (GNM) status.

Independent Study, Research, and Field Experiences (EDUC) ................ 45
Educational Curriculum and Instruction (EDC\&I) courses ......................... 46
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Educational Psychology (EDPSY) courses ...................................................... 51
Special Education (EDSPE) courses .................................................................. 52
Other Programs of Interest to Educators ......................................................... 50

## Center for Multicultural Education

The Center for Multicultural Education in the College of Education focuses on research, policy, and services that respond creatively to the challenges and opportunities related to ethnic, cultural, and social-class diversity. Several multiethnic education courses are offered this summer including Multiethnic Curriculum and Instruction (EDC\&I 424), Educating the Black Inner-City Child (EDC\&I 469), and Multiethnic Studies: Methods, Content, and Materials (EDC\&I 474). For more information about the center, please call (206) 543-6636.

## Additional information

## For graduate students:

Because of competition for the space that is available, as well as the amount of time required for processing, students who seek admission to graduate programs are encouraged to contact the Office of Graduate Studies and Research, 206 Miller, (206) 543-7833, for application deadlines and program materials.

All graduate students working toward advanced degrees in the College of Education must have their summer class schedules approved by their faculty supervisors.
For complete details concerning graduate study, please refer to the current University of Washington General Catalog.

## For students enrolled in the initial teaching certificate program:

All students enrolled in the College of Education Initial Teaching Certificate Program must obtain approval through the Teacher Education Advising and Certification Office, 211 Miller, 543-1820, before registering for courses. For complete details concerning the teacher certification program, please refer to the current University of Washington General Catalog.

## Continued from the previous page

vice organization. Approximately 20 hours of participation plus scheduled seminars are required for each credit earned. Participants wishing to utilize the practicum to satisfy, in part, graduate degree requirements should make arrangements with their graduate program adviser and the Assistant Director of Certification prior to registration. Prerequisites: application for assignment and entry code (211 Miller). CR/NC only.

## Courses by special arrangement

Master's Thesis, Doctoral.Dissertation

## Educational Curriculum and Instruction (EDC\&1)

115 Miller Hall, DQ-12
Telephone: 543-1847
EDC\&I offers courses required for and or appropriate for various graduate programs as well as a range of innovative and challenging courses and workshops for the new and the veteran teacher.

## 317-4 Art in Childhood Education

 (3)Provides the general elementary student with a theoretical and practical background for teaching art to children. Prerequisites: ART 109, admission to the Teacher Certification Program, and entry code (Miller 211). Materials fee required.

## 319ヶ4 Music in Childhood Education (3)

Provides the student with a theoretical and practical introductory background to the fundamentals of music and for teaching music to children as a creative process and mode of learning. Prerequisites: MUSIC 200, admission to the Teacher Certification Program, and entry code (Miller 211).

## $424 *$ Mulfiethnic Curriculum and Instruction (3)

June 21-July 2. Designed to help teachers better understand the school's role in the ethnic education of students and acquire the insights, understandings and skills needed to design and implement curricular and instructional strategies that reflect ethnic diversity.

## 425*A Learning Variables of Minority Youth (3)

Designed to equip educators with appropriate skills in effective teaching of culturally and socioeconomically different students. Attention is directed to understanding how these students differ from mainstream youth and what the implications are for instructional strategies in the classroom. No credit is given for students who have completed EDPSY 513.

## 434* Introduction to Computers in the Classroom (3)

An overview of the uses of computers in education. Emphasizes the uses of computers in instruction, classroom management (grade-books, utili-
ties, etc.), evaluation of software, overview of programming, and word processing. No prior experience is required. CR/NC only.

## 437- Uses of Computer Application Packages in Schools (3)

Introduction to the instructional and management uses of application programs. Topics may include: data bases, spreadsheets, word processing, graphics packages, graphing utilities, telecommunication, desktop publishing. Emphasis is on K-12 setting. Prerequisites: 434 or equivalent and word processing skills. CR/NC only.
453A Teaching the Bilingual/Bicultural Student (3)
Educational needs of bilingual students: research findings, special programs, materials, and methodologies that bilingual-bicultural education can provide to meet those needs. Cultural combinations of bilingual populations in American culture; historical, social, and linguistic factors affecting their $\mathrm{K}-12$ education.

## 454* Cooperative Learning in the Classroom (3)

June 21-July 5 Theory and research on cooperative learning and current practices of managing such learning. Team learning activities and opportunities to plan and try out lessons and materials using several different strategies. CR/NC only.

## 455 The Language Arts: Instruc-

 tional Problems and Practices in the Elementary School (3)Study of important and recent research in elementary school language arts and consideration of its practical implications for teaching. Prerequisite: teaching experience.

## 456* Workshop in Instructional Improvement: Language Arts (1-6, max. 15)

## A. ESL Reading (3)

Provides reading and lecture material on reading techniques specifically suitable for students with limited English proficiency; focuses on both materials for use with LEP students and appropriate instructional strategies for teachers of LEP students.

## 456A Workshop in Instructional Improvement: Language Arts (1-6, max. 15) <br> B. Multicultural Literature for Students (3)

July 21-August 3 Students read both fiction and nonfiction in developing bibliographies for their classroom teaching. They also use response journals, literature circles, and grade level discussions in planning ways of integrating multicultural literature in the classroom. Recommended: 459A.

## C. Using Computers in Language Arts and Reading (3)

August 4-17 Students review current software and devise practical methods for integrating computers in the classroom.

## 457- Methods in Teaching ESL (3)

Prepares preservice and inservice teachers to teach English as a second language and to meet the educational and linguistic needs of students who have little or no English language skills. Emphasis on a survey of first- and second-language-acquisition research and its educational implications, as well as instructional strategies consistent with the audiolingual, cognitive, and creative construction approaches to second-language learning. Includes diagnostic-prescriptive strategies for classroom application.

## 459* Workshop in Instructional Improvement: Reading (1-6, max. 15) <br> A. Adult Authors of Color: Multicultural Perspectives in the Classroom (3)

June 21-July 5 Adult literature by authors of color are used to develop multicultural perspectives. Especially geared to teachers of K-12 who select literature for use in their classrooms. This course is recommended as a prerequisite for 456 A , Multicultural Literature for Students.

## 460* The Teaching of Reading (3)

Improvement of teaching reading in the elementary school, including comprehension and decoding, reading in the content fields, motivation of voluntary reading and teaching of literature. Prerequisite: teaching experience or prior course work in the teaching of reading.

## 461* Materials for Teaching Reading (3)

July 6-19 Designed to provide acquaintance with materials used in the teaching of reading. Trade books and materials from content areas are examined. Prerequisite: one prior course in the teaching of reading.

## 462* Reading in the Secondary School (3)

Teaching of reading in the secondary schools, including vocabulary development, comprehension, speed reading in the content fields, and organization of reading programs at the secondary level. Prerequisite: teaching experience or concurrent internship, and entry code. (Miller 211).

## 465- Social Studies Education: Elementary School Programs and Practices (3)

Stresses curriculum patterns, instructional procedures, resource materials, and selection of content in social studies. For elementary and junior high school teachers. Prerequisite: teaching experience.

## 466A Social Studies Education: Secondary School Programs and Practices (3)

Stresses curriculum patterns, instructional procedures, resource materials, and a selection of content in social studies for junior and senior high school teachers. Prerequisite: teaching experience.

## 4684 Workshop in Instructional Improvement: Social Studies (1-6, max. 15)

A. Learning with Biographies (2)

July 28-August 5 Examines reading and writing to learn approaches to using biographies in social studies teaching and learning. CR/NC only.

## 469* Educating the Black Inner-City Child (3)

July 9-22 Intensive analysis and review of the research and literature, both theoretical and empirical, relevant to curriculum patterns and programs designed especially for African American students. Special attention to the implications of research reviewed for devising effective teaching strategies for inner-city youth.

## 470* Science Education: Elementary School Programs and Practices (3)

Designed for classroom teachers with reference to the teaching and learning of science from kindergarten through grade six. Emphasis on objectives, methods, and materials, as related to the concepts and processes of science. Prerequisite: teaching experience.

## 471 Science Education: Secondary School Programs and Practices (3)

Survey of the status and potential role of science in education: trends and their implications for the teaching of both biological and physical sciences in the junior and senior high schools; representative curricula and related teaching procedures; the psychology of concept formation and problem solving; organization of science programs. Prerequisite: teaching experience.

## 472A Environmental Education for Teachers (3)

July 22-August 6 Status, selected problems, and role of environmental education in program of elementary, middle, and junior high schools. Opportunity to examine and receive instruction in use of existing environmental education instructional materials. Instruction is in the spirit of inquiry/discovery. Prerequisite: teaching experience.

## 473 Workshop in Instructional Improvement: Science (1-6, max. 15)

A. Pacific Science Center: Environmental Science in an Urban Setting (3)
June 21-July 2 Living things are affected by their environment, while the physical environment is altered by organisms. This workshop uses active participation and hands-on activities to explore themes of environmental education. Activities make use of the unique features of urban settings such as the school yard, parking lot, neighbortood park, playfield, as well as special urban environments of parks, streams, and beaches as location to study and learn. Recommended for teachers of
upper elementary and middle school. A required materials fee of $\$ 15$, payable to Pacific Science Center, will be collected at the first class.

## B. Pacific Science Center: Children's Literafure and Science (3)

July 5-16 Children's fiction provides an excellent opportunity for teachers and students to launch into an investigative study of the scientific concepts introduced by a book's story line. This workshop uses children's literature as the springboard to creative and effective physical, earth, and life science lessons that are appropriate and easily adapted to the curricula of the elementary (K-6) classroom. A required materials fee of $\$ 15$, payable to Pacific Science Center, will be collected at the first class.

## 4734 Workshop in Instructional Improvement: Science (1-6, max. 15) <br> C. Pacific Science Center: Astronomy/Space Science (3)

July 26-August 6 Investigate the phases of the moon, survival on other planets, stars, and constellations in this activity-oriented course.Astronomy concepts are explored using hands-on materials and active participation. Recommended for teachers of upper elementary and middle school, all activities can easily be integrated into an existing astro/space curricula or used to create a new curricula. A required materials fee of $\$ 15$, payable to Pacific Science Center, will be collected at the first class.

## 474- Multi-Ethnic Studies: Methods,

 Content, and Materials (3)July 5-16 Designed to help preservice and inservice teachers identify content and materials and devise methods for implementing ethnic studies programs and for incorporating ethnic content into regular K-12 social studies, language arts, and humanities curricula. Special attention given to teaching about American Indians, Mexican Americans, African Americans, Asian Americans, Puerto Rican Americans, and White ethnic groups.

## 475- Improvement of Teaching: Elementary School Mathematics (3)

Designed for elementary teachers. Emphasis on the contributions of research to the improvement of the teaching of mathematics in the elementary school. Prerequisite: teaching experience.

## 478- Special Topics in Mathematics for Teachers (2-9)

## A. Problem Solving and Communication (3)

Study of selected areas of mathematics with a focus on problem-solving and communication. Designed for the improvement of teaching mathematics.

480* Introduction to Graduate Study in Educational Technology (3)
Introduction to the theoretical and practical aspects of educational technology. Introduces history, conceptual orientation, and research of the field. The practical application of theory and research through the procedures of instructional designand development are also examined.
494* Workshop in Improvement of Curriculum (1-6, max. 15)

## A. Japan Institute for Social and Economic Affairs (4)

Exposure to Japanese culture through lectures, discussions, and site visits. Participants develop instructional materials for teaching about Japan and intercultural understanding. Open only to NCSS/ KEZ41 KOHO fellows.

494』 Workshop in Improvement of Curriculum (1-6, max. 15)
B. Multicultural Global Education: Issues, Concepts, and Strategies (3)

August 9-20 Designed to help practicing teachers and graduate students develop an understanding of the issues and concepts in multicultural education and in global education. Students are helped to understand both the differences and similarities between multicultural and global education. Particular emphasis on teaching strategies and materials.

495A Workshop in. Improvement of Teaching: Selected Topics, Issues or Problems (1-6, max 15)
A. ESL Materials, Assessment, and Instruction (3)
Designed for teachers working with non- and lim-ited-English-proficient students. Emphasis on the selection and adaptation of materials and resources, assessment techniques, and instructional methods for the bilingual/ESL classroom.

## 497* Dealing Effectively with the Disruptive Student (3)

July 5-16 Several approaches to discipline. Using research, theory, and practice, participants develop individual action plans for classroom management, create formats to identify disruptive behavior, and devise means for evaluating the effectiveness of teacher intervention. Prerequisite: student teaching which may be done concurrently.CR/NC only.

## 505A Seminar in Curriculum and Instruction (3)

## A. Multicultural Education: Educating Young Children of Color (3)

July 22-August 4 Designed to help educators attain the concepts, theories, materials, and strategies needed to develop effective programs and practices for young children from different racial, cultural, ethnic, and social class groups. The course

[^14]focuses on early childhood education research and programs for African Americans, Hispanics, Asian Americans, and American Indians. Gender and social class are also examined.

## 530^ Seminar in Analysis of Approaches for Teaching Reading (3)

Designed to aid experienced teachers who possess background in the teaching of reading. This course presents a variety of approaches and actual analysis of approaches. Prerequisites: teaching experience and a basic course in the teaching of reading; entry code (Miller 122).

## 532 Seminar in Research in Reading (3)

Primary focus on those aspects of the reading process that are of concern in a developmental reading program. Emphasis on research design, evaluation of research, and research findings dealing with factors influencing reading ability, problems in skill development, and recreational reading. Includes group and individual analysis of studies with attention to research design and measurement. Prerequisite: entry code (Miller 122).

## 556* Elementary School Curriculum (3)

Study of elementary school curriculum, its design, rationale, and delivery. Current trends and issues affecting elementary school curriculum are analyzed.

## 558 Secondary School Curriculum (3)

Systematic description and analysis of current curriculum practices, with particular emphasis on the factors and forces affecting secondary school curriculum.

## 559* Principles and Procedures of Curriculum Development (3)

Intensive study of the basic principles and procedures utilized in the development of curricula. Prerequisite: teaching practicum or equivalent experience.

## 561. Seminar in Language Arts (3)

Study of recent research in language structure with special attention to research pertaining to the teaching of language skills: auding, speech and written composition. Course work includes group and individual analysis of language arts studies with attention to research design and measurement. Prerequisite: permission of instructor.

## 563- Current Issues in Language Arts Education (3)

Discussion of problems and issues of current interest and importance in language arts education. Prerequisite: 561.

## 565 Seminar in Social Studies Education: Elementary Emphasis (3)

Intensive study of the social studies curriculum, with particular emphasis on current literature and research. Prerequisite: 465 or equivalent.

566* Seminar in Social Studies Educafion: Secondary Emphasis (3)
Intensive study of the social studies curriculum, with particular emphasis on current literature and research. Prerequisite: 466 or equivalent.

## 570 Seminar in Science Education: Elementary Emphasis (3)

Investigation of curriculum and instruction in science, with particular emphasis on current literature and research. Prerequisite: 470 or equivalent. CR/NC only.
571* Seminar in Science Education: Secondary Emphasis (3)
Investigation of curriculum and instruction in science, with particular emphasis on current literature and research. Prerequisite: 471 or equivalent. CR/NC only.
575- Seminar in Mathematics Educafion: Elementary Emphasis (3)
Investigation of curriculum and instruction in mathematics at the elementary-school level; review of research and preparation of proposals. Prerequisite: graduate standing.
576* Seminar in Mathematics Educafion: Secondary Emphasis (3)
Investigation of curriculum and instruction in mathematics at the secondary-school level; review of research and preparation of proposals. Prerequisite: graduate standing:

## 601 Internship (3-9, max. 9)

Recommended for all doctoral candidates preparing for positions as curriculum directors in public school systems. Half-time work in a school district or districts in proximity to the University of Washington for one, two, or three quarters, depending upon the student's previous experience. Supervision by staff members of the College of Education and the appropriate school staff member in charge of curriculum in the selected school district. Prerequisites: 599 and approved plan of study filed in the Office of Educational Curriculum and Instruction, and entry code (Miller 122). CR/NC only.

## Courses by special arrangement

Undergraduate Research, Field Study, Independent Studies in Education, Independent Study or Research

## Educational Leadership and Policy Studies (EDLPS)

M217 Miller Hall, DQ-12
Telephone: 543-1891
Graduate-level studies in K-12 administration, social foundations, organizational and policy analysis, and higher education. M.Ed., Ed.D., Ph.D., and/or K-12 administrative credential programs.

## 479*A Crucial Issues in Education (3)

Examines selected educational issues, policies, and contexts. Includes evolution of the American edu-
cational enterprise, legal issues, professionalism, finance, and other vital educational concerns. Prerequisite: admission to the Teacher Certification Program or permission, and entry code (211 Miller Hall). Term $b$ is repetition of term $a$.

## 505- Transition to Leadership (3)

Development and administration of systems for selection, evaluation, and clinical supervision of certificated and classified personnel. Focuses on leadership models and transition to a leadership role, including opening a school or program and dealing with student/school crises. (Only for students admitted to the EDLPS Principal/Program Administrator Program.)

## 5104 School Finance (3)

Financial practices and problems in districts and schools considered, including state and federal support plans, school plant planning, school business management, resource allocation, and budgeting and educational accountability.

## 519 Special Problems in Educational Leadership (1-3, max, 9)

Readings, lectures, and discussions pertaining to significant topics of special and current interest to educators. Focus is on issues of particular concern to $\mathrm{K}-12$ administrators and other educators in leadership roles in districts and schools.

## A. Creating Schools for All Children (3)

July 19-29 Focuses on the attitudes, behavior, and values of formal and informal school leaders that ensure that equity and excellence exist for every child. Particular emphasis on creating school environments that are more "user-friendly" for minority children. Includes an examination of the instructor's recent findings after a nation-wide visit of over 30 schools regarded as successful for children of color.

## 521 Philosophy of Education (3)

Philosophy of education considered as a study of the conceptual basis for educational policy and practice. Emphasis on relationships between enduring educational problems and fundamental philosophic issues; concepts that feature centrally in educational discourse; and conceptual analysis as a means for clarifying decisions regarding educational policy and practice.

## 530^ History of Educational Thought (3)

An overview of the influence of cultural context on educational theory and practice from classical times to the present.

## 561* Education Policies in Political Context (3)

Systematic consideration of the structure and function of educational policies and problems of research in political context.

## 562* Education and the Law (3)

Examination of court cases associated with the rights of individuals and groups in educational organizations. Attention is given to the understanding of administrative due process requirements and to the growing body of administrative law affecting student and personnel management.

## 564A Seminar in Economics of Education (3)

Current problems in school finance, including costs, ability to support schools, and financial implications of educational principles. The economics of public education. Problems of federal, state, and local school support. Financing capital outlay, research, and public relations.

## 588* Seminar in Administration of Community Colleges (3)

June 21-July 2 For students preparing for administrative positions in community colleges. Principles and practices in organization and administration of community colleges.

## 598* Special Problems in Higher Education (1-3, max. 9) <br> A. Student Services Administration in the Community College Setting (3)

July 6-12 Because they give so much attention to student needs, community colleges also give special attention to the administration of their student services program. This seminar provides a careful analysis of some of the issues facing community college student services administrators today.

## B. The Community College Student (3)

July 13-19 After a brief review of the literature on college students of the past, seminar members focus their attention on the community college students of today. Special attention on the various student characteristics, the various studentsubcultures, students of color, age differences, and other factors that characterize the modern-day community college student.

## 5981 Special Problems in Higher Education (1-3, max. 9) C. Ethics in Higher Education (3)

Intended for graduatestudents interested in higher education, including philosophy of higher education and higher education administration. Although primarily intended for doctoral students, it may be suitable for master's degree students. Introduction to the study of professional ethics, including the philosophical and sociological approaches to developing models of ethical behavior. Proposes and critiques a particular taxonomy of ethical violations by professors. Major ethical dilemmas faced by institutions of higher education in the U.S. are also examined.

## Courses by special arrangement

Independent Study or Research, Intersship
Continued on page 51


## Music education courses

Over 40 courses are offered for music educators this summer, including:

MUSED 200 $\triangle$ Music and the Child
MUSED 496 Special Topics in Music Education:
B. Removing Fear of Improvisation
D. Teaching Piano Basics
L. Creative Music Experiences in the Curriculum
For a complete list of courses, see pages 28-30.

| Intensive language courses |  |
| :--- | :--- |
| Courses are offered in the following languages |  |
| - Arabic | - Kazakh |
| - Chinese | - Kirghiz |
| - Czech | - Korean |
| - French | - Latin |
| - German | - Russian |
| - Greek | - Spanish |
| - Hebrew | - Swahili |
| - Hindi | - Swedish |
| - Italian | - Tajik |
| - Japanese | - Uzbek |

## Advanced Study Program for high school students

The Advanced Study Program allows qualified high school students to enroll in UW courses during the summer. The program is designed for high-achieving students who have completed their high school freshman year by June 15. Each student enrolling for credit establishes a UW transcript. For more information, see page 116.

## Content area courses for educators

Please refer to individual departmental listings for content areas of interest to you. Some special courses include:

AAS 305 Asian American Cultures for Teachers (page 11)

DRAMA 395 Creative Classroom
Computing (page 18)
ENGL $445 \quad$ Colloquium in English for Teachers: Tutoring At-Risk Children (page 21)

GPHYS 480 Special Topics in Geophysics: Earth Sciences for Teachers (page 22)

MATH $170 \quad$ Mathematics for Elementary School Teachers (page 26)

MATH 411 412A Introduction to Modern Algebra for Teachers (page 27)

PHYS 407, 408, 409 Physics for Teachers (page 32 )

SPHSC 449 Special Studies in Speech Pathology and Audiology: Children's Language Disorders: An Overview of Service Delivery (page 39)

SPHSC 581 Management of HearingImpaired Children (page 39)
SPCH 341 Oral Interpretation of Children's Literature (page 40)

SPCH 498 Special Topics in Speech Communication: Oral Interpretation of Plays for Children (page 40)

## Academic Programs for Teachers

The University of Washington's Academic Programs for Teachers (APT) offers a variety of con-tent-area programs exclusively for teachers. The programs address concerns specific to the teaching profession and include follow-up activities which help participants apply what they have learned in their classrooms. The overall goal of APT is to make the resources of the UW, particularly those of the College of Arts and Sciences, more accessible to teachers. Many of the programs are grant-funded or offered for reduced fees. For more information, call (206) 543-2320 and ask for the APT brochure.

## Puget Sound Writing Program

Short intensive summer workshops to improve the teaching of writing for teachers of all subjects and grade levels. Registration for these courses is through UW Extension. You do not have to apply to Summer Quarter to take these courses.

ENGL 444 Special Topics in English for Teachers (3-5, max. 10)
A. Puget Sound Writing Program Institute (9)
B. Puget Sound Literature Program (5)
C. Portfolio Assessment (5)

To request a PSWP brochure, please call (206) 543-2320.

## Independent study

There is no limit to the number of Independent Study by Correspondence credits which may be used for continuing certification and endorsements. For a list of courses, see pages 109-110, or call (206) 543-2350 for a Distance Learning Bulletin.

See the Time Schedule section, pages 68-108, for class dates and times.

# Educational Psychology (EDPSY) 

312 Miller Hall, DQ-12<br>Telephone: 543-6347

The 1993 summer curriculum in educational psychology offers two preservice teacher certification courses (EDPSY 304 and 308), several core courses for college-wide graduate degree programs, and a cluster of special topic courses for teachers, counselors, and school psychologists concerned with advanced training.

For persons interested in self-esteem enhancement in schools, the EDPSY 449 section listed below is especially recommended. Other unique course offerings include the EDPSY 581 and 582 seminars concerning topics of contemporary educational assessment, multicultural counseling, adolescent sexuality, and counseling for the gifted student.

Interested students will also note a variety of additional courses focused on human learning, clinical assessment, case study (for counselor and school psychology certification), and coursework in educational research design and statistical analysis.

## 304 Educational Psychology (5)

Hiuman learning in the educational setting. Cognition, development, learning, motivation, affective processes, and socialization. Emphasis on skills influencing classroom learning and discipline. Prerequisite: entry code ( 211 Miller Hall).
308 Evalúation in Education (3)
Fundamentals of measurement, construction of achievement tests, selection and administration of standardized tests and scales, and evaluation and application of test results. Prerequisite: entry code (211 Miller Hall).

## 449* Laboratory in Educational Psychology (2-6, max. 6) <br> A. Increasing Self-Esteem in the Classroom (3)

July 7-21 Workshop participants experience the Dependable Strengths Articulation Process and learn about using the self-esteem curricula in $\mathrm{K}-12$ settings. Curricula and methods have been developed and evaluated since initial implementation in 1987. CR/NC only.

## 490 Basic Educational Statistics (3)

Measures of central tendency and variability, point and interval estimation, linear correlation, hypothesis testing.

## $501 \Delta$ Human Learning and Educational Practice (3)

Systematic examination of current research about human learning and instructional psychology, including the study of motivation, human abilities, learning, the learning process, and performance assessment. Prerequisite: 304 or equivalent.

## 508 Clinical Supervision-Practicum

 (2-6, max. 12)Practicum in supervising counseling, group counseling, diagnostic activities and remedial reading therapy. Prerequisites: advanced graduate standing and entry code.

## 541 Group Tests in Counseling (5)

Emphasis on the utilization of objective measures in counseling. Prerequisite: 490 or equivalent. Prerequisite: entry code.

## 550 Family Counseling (5)

Introduction to family counseling theory and practice, emphasizing family dynamics and communication analysis. Prerequisite: 544 or permission of instructor.

## 565 Personality Appraisal (5)

Study of personality evaluation with a supervised laboratory emphasizing work with children and their families. Prerequisites: 540, 548, entry code.

## 566* A Case Study Seminar (1)

Integrating theoretical concepts with practice/service issues. Cases selected for discussion represent a wide range of problems and agency settings, including school and child problems. Prerequisite: entry code (312J Miller Hall). CR/NC only.

## 571 Educational Applications of Neuropsychology: Assessment and Intervention (5)

Students observe and administer neuropsychological tests and plan and carry out educational interventions for children with neuropsychological disorders. Content focuses on various neuropsychological disorders for which school psychologists can provide assessment and consultation. Prerequisites: 540 or equivalent course in individual testing and 471 or permission of instructor.

## 581* Seminar in Educational Psychology (1-3, max. 15) <br> A. Confemporary Educational Assessment (2)

Focuses on current trends and issues in large scale assessment programs including: the influence of high stakes tests on educational programs, the movement toward performance based assessment systems, and the relationship between assessment and education restructuring movements. $\mathrm{CR} / \mathrm{NC}$ only.

## B. Counseling the Highly Capable Studenf (2)

Problems, issues and strategies concerning the counseling needs of highly capable students are addressed in the context of current and proposed educational programs. CR/NC only.

## 5814 Seminar in Educational Psychology (1-3, max. 15) <br> C. Mulficulfural Issues in Counseling and Education (3)

Utilizing case studies, home and school experiences of children from diverse cultural backgrounds are examined from a developmental perspective in an attempt to isolate factors leading to satisfactory personality integration. Special reference is made to the problems of students from Third World immigrant families. CR/NC only.

## D. Counseling Chemically Dependent Clients (3)

Designed to provide a theoretical and technical orientation to counselors assisting drug and alcohol ("substance") impaired clients. Focuses on effective strategies with a formative base adapted from the 12 -step program of recovery, based on principles first enumerated in Alcoholics Anonymous. Review and critical analysis of advances in intervention, group counseling, behavioral change, and relapse prevention. This course is designed for school and community agency personnel and is a core course in the accreditation standards for chemical dependency counselors (WAC 275-19).

## 582 Seminar in Development and Socialization (3, max. 15)

A. Adolescent Sexuality and Education (3)
Examination of current trends, issues, and problems associated with the sexual behavior and development of adolescents. Emphasis on the research data base for adolescent sexuality and implications for education and counseling. The impact of sexuality education in secondary schools is also examined. CR/NC only.

## 591 Methods of Educational Research (3)

Introduction to educational research. Primary focus on hypothesis development, experimental design, use of controls, data analysis, and interpretation. Required of candidates for advanced degrees. Prerequisites: 490 and entry code ( 312 Miller Hall).

## 593 Experimental Design and Analysis (5)

Experimental design with emphasis on the analysis of variance. Prerequisites: 490 or equivalent, and 591 or permission of instructor, and entry code.

## 594 Advanced Correlational Techniques (5)

Multivariative analysis, including regression and multiple correlation; matrix algebra; factor analysis. Prerequisite: 490 or equivalent.

## Courses by special arrangement

Undergraduate Research, Field Study, Independent Studies in Education; Independent Study or Research, Internship

## Special Education (EDSPE)

102 Miller Hall, DQ-12<br>Telephone: 543-1827 (V/TDD)

EDSPE courses are designed to meet the needs of both special education professionals and general education teachers who wish to better serve the students with disabilities in their classrooms.

## 404* Exceptional Children (3)

Atypical children studied from the point of view of the classroom teacher.

## 419^ Interventions for Families of Children with Disabilities (3)

Upper-division course for professionals and paraprofessionals working with families of children with disabilities enrolled in special education or inclusive programs.
496 Workshop in Special Education (1-9, max. 15)

## A. Individual Topics (1-6)

Demonstration, observation, and/or participation with groups of children with disabilities in laboratory or controlled classroom settings. Prerequisite: permission of instructor and entry code (102 Miller Hall). CR/NC only.

## 496* Workshop in Special Education (1-9, max. 15)

## B. Techniques of Consultation and Collaboration in Special Education (3)

Focuses on the role of the special educator as consultant or collaborator in inclusive classroom or resource settings. Course content includes specific strategies for providing appropriate services for children with disabilities in general education settings. Cases generated by the class and the instructor are used to illustrate concepts presented.

## C. Inclusion (3)

The goal of this class is to provide students with information regarding the philosophy, instructional strategies, and implementation resources of inclusive education. The questions this class addresses include: What is inclusive education? What are the implications of inclusive education for general and special education teachers? What are some effective instructional strategies for inclusive education? Students analyze and discuss current articles on inclusive education, participate in cooperative learning activities, multi-level teaching role playing, and other instructional strategies.

4964 Workshop in Special Education (1-9, max. 15)
D. Classroom Management (3)

Focuses on positive classroom management techniques and ways of effectively communicating with students, parents, and school-site personnel. Other issues to be explored are teaching social skills and developing a classroom management style.

## 513. Clinical Appraisal of Exceptional Children (3)

Diagnostic instruments used in the clinical appraisal of exceptional children. Theoretical and measurement considerations are used to buttress practical experiences in appraisal related to intervention.

## Courses by special arrangement <br> Field Study, Independent Study or Research, Internship

## College of Engineering

With the exception of Engineering College Courses (ENGR), enrollment in College of Engineering courses during SummerQuarter usually consists of continuing University of Washington students who have been accepted into an engineering degree program. However, other students are encouraged to contact the departmental offices for possible registration on a space-available basis. Students seeking to enter an engineering degree program should consult the appropriate departmental office; each major program has its own admission policies, procedures, and admission closing dates.

## Aeronautics and <br> Astronautics (A A)

206 Guggenheim Hall, FS-10
Telephone: 543-1950

## Courses by special arrangement

Special Projects, Independent Study or Research, Master's Thesis, Doctoral Dissertation

## Chemical Engineering (CH E)

105 Benson Hall, BF-10
Telephone: 543-2250

## Courses by special arrangement

Undergraduate Research, Independent Study or Research, Master's Thesis, Doctoral Dissertation

## Civil Engineering

201 More Hall, FX-10
Telephone: 543-2390
Civil Engineering courses are classified as:

- Civil Engineering Core Courses
- Structural and Geotechnical Engineering and Mechanics
- Transportation, Surveying, and Construction Engineering
- Environmental Engineering and Science


## Civil Engineering Core Courses (CIVE)

Courses by special arrangement<br>Master's Thesis, Doctoral Dissertation

## Structural and Geotechnical Engineering and Mechanics (CESM)

## 380 Elementary Structures II (3)

Classification and idealization of structures. Theorem of virtual work. Unit load method of beams, frames, and trusses. Matrix formulation of theorem of virtual work. Force method for statically determinate and indeterminate method. Moment distribution for beams and frames including sway analysis. Prerequisite: 379, civil engineering student status, or permission of instructor.

## 499 Special Projects: Structures, Geotechnical and Mechanics (1-5, max. 6)

Individual undergraduate research projects. Maximum of six credits allowed toward an undergraduate degree. Prerequisite: entry code.
599 Special Topics-Structures and Mechanics (2-5, max. 15)
Prerequisite: entry code.
Course by special arrangement
Independent Study or Research

## Transportation, Surveying, and Construction Engineering (CETS)

## 400 Computer-Aided Design (3)

Review and evaluation of computer-aided design hardware, software, and applications in civil engineering. Use of interactive graphic software to solve complex, multiobjective design problems. Prerequisite: ENGR 123 or equivalent.
407 Contracts and Specifications (3) Construction industry, forms or organizations, real property laws, and bidding procedures. Basic elements of contracts, types of specifications, general conditions of standard construction contracts, le-
gal disputes related to construction contract provisions, surety bonds, and construction insurance. Prerequisite: 306 or permission of instructor.

## 499 Special Projects: Transportation, Construction, and Geometronics (1-5, max. 6)

Individual undergraduate research projects. Maximum of six credits allowed toward an undergraduate degree. Prerequisite: entry code.

## 599 Special Topics: Transportation, Construction, and Geometronics (2-5, max. 15)

Prerequisite: permission of instructor and department chairperson.
Course by special arrangement
Independent Study or Research

## Environmental Engineering and Science (CEWA)

499 Special Projects: Water and Air Resources (1-5, max. 6)
Individual undergraduateresearch projects. Maximum of six credits allowed toward an undergraduate degree. Prerequisite: entry code.

## 599 Special Topics: Water and Air Resources (2-5, max. 15)

Prerequisite: permission of instructor and department chairperson.
Course by special arrangement
Independent Study or Research

## Computer Science and Engineering (CSE)

114 Sieg Hall, FR-35
Telephone: 543-1695
142 Computer Programming I (4) P
Computer programming in a high-level language. Emphasizes algorithmics (variables, expressions, statements); abstraction (data types, subprograms, packages, generics); analysis (correctness, efficiency, numerics). Program design analysis: specification, coding, documentation, testing, debugging, evaluation (mostly in Ada, including FORTRAN). Using software tools. Joint with ENGR 142.

## 143 Computer Programming II (5)

Continuation of CSE/ENGR 142. New topics include analyzing algorithms; using/writing standard software components (queues, stacks, and tables) implemented by private types, generic packages, and dynamic data structures (lists and trees); recursive data- and control-structures. The last two weeks survey topics in computer science. Prerequisites: 142 or ENGR 142.

## Courses by special arrangement

Special Project, Reading and Research, Independent Study or Research, Master's Thesis, Doctoral Dissertation

## Electrical Engineering (E E)

215 Electrical Engineering Building, FT-10
Telephone: 543-2142

## 306 Elements of Electrical Engineering (3-5)

An introductory course for non-electrical engineering majors, covering circuit analysis, electronic devices, and rotation machinery. The three-credit portion covers circuit analysis and electronics; the four-credit portion contains two laboratories to introduce electronic instrumentation and device operation. The five-credit portion covers machinery with additional laboratory. Prerequisites: PHYS 122 and MATH 126. Mechanical Engineering majors only.

## 312 Electrophysics Laboratory (2)

One three-hour laboratory period each week; experiments on solid-state devices, properties of materials, generation and guiding of electromagnetic waves. Prerequisites: 310,381 , and 383 (may be taken concurrently). Electrical and computer engineering majors only. Nonmajors need departmental permission.

## 331 Devices and Circuits I (5)

Fundamentals of electrons and holes in semiconductors; physical processes of drift, diffusion, recombination; structure, characteristics of pn-junction diodes; use and analysis of junction diodes in nonlinear circuit applications; structure, characteristics of field-effect transistors; use and analysis of field-effect transistors in nonlinear circuit applications. Weekly laboratory. Prerequisite: ENGR 233.

## 356 Electronics II: Analog Integrated Circuits (4)

Analog integrated circuit technology, inputstages, bipolar and FET, current sources, output stages, frequency response, feedback fundamentals and stability analysis, applications. Includes weekly laboratory. Prerequisites: 333, 355; 310 recommended. Electrical and computer engineering majors only. Nonmajors need departmental permission.

## 372 Introduction to Microprocessor Systems (4)

Utilizing microprocessors, digital computer studied at assembly language level with emphasis on concepts of central processor architecture, memory organization, input/output, and interrupts. Assembly language programming concepts applied to solution of various laboratory problems. Prerequisites: 370, ENGR 142 and ENGR 275.

## 433 Analog Circuit Design (5)

Design of analog circuits and systems applying modern integrated circuit technology: operational
amplifiers, differential amplifiers, active filters, voltage references and regulators. Prerequisite: 356.

## 446 Control System Analysis I (4)

Linear servomechanism theory and design principles. Pole-zero analysis, stability of feedback systems by root-locus and real-frequency response methods. Design methods of Bode and Nichols. Introduction to advanced topics in automatic control theory. Prerequisite: 335, ENGR 230 recommended. Electrical and computer engineering majors only. Nonmajors need departmental permission.

## 499 Special Projects (2-5, max. 10)

 Assigned construction or design projects carried out under the supervision of the instructor. Prerequisite: permission of department.
## 505 Introduction to Probability and Random Processes (4)

Foundations for the engineering analysis of random processes; set theoretic fundamentals, basic axioms of probability models, conditional probabilities and independence, discrete and continuous random variables, multiple random variables, sequences of random variables, limit theorems, models of stochastic processes, noise, stationarity and ergodicity, Gaussian processes, power spectral densities. Prerequisite: graduate standing.

## 599 Selected Topics in Electrical Engineering (*)

Prerequisite: permission of instructor.
Courses by special arrangement
Independent Study or Research, Master's Thesis, Doctoral Dissertation

## Engineering (College Courses) (ENGR)

## 356 Loew Hall, FH-10

Telephone: 543-8590

## 123 Introduction to Engineering Graphics (4)

Freehand sketching, lettering, scales, use of instruments, layout drawings, orthogonal projection, descriptive geometry, pictorials, and basic dimensioning. Communicating technical information in engineering design and research. Introduction to computer-aided design drafting.

## 142 Computer Programming for <br> Engineers and Scientists I (4) P

Computer programming in a high-level language. Emphasizes algorithmics (variables, expressions, statements); abstraction (data types, subprograms, packages, generics); analysis (correctness, efficiency, numerics). Program design analysis: specification, coding, documentation, testing, debugging, evaluation (mostly in Ada, including FORTRAN). Using software tools. Joint with CSE 142.

## 170 Fundamentals of Materials Science (4)

Elementary principles underlying the structure and properties of materials utilized in the practice of engineering. The properties of inorganic and organic materials are related to atomic, molecular, and crystalline structure. Metals, ceramics, multiphase systems, and natural and synthetic polymeric materials are included. Mechanical stress, electromagneticfields, irradiation, and thermal and chemical changes are considered with respect to their influences on mechanical, electrical , and chemical properties. For advanced freshmen and sophomores. Prerequisite: CHEM 150 or permission of adviser.

## 199 Special Projects (1-3, max. 3)

Students propose problems to solve to an engineering faculty member. The problems may be selected from the student's own experiences and interests, from the interest of the faculty member, or from other sources, such as faculty or graduate students doing research projects, or from personnel in the physical medicine area, occupational therapy, hospital, industry, government, etc. Corroboration by an engineering faculty member is required. Project suggestions are available. Prerequisite: entry code.

## 210 Engineering Statics (4)

Principles of statics, basic concepts, parallelogram law, Newton's law, resultants, force-couple relationships, equilibrium diagrams, equilibrium analysis, three-dimensional structures, two-dimensional frames, trusses, beams, and friction. Vector algebra used throughout the course. Prerequisites: MATH 126 and PHYS 121; graphics background recommended.

## 220 Introduction to Mechanics of Materials (4)

Introduction to the concepts of stress, deformation, and strain in solid materials. Development of basic relationships between loads on structural and machine elements such as rods, shafts, and beams, and the stresses, deflections, and load carrying capacity of these elements under tension, compres sion, torsion, bending, and shear forces, or combinations thereof. Prerequisite: 210.

## 230 Kinematics and Dynamics (4)

Kinematics of particles, systems of particles, and rigid bodies; moving reference frames; kinetics of particles, systems of particles, and rigid bodies; equilibrium, energy, linear momentum, angular momentum, Euler equations, and special problems (e.g., central force motion, vibration). Prerequisite: 210.

## 231 Introduction to Technical Writing (3)

Principles of organizing, developing, and writing technical information. Report forms and rhetorical patterns common to scientific and technical disciplines. Technical writing conventions such as headings, illustrations, style, and tone. Numerous
written assignments required. Required for all engineering majors. Prerequisite: one5-credit composition course.

## 260 Thermodynamics (4)

Introduction to basic principles of thermodynamics from a predominantly macroscopic point of view. Development of the basic laws of thermodynamics, together with their illustration by application to energy transformations and state changes in engineering problems. Prerequisites: MATH 126, PHYS 121, and CHEM 140.

## 322 Engineering Cooperative Education Postwork Seminar (1-5, max. 16)

Prerequisite: entry code (Loew 353). CR/NC only.

## 333 Advanced Technical Writing and Oral Presentation (4)

Emphasis on the presentation of technical information to various audiences. Style of writing required for proposals, reports, and journal articles. Oral presentation principles, including use of visuals, as well as organizing and presenting an effective talk. Prerequisite: 231.

## 341 Computer Applications of Numerical Methods (3)

Development and application of numerical methods to solve problems in engineering. Simultaneous equations, curve fitting, root-finding algorithms, Taylor series analysis, numerical integration, ordinary differential equations. Joint with AMATH 341 . Prerequisites: 141 or equivalent and MATH 307 which may be taken concurrently.

## 498 Special Topics in Engineering (1-5, max. 6)

Prerequisite: entry code (Loew 356)

## 499 Special Projects in Engineering (1-3, max. 6)

Prerequisite: entry code (Loew 356)

## Materials Science and Engineering (MSE)

302 Roberts Hall, FB-10
Telephone: 543-2600

## 553 Vacuum Sciences and Technology (3)

Fundamental theory and gas kinetics and treatment of gas flow, working principles of vacuum pumps and gauges, characteristics required of the vacuum components, material selection, fundamentals essential to vacuum system design. Covers both fundamental and practical aspects of modern vacuum science and technology.

## Courses by special arrangement <br> Special Projects, Independent Study, Master's Thesis, Doctoral Dissertation <br> Mechanical Engineering (ME)

143 Mechanical Engineering Building, FU-10 Telephone: 685-0908

## 304 Manufacturing Processes (3)

Study of manufacturing processes, including interrelationships between the properties of the material, the manufacturing process, and the design of component parts. Prerequisite: 343.

## 333 Introduction to Fluid Mechanics (4)

Introduction to the basic fluid laws and their application. Conservation equations, dynamic similarity, potential flow, boundary layer concept, effects of friction, compressible flow, fluid machinery, measurement techniques. Prerequisites: ENGR 260, МАТН 307.

## 353 Machine Design Analysis (4)

Analysis, design, and selection of mechanical subsystems and elements, such as gears, linkages, cams, and bearings. Prerequisites: 343,352 .

## 395 Introduction to Mechanical Design (4)

Design process and methodology; decision making; optimization techniques; project planning; engineering economics; probabilistic and statistical aspects of mechanical design; ethical and legal issues. Prerequisites: 352, 373, ENGR 123, ENGR 260, ENGR 315.

## 434 Advanced Mechanical Engineering Laboratory (3)

Introduction to engineering measurement problems and techniques including interpretation of experimental data based upon the theories of probability and statistics. Experiments in all areas of mechanical engineering using single-component and multicomponent systems. Prerequisites: 323, 331, 333, 343, 374, and ENGR 315.

## 469 Applications of Dynamics in Engineering (4)

Application of principles of dynamics to selected engineering problems, such as suspension systems, gyroscopes, electromechanical devices. Includes introduction to energy methods, Hamilton's principle and Lagrange's equations and design of dynamic systems. Prerequisites:374,ENGR 230, or permission of instructor.

## Courses by special arrangement

Special Projects, Independent Study or Research, Master's Thesis, Doctoral Dissertation

[^15]
# Nuclear Engineering <br> (NUC E) 

303 Benson Hall, BF-20
Telephone: 543-2754

## Courses by special arrangement <br> Undergraduate Research Projects, Independent Study or Research, Master's Thesis, Doctoral Dissertation

Technical Communication (TC)
14 Loew Hall, FH-40
Telephone: 543-2567

## 495 Professional Practice

(3-5, max. 10)
Supervised internship in a working publications organization approved by the faculty adviser. A minimum of one internship is required of students taking an interdisciplinary degree in technical communication. Prerequisite: 3.0 average in required TC courses, or permission of TC Admissions and Academic Standards Committee. CR/ NC only.

## Courses by special arrangement

Special Projects, Independent Study or Research, Master's Thesis

## College of Forest Resources

116 Anderson Hall, AR-10,
Telephone: 543-7081.
Three scheduled courses, intern, tutorial, research, and thesis courses are offered; all except FRM 350, FRM 400, and UHF 331 require an entry code. Tutorial study is designed to meet the individual requirements of undergraduate and graduate students and may include literature review and field and laboratory work; consult the Time Schedule section in this bulletin for a complete listing of tutorial courses.

## Forest Resources <br> Management (FRM)

107F Anderson Hall
Telephone: 543-9695

[^16]internship in forest management in broad aspects Prerequisites: completion of Pack Forest, instructor's permission, and entry code.

## 3504 Wildlife Biology and Conservation (3) D

Wildlife ecology and population biology, and interrelationships between wild animals and humans, including encouragement of wildlife population growth and productivity, control of pest populations, and preservation of endangered species, with emphasis on forest environments and forest faunas. Open to nonmajors. Prerequisite: junior standing.

## 400 Forestry in Washington (5)

Examines the components of contemporary forestry practices and issues and their importance to the economy and quality of life in Washington state. For education majors, selected lab sessions provide hands-on experience for classrooms K-12 using the Project Learning Tree activity guides. One all-day field trip. Prerequisites: seniors or gradu-ate-level students.

## Courses by special arrangement

Undergraduate Studies, Graduate Studies, Independent Study or Research, Internship, Master's Thesis, Doctoral Dissertation

## Forest Products and Engineering (FPE)

107F Anderson Hall
Telephone: 543-9695

## Courses by special arrangement

Undergraduate Studies, Graduate Studies, Independent Study or Research, Master's Thesis, Doctoral Dissertation

## Urban Horticulture (UHF)

107F Anderson Hall
Telephone: 543-9695

## 331* Landscape Plant Recognition (3)

Field recognition of important groups of woody and herbaceous landscape plants emphasizing diversity at the genus and family levels. Cultivated plant nomenclature. Plant descriptive character evident in the field with eye and hand lens. Hardiness and landscape applications. Joint with BOT 331. Recommended: BOT 113.

## 601 Internship (3-9)

Internship required of students in Master of Forest Resources program in Urban Horticulture. Independent work in collaboration with faculty, Ar boretum staff, and/or sponsoring institutions. Prerequisite: permission of graduate program adviser and entry code.

## Courses by special arrangement

Graduate Studies, Independent Study or Research, Master's Thesis, Doctoral Dissertation

# Interdisciplinary Graduate Degree Programs 

Individual Ph.D. Program (IPHD)

201 Administration Building, AG-10
Telephone: 543-5900

## Courses by special arrangement

Independent Study or Research, Doctoral Dissertation

## Physiology Psychology (P PSY)

G424 Health Sciences, SJ-40
Telephone: 685-0519

## Course by special arrangement <br> Doctoral Dissertation

# Interschool or Intercollege Programs 

## Bioengineering (BIOEN)

309 Harris Hydraulics Laboratory, WD-12
Telephone: 685-2000

## Courses by special arrangement

Special Projects, Special Topics in Bioengineering, Independent Study or Research, Master's Thesis, Doctoral Dissertation

## Quantitative Science (Q SCI)

3737 15th Ave. NE, HR-20
Telephone: 543-1191

## 291 Analysis for Biologists (4)

Calculus for biologists. Differentiation and integration of single-and multiple-parameter models are presented using examples from biology and ecology. Both numerical and analytic techniques in the analysis of problems are presented.

## 381 Introduction to Probability and Statistics (5)

Anintroduction to elementary probability and statistics with an emphasis on biological applications. Elementary concepts of probability include random variables, discrete and continuous distribu-
tions, expectation, and variance. Inferential statistics include graphical methods, point and interval estimation, and basic concepts of hypothesis testing. Introduction to computers and the MINITAB statistical software package. Prerequisite: MATH 105 or equivalent.

## 482 Statistical Inference in Applied Research (5)

Statistics for biologists. Parametric and nonparametric methods for analyzing biological and ecological data are presented. Applications include one, two, and multiple sample comparisons using $t$-tests and analysis of variance procedures. Design of ecological studies and experiments is emphasized, including sample size and power calculations. Prerequisite: 381 or permission of instructor.

## 502 Statistical Consulting for the Life Sciences (1-4)

## 599 Research in Quantitative Resource Management (*, max. 12)

## School of Law

316 Condon Hall, JB-20
Telephone: 543-0453
The program for summer 1993 is directed primarily to non-law students in the belief that theSchool of Law can contribufe to the cultural and professional education of people whose interests and needs include some knowledge of the law and the legal system. Students may also find that the course Introduction to Law (LAW 300) will arouse their interest in attending law school in the future.

The School of Law also makes some of the summer 1993 offerings available to matriculated law students in the belief that these courses enrich their professional training. Courses depart from mainstream practice-oriented courses and may require something extra of the law-student members of the class such as research and a paper on a particular aspect of the course. These courses are in addition to the externships available to University of Washington law students.

The Summer Quarter may be used by matriculated law students as one of the nine necessary resident quarters if special permission is given by the Associate Dean of the School of Law. It is necessary to earn at least 12 credits to qualify any quarter as a resident quarter. Normally 15 credits constitute a full quarter load.
Students in good standing at other law schools may enroll in the University of Washington summer law courses, with the exception of the externships and the tutorial, and arrange to trans-
fer these credits to the colleges or universities from which they expect to receive their degrees.

Students matriculated in the School of Law may register for Summer Quarter 1993 courses through the Law School's StudentServices Office. Enrollment by students matriculated in degree programs in other law schools is initiated by application available at the Office of the Director of Admissions, School of Law, University of Washington, 316 Condon Hall, JB-20, Seattle, Washington 98195 , and returned to that office no later than June 12, 1993.

Non-law students matriculated at the University of Washington enroll through regular University of Washington registration. Other individuals, including non-law students matriculated at other schools or colleges, should complete the enclosed Summer Quarter 1993 application form.

Check with the School of Law or other university departments for departmental cross-listings of these courses.

## 300-A Introduction to Law (3-6, max. 6)

Understanding the legal system, its functions in the socio-economic order, legal reasoning, and the world of legal education and the legal profession. Taught by law professors and open to non-law students only. Students can take term $a$, term $b$, or both. Taught with OE 200.

## 404/B504A Low of Professional Misconduct (3)

Explores how the law defines acceptablestandards of professional care and how it remedies injuries caused by departure from such standards. Focuses on the duties of such diverse professionals as doctors, lawyers, counsellors, accountants, financial advisors, engineers, architects, educators, and other specialists. Also explores the limitations on the law's effectiveness in addressing the problem of professional misconduct and persistent questions such as the problem of defining mutual expectations. Open to law and non-law students.

## 427/A527• Environmental Law (3)

Asurvey of environmental issues developed in the context of pollution control. Basic environmental law issues are presented, including the National Environmental Protection Act, the Clean Water Act, the Clean Air Act, and hazardous wastes. Emphasis is on procedural and administrative issues common to pollution control regulations. Contemporary environmental issues such as biodiversity and endangered species questions are also explored. Open to law and non-law students.

## 442 Land Low and Urban Environment (3)

Examination of the major legal tools available to shape the urban environment by controlling the use of land. Considers zoning, subdivision controls, urban renewal, private land-use restrictions,
and the rules of nuisance law. Open to law and non-law students. CR/NC only.

## 476/A576A International Economic Relations and Trade Policy (3)

Considers the international control of national trade policies and the permissible transnational reach of national trade or other regulation. The General Agreement on Tariffs and Trade and the international monetary system are examined both from a legal and an economic perspective. The effectiveness of other safeguards against unfair or retaliatory trade practices are also considered. Prescriptive jurisdiction is examined and compared to the parallel body of public international law. Open to law and non-law students.

## Courses by special arrangement

Independent Study or Research, Extermships, Doctoral Dissertation

## Graduate School of Library and Information Science

Access to information is increasingly essential in all aspects of an individual's personal and professional endeavors. Career opportunities in the information profession are becoming more interesting, challenging, and diverse as the uses of technology expand. The Master of Librarianship program is a 63 -credit course of study which prepares professionals in library and information science. A number of courses are scheduled during Summer Quarter for students in the degree program, and courses are also planned for professional librarians to assist them in keeping up-to-date on developments in professional practice and informed about new ideas in the field.

Visiting faculty of special interest this summer include Martha Dragich, Assistant Chief, Legal Research and Library Services Branch, Administrative Offices of the United States Courts, Washington, D.C.; Nancy Gershenfeld, Technical Services Librarian, Microsoft Information Services, Redmond, WA; Dr. Charles Meadow, Associate Dean, Faculty of Library and Information Science, University of Toronto; Dr. Herman Totten, Associate Dean and Regents Professor, School of Library and Information Science, North Texas State University, Denton; and Dr. Herbert White, Distinguished Professor, School of Library and Information Science, Indiana University, Bloomington.

Students in other programs are encouraged to enroll in these courses.

## See the Time Schedule section, pages 68-108, for class dates and times.

## Library and Information Science (LIBR)

133 Suzzallo Library, FM-30
Telephone: 543-1794
498 Special Topics (1-5, max. 15)

## A. Special Libraries and Informafion Cenfers (3)

June 21-July 2 Examination of special libraries in an industrial, governmental, or other institutional context. Elements peculiar to the environment are examined in such decision-making areas as objectives,staffing, budget, servicefunctions, and evaluation, with emphasis on the specialized nature of both user services and management interactions. CR/NC only,

## B. Automation in Libraries (3)

July 8-21 Survey of major computer-based resources available for integrated library systems. Emphasizes techniques for assessing automation requirements, surveying products, negotiating with vendors and preparing for new system installation. Prerequisites: 502 and 503 , or permission of instructor. CR/NC only.

## 498А Special Topics (1-5, max. 15) <br> C. Text-based Information Systems (3)

July 26-August 6 Investigation of the conventions, capabilities, and limitations of information retrieval systems. Internal organization of database searching systems, design of methods for translating natural language queries to database conventions, file navigation strategies, and evaluation of retrieval system performance. Prerequisites: a modest understanding of the conventions of online database searching, algebra, and any programming language. No programming will be required. CR/NC only.

## D. Multicultural Library Services (3)

August 9-20 Objectives are to develop an awareness of the primary issues in providing library services in a multicultural society, to acquire familiarity with the materials and methods of value in serving the various groups, and to develop an awareness of the needs and cultural milieu of these multicultural communities. Recommended for students interested in bibliographic access to sources of information about multicultural library resources and services, as well as working reference librarians in school, public, special, and academic libraries. CR/NC only.

## 5014 Bibliographic Control (4)

July 22-August 20 Survey of the major types of instruments for the bibliographic control of the various kinds of library materials and of the conventions used in describing them. Basic concepts, historical background, and theoretical and practical aspects of bibliographic control; evaluation and methodology. Prerequisite: major standing or permission of instructor.

503- Bibliographic Data Bases (4)
June 21-July 21 Concepts and conventions of bibliographic record structure, file organization, and search protocols. Elementary techniques in the use of bibliographic utilities and on-line search services. Prerequisite: major standing or permission of instructor.

## 5474 Evaluation and Selection of Audiovisual Materials (3)

August 9-20 Develops competency in applying criteria to the evaluation, selection, and use of audiovisual materials and their accompanying technologies. Focuses on previewing the full range of audiovisual formats found in all types of libraries.

## 577- Law Library Administration (4)

June 21-July 7 Study of administration in law libraries, including organization, personnel and management issues (interviewing, hiring, firing), communications, library planning, and bookkeeping. Prerequisite: 544 or permission of instructor. CR/NC only.

## 590 Directed Field Work (4)

Professionally supervised field work in library or professional information agency. Prerequisites: 33 credits in Master of Librarianship degree program. CR/NC only.

## Courses by special arrangement

Independent Study or Research, Master's Thesis

## School of Medicine

The School of Medicine provides instruction for medical students, interns, and residents. Through various programs within the School of Medicine some instruction is also provided for practicing physicians and qualified students in other schools and colleges. Further information can be obtained from the School of Medicine, (206) 543-5560.
In general, the following courses are open to all qualified students by arrangement with the department or the Office of the Dean for Academic Affairs.

Medical students and others needing a complete listing of School of Medicine summer courses should consult the Time Schedule section of this bulletin.

## Medical History and Ethics (MHE)

A204 Health Sciences Center, SB-20
Telephone: 543-5447

## Courses by special arrangement

Undergraduate Thesis, Undergraduate Research, Clinical Ethics Practicum, Independent Study or Research, Master's Thesis

## Microbiology

See course listings under College of Arts and Sciences, page 27.

## Pathology (PATH)

C516 Health Sciences Center, SM-30
Telephone: 543-1140

## 507 Cellular Pathology (2)

Emphasis on application of recent developments and techniques in biology to problems of pathology. Series of lectures by eminent visiting scientists with expertise in the area being discussed. May be repeated for credit. Prerequisite: permission of instructor. CR/NC only.

## 551 Experimental and Molecular Pathology (2-5, max. 20)

Prerequisite: entry code. May be repeated for credit. CR/NC only.

## 679P Pathology Summer Clerkship (', max. 24)

Clerkship designed for the summer following students' first year. Several sites available. Prerequisite: completion of first year and permission.

## 680P Diagnostic Pathology Clerkship, UH ( ${ }^{*}$, max. 24)

Clerkship offers equal time to autopsy and surgical pathology services. Students are intimately involved in working out diagnostic problems. Prerequisite: permission.

## 681 P Diagnostic Pathology Clerkship, HMC (*, max. 24)

Clerkship offers both surgical and autopsy examinations and provides crytologic interpretations of specimens. Emphasis on gross autopsy observation and clinical pathologic correlation. Microscopic slides are reviewed and reports are completed by the clerk. Prerequisite: permission.

## 682P Diagnostic Pathology Clerkship, VA (", max. 24)

Autopsy and surgical pathology experiences available, with emphasis on surgical pathology. Students also solve diagnostic problems in surgical pathology with frequent use of immuno, crytochemistry, and electron microscopy. Prerequisite: permission.

## 687P Diagnostic Pathology Clerk-

 ship-Children's Hospital and Medical Center (*, max. 24)For description and prerequisite, see 680P.
688P Diagnostic Pathology Clerkship-Madigan Army Medical Center (', max. 24)
For description and prerequisite, see 680P.

## 689P Diagnostic Pathology <br> Clerkship-Valley Medical <br> Center ( ${ }^{*}$, max. 24)

For description and prerequisite, see 680P.

## 690P Diagnostic Pathology Clerkship-Northwest Medical Center (*, max. 24)

For description and prerequisite, see 680P.

## 691P Diagnostic Pathology Clerkship-General Hospital of Everett ( ${ }^{*}$, max. 24)

For description and prerequisite, see 680P.

## 692P Diagnostic Pathology Clerkship-Group Health Cooperative ( ${ }^{*}$, max. 24)

For description and prerequisite, see 680P.
Courses by special arrangement
Undergraduate Thesis, Undergraduate Research, Independent Research

## Physiology and Biophysics (P BIO)

G424 Health Sciences Center, SJ-40
Telephone: 543-0950

## 508 Introduction to Laboratory Research in Physiology (2-5)

Students participate in the performance of ongoing projects in designated research laboratories. Emphasis is on experimental design, methodology and techniques. For first- and second-year graduate students in physiology and biophysics and physiology-psychology to provide a basis for future independent research. Student presentations are given early in the next quarter. Prerequisite: entry code.

## 520 Physiology Seminar (*)

May be repeated for credit. Selected topics in physiology. Prerequisite: entry code.

## 521 Biophysics Seminar (*)

May be repeated for credit. Selected topics in biophysics. Prerequisite: entry code.

## 522 Selected Topics in Respiratory Physiology (1-3)

May be repeated for credit. Advanced seminar on selected topics including pulmonary mechanics, gas exchange, lung fluid balance and circulation, control of respiration. Prerequisite: instructor permission and entry code.

## 527 Reading in Advanced Physiology and Biophysics (*)

May be repeated for credit. Guided study of the experimental literature of physiology and biophysics. Essays are written and discussed with staff. Emphasis on critical analysis, accuracy of expression, bibliographical technique, and other factors of good scholarship. Prerequisite: entry code.

## Courses by special arrangement

Undergraduate Thesis, Undergraduate Research, Independent Study or Research, Master's Thesis, Doctoral Dissertation

## School of Nursing

T303 Health Sciences Center, SC-72
Undergraduate Program, 543-8735
Graduate Programs, 543-4152
During summer the School of Nursing offers independent study opportunities for undergraduate students, and graduate courses at the master's and doctorate levels.

For more information, write to the School of Nursing at T303 Health Sciences Center, SC-72, or call (206) 543-8735 for information on undergraduate programs and (206) 543-4152 for information on graduate programs.

## Nursing Science (NURS)

## 573 Advanced Field Study in Family Nursing (2-9)

Advanced practice development in direct care, consultation, and/or coordination with individual families or groups of families across the life span. Opportunities provided to strengthen interpersonal therapeutic process skills, family nursing approaches relevant to family health promotion, problematic family health patterns. Prerequisites: concurrent registration in 574; recommended: 571. CR/NC only.

## 574 Family Nursing Therapeutics: A Systems Perspective (3)

Family models and research evaluated for relevance to advanced nursing practice and the family as a system. The interrelatedness of the individual, family, and social and health contexts examined. Experiential learning labs with family case analyses enhance knowledge and therapeutic skills. Prerequisite: permission of instructor.

## 590* Special Topics in Nursing Research (2-3, max. 9)

Examination of a specific research method, with evaluation of appropriateness, efficiency, rigor of measurement, and potential for interference for
nursing research. Prerequisites: minimum of five credits of basic nursing research methodology at graduate level and permission of instructor.

## A. Nursing Interventions: Research Design and Methods (3)

## 590 Special Topics in Nursing

Research (2-3, max. 9)
Examination of a specific research method, with evaluation of appropriateness, efficiency, rigor of measurement, and potential for interference for nursing research. Prerequisites: minimum of five credits of basic nursing research methodology at graduate level and permission of instructor.

## B. Physiological Measurement (3)

598 Special Projects (1-12, max. 12)
Special projects course to fulfill the requirements of the non-thesis option for Master's in Nursing students. May be repeated until the project is completed. Projects involve scholarly inquiry with indepth focused analysis culminating in a written product/report for dissemination. Prerequisites: 520 and 521 or permission of instructor.
599 Selected Readings in Nursing Science (1-3, max. 18)
Analysis or synthesis of selected readings with faculty mentor. Prerequisite: permission of instructor.

## Course by special arrangement Doctoral Dissertation

## Community Health Care Systems (CHCS)

## 514 Seminar in Home Care for Chronic IIIness (3)

Home-care services as component of community health nursing. Understanding effects of direct nursing functions on care of chronically ill persons and their families. Selected field study experiences in community health settings. Prerequisites: 550, graduate standing, and permission of instructor.

## 574 Selected Topics in Comparative

 Nursing Care Systems(2 or 3, max. 10)
In-depth examination of the literature pertinent to major theoretical issues in cross-cultural nursing and health-care systems. Seminar with analysis and discussion of selected topics and reading. Implications for research and health care stressed. Prerequisite: permission of instructor.

[^17]
## B. Managing Access and Utilization Within Care Systems (3)

## C. Health Promotion in the Community (3)

## 583 Transcultural Nursing Practices (3)

Nursing practices in different cultures. Seminar focus is on theoretical formulations and comparative analysis of values, patterns, techniques, and practices of nursing care in many societies. Rituals, myths, taboos, and beliefs studied in relation to the subculture(s) of caring and nursing practices. Prerequisite: permission of instructor.

## Courses by special arrangement

Undergraduate Research, Independent Study or Research, Master's Thesis

## Parent and Child Nursing (PCN)

## 509 Women's Health: A Nursing Perspective (3)

Critical analysis of contemporary and historical works relevant to nursing care for women across the life span. Synthesis of a holistic view of women's health to guide nursing practice and research. Prerequisite: graduate and senior undergraduate students.

## 512 Advanced Practicum in Perinatal Nursing (2-12)

Clinical seminar and practicum provide opportunities to develop advanced nursing practice competencies in the care of women, parents, children, and/or adolescents. Application of theory and principles to direct care, consultation, education, and/or care coordinator roles with individual and/or groups. CR/NC only.

## 528 Implications of Human Embryology and Genetics for Clinical Practice (3)

Normal development of the human embryo and fetus and principles of human genetics. Alterations in development leading to common anomalies and implications for clinical practice. Prerequisite: graduate standing or permission of instructor.

## 532 Advanced Parent. and Child Nursing: Provision of Healih Services (2)

Focuses on the aggregate of parents and children and their health-care needs. Selected strategies suitable for providing services to groups of parents/children emphasized. Role of the clinical nurse specialist in planning, implementing, and evaluating services. Prerequisites: 530, 531.

## 573 <br> Selected Topics in Parent and Child Nursing (1-6, max. 12)

In-depth examination of the literature pertinent to major theoretical issues in parent and child nursing. Seminar with analysis and discussion of selected topics and readings. Implications for research, prevention, and health care stressed. Prerequisite: permission of instructor.

## 5. Advanced Topics in Women's Health Care (4)

## Courses by special arrangement

Undergraduate Research, Independent Study or Research, Master's Thesis

## Physiological Nursing (PN)

## 504 Nursing Therapies in Critical Continuing Care (3)

Therapeutic modalities commonly employed by nurses to assist patients with a variety of human responses to health problems. Weekly seminars and out of class assignments to encouragestudents to critically analyze current therapies. Prerequisites: 502,503 , or permission of instructor.

## 510 Curriculum Development in Nursing Education (3)

Theoretical rationale for curriculum development, study of curricular problems in nursing in relation to the elements of the curriculum as described in a curricular design. Prerequisite: graduate standing.

## 544 Clinical Physiological Nursing Seminar II (1-10)

Continuation of 541. Guided experience in area of clinical specialization: critical care, cardiovascular, neuroscience, oncology, gerontology, and respiratory. Two hours of class and a minimum of seven hours of guided experience weekly. Prerequisites: 540,541 .

## A. Critical Care <br> B. Cardiovascular <br> C. Gerontology <br> E. Adult/Geriatric Nurse Practitioner

545 Special Topics in Physiological Nursing (3-6, max. 9)
Guided survey of the experimental literature of major topics in physiological nursing. Conducted as a seminar with analysis and discussion of selected topics and readings. Implications for future research and health care emphasized.

## E. Oncology (3)

## Courses by special arrangement <br> Undergraduate Research, Independent Study or Research, Master's Thesis

## Psychosocial Nursing (PSN)

## 505 Selected Topics in Psychosocial Nursing (2-10, max. 10)

In-depth exploration of the major theoretical issues in psychosocial nursing. Seminar with analysis and discussion of selected topics and readings and implications for research and health care.

## C. Biological Intervention (3) <br> J. Memory Theory and lits Implications for Nursing (3)

## 553 Assessment in Psychosocial Nursing (3)

Concepts, methods, and clinical approaches to psychosocial nursing assessment. Basic principles of measurement as they apply to psychosocial nursing assessment diagnosis and intervention. Knowledge synthesized from psychosocial nursing and allied disciplines tested. Clinical assessment laboratory included. Prerequisite: graduate standing in nursing or permission of instructor.

## 555 Advanced Clinical Therapeutics Seminar (4)

Opportunities to test and evaluate selected theories presented in 554 . Faculty and preceptor supervision in clinical agencies guide students' therapeutic skills in working with individuals, groups, and families. Collaborative interactions with interdisciplinary team members. Prerequisite: concurrent registration in 554, or permission of instructor. CR/NC only.

## 565 Self-Management Strategies and Techniques in Patient Care (3)

Theories underlying cognitive/behavioral selfmanagement strategies and techniques in patient care. Evaluation of the clinical appropriateness and utility for nursing. Application to such clinical problems as abstinence in the recovering alcoholic, depression, and eating disorders. Prerequisite: graduate standing or permission of faculty.

## Courses by special arrangement

Undergraduate Research, Independent Study or Research, Master's Thesis

# College of Ocean and Fishery Sciences 

School of Marine Affairs (SMA)

3707 Brooklyn Ave. NE, HF-05
Telephone: 543-4326

## Courses by special arrangement

Undergraduate Research, Independent Study or Research, Master's Thesis

## School of Fisheries

211 Fisheries Center, WH-10
Telephone: 543-7457
School of Fisheries courses are offered in:

- Fisheries
- Food Science

The School's basic course Introduction to Fisheries Science (FISH 101) provides a background to an important Northwest industry in addition to showing applications of science to a field of wide interest.

## Fisheries (FISH)

## 101 Introduction to Fisheries Science (5) D

Identification, distribution, and life histories of selected fish and shellfish; commercial and recreational fishing, utilization of fisheries products; problems faced in fisheries conservation and management. Recommended for both majors and nonmajors.

## Courses by special arrangement

Undergraduate Research, Independent Study or Research, Internship/Experiential Learning, Master's Thesis, Doctoral Dissertation

## Food Science (FD SC)

## 483 Food Analysis (3)

Principles of separation and identification of food components by chromatographic, spectrophotometric and other methods including vitamins, minerals, and preservatives.

## Courses by special arrangement

Undergraduate Thesis, Independent Study or Research, Master's Thesis

# School of Oceanography (OCEAN) 

108 Oceanography Teaching Building, WB-10 Telephone: 543-5039

Oceanography, an environmental science that attempts to explain all processes in the ocean and the interrelation of the ocean with the earth and the atmosphere, includes studies of chemical composition of sea water; sea water in motion; interactions between sea and atmosphere and between sea and solid earth; sediments and rocks beneath the sea; physics of the sea and sea floor; and life in the sea.
101 Survey of Oceanography (5) D Origin and extent of the oceans; nature of the sea bottom; causes and effects of currents and tides; animal and plant life in the sea. Intended for nonmajors.

## Courses by special arrangement

Undergraduate Research, Independent Study or Research, Master's Thesis, Doctoral Dissertation

## School of Pharmacy

T341 Health Sciences Center, SC-69
Telephone: 543-2030

## Medicinal Chemistry (MEDCH)

## Courses by special arrangement

Undergraduate Research, Independent Study or Research, Master's Thesis, Doctoral Dissertation

## Pharmaceutics (PCEUT)

## Courses by special arrangement

Undergraduate Research, Independent Study or Research, Master's Thesis, Doctoral Dissertation

Pharmacy (PHARM)

## 305 Clinical Dispensing Pharmacy (1-3, max. 3)

Preparation and dispensing of prescriptions at Rubenstein Memorial Pharmacy in Hall Health Center and University of Washington Medical Center outpatient pharmacy. For students with little or no experience in pharmacy wishing experience prior to internship, externship, or didactic course work. Under direct supervision of Student Health Service pharmacist and University Hospital pharmacists. Prerequisites: pharmacy major and entry code. CR/NC only.

## 470 Externship in Community Practice (8)

Closely supervised study-experience periods in community pharmacies. Students participate in active community pharmacy under the supervision of clinical preceptor. Conferences on selected topics supplement work experience. Prerequisite: pharmacy major. CR/NC only.

## 471 Externship in Institutional Practice (4)

Closely supervised study-experience periods in hospital or other institutional pharmacies. Students participate in active institutional pharmacy under supervision of clinical preceptor. Conferences on selected topics supplement work experience. Prerequisite: pharmacy major. CR/NC only.

## 472 Advanced Pharmacy Externship (", max. 16)

Advanced level externship in pharmacy in a community, institutional, long-term care, or specialty practice setting under direct supervision of a clinical preceptor. Students register for a minimum of four credits. Prerequisite: entry code. CR/NC only

## 486 Clinical Pharmacy Clerkship I (4)

Supervised experience in the clinical roles of pharmacy practice. Students participate in rounds in institutional patient-care facilities and take drug use histories, monitor drug therapy of patients, instruct patients about medications, and provide consultation to other health-care professionals in ambulatory or institutional patient-care facilities Prerequisites: 334, 484, and pharmacy major. CR/NC only.

## 487 Clinical Pharmacy Clerkship II (4)

Supervised experience in the clinical roles of pharmacy practice. Students participate in daily rounds, take drug-use histories, monitor drug therapy of patients, instruct patients about discharge medications, and provide drug therapy consultation to other health-care professionals. Prerequisites: 334, 484, and pharmacy major. CR/ NC only.

## 488 Advanced Clinical Pharmacy Clerkship (1-16, max. 16)

Advanced level clinical pharmacy experience in institutional (hospital, nursing home, long-termcare facility) and ambulatory patient-care facilities under direct supervision of a clinical preceptor. Prerequisite: 487 and entry code. CR/NC only.

## 489 Drug Information (4-8)

Supervised experience in performing clinical pharmacy activities relating to retrieval and analysis of drug information from various resources; preparation of responses to consultation requests presented to Drug Information Service; techniques of preparing written and verbal drug information reports; participation in preparation of pharmacy newsletter. Prerequisites: permission of instructor, entry code.

## 495 Special Studies in Pharmacy ( ${ }^{*}$, max. 6)

Special studies of professional topics in pharmacy. An opportunity to expand the breadth and depth of understanding in specific pharmaceutical areas. Students usually take independent study under the individual direction of a faculty member. Prerequisite: permission of instructor and entry code.

## 501 Orientation to Pharm.D. (2)

Orientation to literature searching and evaluation and discussion of presentation skills. Orientation to departmental faculty practice and research. Prerequisite: Doctor of Pharmacy students only. CR/ NC only.

## 587 Advanced Inpatient Clerkship: Inpatient Care (*, max. 15)

Under faculty supervision, students participate in medical and pharmacy patient rounds in hospitals or long-term care facilities, monitor drug therapy, instruct patients concerning proper use of medications, and provide drug consultation to other health care providers. Prerequisites: 485 or equivalent, and permission of instructor. CR/NC only.

## Courses by special arrangement

Undergraduate Research, Independent Study or Research

# Graduate School of Public Affairs 

208 Parrington Hall, DC-13<br>Telephone: 543-4900

## Public Affairs (PB AF)

## 503 Administrative and Executive Leadership (3)

Nature of executive life in the public sector, the function of leadership in implementing, making, and changing policy. Leadership styles, the relation of leadership to its constituencies and communities. Joint with POL S 572. Taught by Elizabeth Reveal, Director of Finance for the City of Seattle. She has previously served as Budget Director for the City of Philadelphia, and as Assistant Dean of Haroard's Kennedy School of Government. Ms. Reveal is co-author (with Gordon Chase) of How to Manage in the Public Sector.

## 505* The Law of Public Administrafion (3)

Legal framework of public administrative action in the United States, emphasizing constitutional requirements; operation of the administrative process; management of personnel, funds, and contracts; and judicial review of administrative activity. The summer section emphasizes the critical role played by legal process and language in the development of effective public policy. Taught by Victor C. Flatt, at-
torney for the Washington State Court of Appeals. Mr. Flatt has experience in the research and drafting of legal opinions across a wide range of public policy issue areas, including environmental and land use law, administrative law, family law, constitutional law, and international low.

## 511 Management of Not-for-Profit Organizations (3)

Focuses upon the role played by not-for-profit organizations in meeting the public good. Course examines internal management issues such as structure, budget, and operations; and external issues such as board functions, legal status, marketing, media relations, and fund-raising. Cotaught by Frank Chopp, Executive Director of the Fremont Public Association, and Nancy Long, Director of Planning, Marketing, and Community Services for Pacific Medical Center.

## 593A Environmental

## Policy Processes (3)

Emphasizes the process of developing and implementing environmental policy within the context of political and social institutions. Built on a series of case studies that address: topical areas of interest, key aspects of political, regulatory, and institutional processes; and important components of policy analysis. Taught by William R. Ross, principal of Ross \& Associates, a Seattle-based environmental and natural resources consulting firm. Mr. Ross has held a number of environmental management positions in the public sector, including Commissioner of the Department of Environmental Conservation for the State of Alaska.

## Courses by special arrangement

Independent Study or Research, Master's Degree Project

> School of Public Health and Community Medicine

Special six-week sessions are offered in courses with contents from the fields of biostatistics, epidemiology, and health services. The sessions are designed primarily for Master of Public Health students or other persons at the postdoctoral level in the University (persons in clinical training programs on campus). The Extended M.P.H. Degree program is a three-year, part-ime program delivered through a combination of intensive four-week summer sessions on the University campus, independent/directed study, and intensive weekend (Friday-Saturday) seminars during the academic year. The program is designed for mid-career public and community health professionals with three or more years of experience in the health-care field and provides knowledge and skills required at mid- and upper-level practice and management positions for health professionals. The prescribed course work includes a broad exposure to the
health-care system plus specific management training in accounting, finance, personnel management, economics, organization theory, and program evaluation. Information is available by calling the Extended M.P.H. Degree Program office at 685-7580.

## Biostatistics (BIOST)

F600 Health Sciences Center, SC-32 Telephone: 543-1044

## 511 Medical Biometry I (4)

July 6-August 14 Presentation of the principles and methods of data description and elementary parametric and nonparametric statistical analysis. Examples are drawn from biomedical literature, and real data sets are analyzed by the students after a brief introduction to the use of standard statistical computer program packages (e.g.SPSS, BMDP, MINITAB). Statistical techniques covered include description of samples, comparison of two sample means and proportions, simple linear regression and correlation.

## 522 Applications of Vital and Healith Statistics (3)

Analysis of routinely collected data on the health status and care of populations, with emphasis on the potential and limitations of this approach. Stressed are the importance of such data for the development and the evaluation of programs and the recognition of new hazards. Joint with EPI 522. Prerequisite: EPI 511 or permission of instructor.

## 578. Special Topics in Advanced Biostatistics (", max. 3)

## A. Spatial Statistics (3)

Joint with STAT 578A. Prerequisite: entry code. CR/NC only.

## B. Spatial Statistics Seminars (1)

Joint with STAT 578B. Prerequisite: entry code. CR/NC only.

## C. Drug Evaluation (3)

Joint with STAT 578C. Prerequisite: entry code. CR/NC only.

## 590 Biostatistical Consulting (3)

Training in consulting on the biostatistical aspect of research problems arising in the biomedical field. Students, initially under the close supervision of a faculty member, participate in discussions with investigators leading to the design and/or the analysis of a quantitative investigation of a problem. With experience, independent associations of student and research worker are encourages, with subsequent review by faculty of resulting design and analysis. Prerequisite: permission of instructor.

## 593 Cancer Prevention Lab (3)

Laboratory experience for pre- and post-doctoral students working on cancer prevention projects at the Fred Hutchinson Cancer Research Center. Joint with EPI 593.

## Courses by special arrangement

Independent Study or Research, Master's Thesis, Doctoral Dissertation

## Environmental Health (ENVH)

F461 Health Sciences Center, SC-34
Telephone: 543-3199

## 480 Environmental Health Problems

 ( ${ }^{*}$, max. 6)Individual projects involving library, laboratory, or field study of a specific environmental health problem. Prerequisite: environmental health major.

## 482 Environmental Health Internship (3-15)

Assignment to an environmental health or environmental protection agency for supervised observation and experience in environmental health technology, program planning, and utilization of community resources. Prerequisites: environmental health major and permission of department adviser. CR/NC only.

## 512 Hazardous Waste Disposal (3)

Generation, collection, transportation, and ultimate disposal of hazardous waste on land. Indepth engineering and cost aspects of alternatives. Health and engineering implications of TSCA, RCRA, CWA, and CERCLA.

## 520 Biological Effects of lonizing Radiation (3)

Effects of ionizing radiation at the molecular, cellular, organ, and organism levels with emphasis on mammalian systems.

## 572 Clinical Occupational Medicine (3)

Comprehensive overview of clinical occupational medicine. Introduction to principles of occupational disease, occupational history taking, and physician involvement in workers' compensation. Approaches to diagnosis and management of occupational diseases based on organ systems. Prerequisites: possession of an M.D. degree or equivalent or permission of instructor.

## 590 Selected Topics (1-6)

## A. Topic fo be arranged

In-depth study of a current environmental health topic. Prerequisite: entry code. CR/NC only.

## B. Applied Informatics in Environmental Health (2)

Creation, management, distribution, and use of information and knowledge, using computer and telecommunication technology. Provides general understanding of applied information in environmental health with emphasis on assessment of potential for application in the workplace.

## 595 Research Rotations (3-9)

For pre-doctoral graduate students. Introduction to current methods in laboratory research and familiarization with specific faculty research interests. Prerequisite: graduate standing and permission of program director, and entry code.

## 599 Field Studies (2-6, max. 6)

Assignment to an environmental research or service program for application of evaluation techniques. Prerequisite: entry code. CR/NC only.

## Courses by special arrangement

Undergraduate Research, Independent Study or Research, Master's Thesis, Doctoral Dissertation

## Epidemiology (EPI)

F263B Health Sciences Center, SC-36
Telephone: 685-1762

## 522 Applications of Vital and Healith Statistics (3)

Analysis of routinely collected data on the health status and the care of populations, with emphasis on the potential and the limitations of this approach. Stressed are the importance of such data for the development and the evaluation of programs and the recognition of new hazards. Joint with BIOST 522. Prerequisites: 512 and 513, or equivalent, or permission of instructor, and entry code.

## 525 Topics in Preventive Medicine (2)

 Examines current scientific knowledge and state of the art in preventive medicine interventions. Discuss and consider options for current practice. Joint with HSERV 505. Prerequisite: M.D., O.D., or permission of instructor. CR/NC only.527 Practical Issues in the Conduct of Epidemiologic Studies (2)
Seminar format focusing on practical aspects of conducting epidemiologic studies. Topics include grant writing and the peer review process, issues in the study of human subjects, random digit dialing, interviewing techniques, disease registries, and studies in the industrial setting. Prerequisites: graduate standing or permission of instructor.

## 529 Scientific Basis for Collective

 Action in Disease Prevention (2)Seminar series involving preliminary reading on contemporary problems of community action in support of the publichealth. Topics include aspects of standard setting, prophylactic activity, control of injury, and international action, such as that to protect the ozone layer. Prerequisites: 512,513, or permission of instructor, and entry code. CR/NC only.

## 531 Problems in International Health (3)

Survey of the relationship of sociocultural, political, economic, and demographic characteristics of developing countries to disease occurrence and to the solution of health problems. Joint with HSERV 531.

## 542 Clinical Epidemiology (2)

Principles and methods involved in studying the outcome of illness.

## 590 Selected Topics in Epidemiology or International Health (1-6, max. 6)

## 593 Cancer Prevention Lab (3)

Provides laboratory experience for pre- and postdoctoral students working on cancer prevention projects at the Fred Hutchinson Cancer Research Center. Joint with BIOST 593.

## Courses by special arrangement

Undergraduate Research, Independent Study or Research, Master's Thesis, Doctoral Dissertation

## Health Services (HSERV)

F346 Health Sciences Center, SC-37
Telephone: 543-8866

## 4754 Perspectives in Medical Anthropology (5)

Medical anthropology. Ways in which and extent to which "health" and "sickness" are culturally constituted. Epistemological, as well as pragmatic, limitations of the organism-centered cartesian, biomedical approach to sickness, medicine, and health. Joint with ANTH 475.

## 505 Topics in Preventive Medicine (2)

July 1-August 9 Examine currentscientific knowledge and state of the art of preventive medicine interventions. Discuss and consider options for current practice. Joint with EPI 525. Prerequisites: M.D., O.D., or permission of instructor. CR/NC only.

## 531 Problems in International Health (3)

Explores social, political, economic, and environmental determinants of health in developing countries and traces the development of societal responses to health problems. Topics include the origins of primary health care, child survival, traditional health systems, population, water and sanitation, international agencies, and the effects of contemporary macro and micro economic policies. Students participate in a case study formulating a pharmaceutical policy in a developing country. Joint with EPI 531. Prerequisite: graduate or medical student standing.

[^18]
## 532 Planning and Financing Health Services: International Perspectives (3)

Survey of major issues affecting planning and financing of health services. Major focus is on developing countries. An historical perspective on social and economic factors in the development of primary health care, health service infrastructures, health manpower development, pharmaceuticals and financing health care and related overall changes in health status.

## 590 Selected Topics in Healih Services (")

Topics to be arranged. Prerequisite: entry code.

## 592 Program Seminars

(1-6, max. 6)
Topics to be arranged.

## 597 International Health <br> Projects (6) <br> CR/NC only.

Courses by special arrangement
Independent Study or Research, Fieldwork in Community Medicine, MHA Field Project, Master's Thesis

## Pathobiology (PABIO)

F161 Health Sciences Center, SC-38
Telephone: 543-1045

## 511 Pathobiological Frontiers (2)

Examines the biological and immunological concepts of infectious and non-infectious diseases with emphasis on newly recognized agents of infectious diseases. Allergy, immune responses, nature of agents, and prevention are considered in a format suitable for persons knowledgeable in health-related areas but who are not necessarily in biological oriented programs. Prerequisite: entry code. CR/NC only.

## 583 Seminar on Frontier Membrane Research (1, max. 4)

Research seminar on structure and function of cell surface membranes presented for postdoctoral fellows and graduate students.

## 590 Selected Topics (1-6, max. 6)

In-depth study of disease agents and host response, usually related to a current problem, and focusing on characteristics of the disease agent. Seminar format. Small groups of students by arrangement with faculty member. Prerequisite: entry code. CR/NC only.
Courses by special arrangement
Undergraduate Thesis, Undergraduate Research, Independent Study or Research, Master's Thesis

# School of Social Work 

Social Work/Speech and Hearing
Sciences Building, JH-30
Telephone: 543-5640
The School of Social Work offers elective courses for upper-division or graduate students.

Seminars, workshops, and institutes are planned for professionally employed social work practitioners. Inquiries should be addressed to Social Work Continuing Education, 4101 15th Ave. NE, JH-30, Seattle, WA 98195; or call 543-5755.

## Social Work (SOC W)

409 Readings in Social Welfare (1-5, max. 15)
Prerequisite: entry code.

## 415 Beginning Field Instruction (4-6, max. 12)

Prerequisites: major standing and entry code. CR/NC only.

## 508 Integrative Seminar (1-3, max. 12)

For evening part-time students. CR/NC only.
509 Readings in Social Work (*)
May be repeated for credit. CR/NC only.

## 515 Field Instruction

(1-8, max. 12)
CR/NC only.
535 Advanced Field Instruction (2-10, max. 24)
Prerequisites: 515 and entry code. CR/NC only.

## Courses by special arrangement

Independent Study or Research, Master's Thesis

## Social Welfare (SOCWL)

## 582-583 Research Practicum

 (1-3, max. 3 each)Development of specific methodological skills in social welfare research through participation in an ongoing research project. Prerequisite: entry code. CR/NC only.

## Courses by special arrangement <br> Tutorial or Dissertation

# Office of International Programs and Exchanges 

516 Schmitz Hall, PA-10

Telephone: 543-9272
The University of Washington Office of International Programs and Exchanges coordinates foreign study and exchange programs around the world. Summer Quarter options are listed below. Deadlines for some of the Summer programs have passed, but many are still open. For more specific information contact the office at the above address (Seattle, WA 98195).
Chinese Language Program, Beijing Mid-June to mid-August
Denmark International Study Program in Architecture, Copenhagen
Early June to mid-August
El Colegio, Mexico City
Mid-June to late July

## International Summer School,

 Oslo, NorwayLate June to early August

## Russian Language Program, St. Petersburg <br> Mid-June to mid-August

Hebrew University, Jerusalem, Israel July and August

## Foreign Student Studies Center,

 University of Guadalajara, MexicoThree five-week sessions during the summer
Plan now to take advantage of the wide network of programs and exchanges coordinated by the Office of International Programs and Exchanges throughout the year.

# Evening Degree <br> Program 

Evening Degree Programs designed for students who carnot attend day classes are available at the University of Washington in Seattle and at UW branch campuses in Bothell and Tacoma. Students who wish to complete their bachelor's degree can earn a B.A. in general or liberal studies through these multidisciplinary programs, which consist of junior- and senior-level courses. The Summer Quarter evening degree classes described on this page are offered in Seattle. Please see pages 65-66 for summer evening degree classes at the branch campuses. Evening degree students have priority in registering for these classes. Other individuals can register for these classes beginning June 21, 1993. Continuing UW students enrolled forSpring Quarter 1993 in Seattle or at either UW branch campus do not need to apply for Summer Quarter. Use the Summer Quarter Time Schedule and register by STAR the same way as for any quarter. For a brochure and application about the Evening Degree Program in Seattle, call (206) 543-2320. Please call UW Bothell at (206) 685-5000 or UW Tacoma at (206) 552-4400 for information about the Evening Degree Programs at the branch campuses.

## Anthropology (ANTH)

## 301 Human Nature and Culture (3)

Comparison of various anthropological perspectives on the sources of variation in customs, values, and beliefs of human groups, including nonWestern peoples and contemporary Americans.

## 439 Low in Changing Societies (5)

Anthropological viewpoints on legal aspects of colonial, modernizing, and encapsulated societies. Problems of plural legal systems and of conflicts in judicial systems. Prerequisites: 202, 372, or permission of instructor.

## Art History (ART H)

203 Survey of Western ArtModern (5)
Western art from 1520 to the present.

## 232 Photography: Theory and Criticism (3)

Art traditions of photography from its origins in the nineteenth century to the present. Emphasis on photographic traditions and photographers of the twentieth century.

## English (ENGL)

## 354 American Literature: The Early Modern Period (5) D

Literary responses to the disillusionment after World WarI, experiments in form and in new ideas of a new period. Works by such writers as Anderson, Toomer, Cather, O'Neill, Frost, Pound, Eliot, Cummings, Hemingway, Fitzgerald, Faulkner, Stein, Hart Crane, Stevens, and Porter.

## 366 Twentieth-Century Dramatic Literature (5) D

Modern and contemporary plays by such writers as Shaw, Synge, O'Casey, O'Neill, Yeats, Eliot, Beckett, Pinter, and Albee.

## Geography (GEOG)

## 304 Western Europe (5)

Physical and socioeconomic characteristics of western Europe. Contemporary political and economic integration trends in their regional context.

## 366 Regional Development (5)

The process of regional economic development. Theories and conceptualizations of economic growth and structural change, technological change and industrial development, spatial variation in economic activities and government policies. Prerequisite: 207 or ECON 200 or equivalent.

## History (HST)

312 Science in Civilization: Science in Modern Society (5) D
Growth of modern science since the Renaissance, emphasizing the scientific revolution of the seventeenth century, the development of methodology, and the emergence of new fields of interest and new modes of thought.

## 370 Expansion of Islam (5)

Comparative perspective on the expansion of the religion and community of Islam from its origins to the modern age. Patterns and processes of expansion, conversion, and social and cultural assimilation in a number of world regions (e.g., the Arab World, Iberia, Anatolia, West Africa, Iran, India, and Southeast Asia). Specific case studies of Islam in its regional setting (e.g., South Asia).

## History of the Americas (HSTAA)

## 373 Social Hisfory of American Women (5)

A multi-racial, multicultural study of women in the U.S. from the sixteenth century to the present: an emphasis on women's unpaid work, participation in the paid labor force, charitable and reform activities, and feminist movements of the nine-
teenth and twentieth centuries. Use of primary materials such as diaries, letters, speeches, and artifacts. Joint with WOMEN 383 . Prerequisite: WOMEN 200 or WOMEN 283 or HSTAA 201 or permission of instructor.

## Political Science (POL S)

## 354 Elections and Voting in the United States (5)

Electoral institutions and processes of the United States: the idea and practice of elections, the electoral system, individual voting behavior, collective voting behavior, and the impact of elections on policy. Recommended: 101 or 202.

## 443 Comparative Political Societies (5)

Analyses of modern and premodern types of stable political society; special attention to contemporary representative democracy.

## Psychology (PSYCH)

## 448 Seminar in Psychology (5)

Selected research topics of contemporary interest. May be repeated for credit. Quarterly listings of specific offerings are available at departmental advisory office. Prerequisites: some sections require major standing or permission of instructor.

## 449 Organizational and Industrial

 Psychology (5)Research and methods in industrial-social psychology; application of social psychology to the understanding and management of individuals in large organizations and their subunits. Prerequisite: one course in elementary statistics or equivalent.

## Sociology (SOC)

## 331 Population and Society (5)

Population growth and distribution, population composition, population theory, urbanization. Determinants and consequences of fertility and mortality trends and migration in economically developed and underdeveloped areas.

## Women Studies (WOMEN)

## 383 Social History of American Women (5)

A multi-racial, multicultural study of women in the U.S. from the sixteenth century to the present: an emphasis on women's unpaid work, participation in the paid labor force, charitable and reform activities, and feminist movements of the nineteenth and twentieth centuries. Use of primary materials such as diaries, letters, speeches, and artifacts. Joint with HSTAA 373. Prerequisite: WOMEN 200 or WOMEN 283 or HSTAA 201 or permission of instructor.

[^19]
## UW Bothell and Tacoma Branch Campuses

To apply for summer-only admission at either branch campus or in Seattle, please complete the application on the inside back cover of this bulletin. For additional information refer to the admission and registration sections of this bulletin. For courses meeting June 21-July 30, be sure to read Special-date courses, page 120.
If you wish to apply for matriculated status at either branch campus, call Bothell at 685-5000, 1-800-736-6650, or 685-5303 (TDD); or Tacoma at 552-4400, 1-800-736-7750 or 552-4413 (TDD).

## Bothell Branch Campus

All Bothell courses meet June 21-July 30, unless otherwise indicated.

## Education Programs (BEDUC)

## 501 Education in Society: Political, Economic and Cultural Perspectives (3)

An analysis of education and the institution of schooling from sociological, anthropological, political and economic perspectives. Topics to be covered include: education and social mobility; race, class gender and schooling; current debates over the public and private purposes of schooling in a post-modern age; and macro-level and micro-level political processes by which such debates and mediated.

## 515 Perspectives on Curriculum Integration (3)

Aninvestigation of the concept of integration from a variety of perspectives. Topics include integration as technique, integration as structure of knowledge, and integration as restructuring knowledge.

## 540 Current Issues: Children Ar-Risk, Child Abuse and Neglect (3)

This course is designed to provide several perspectives on the at-risk student. The first half of the course will focus on determining who the students are and identifying conditions that place them at risk. The second half of the course will emphasize the role teachers play in reducing the risks of academic failure and increasing the opportunity for success in school. Upon completion of this course students will have stronger understanding of the problems and issues faced by at-risk students and a clearer picture of the instructional implications for them as teachers.

## 591* Special Topics in Education:'

 Art Across the Curriculum (3)Intensive treatment of a selected topic in education presented by lectures or seminars, emphasizing analysis of the most current research on the topic and evaluation of its implications for classroom practice and pedagogical innovation in the schools.

## Liberal Studies (BLS)

303 Analyzing Economic Performance: Growth and Stability in U.S. and World Markets (5)

An examination of inflation, unemployment, and economic development. U.S. and international case studies are used to investigate the factors underlying macroeconomic problems and the policies used to combat them.

## Liberal Studies: Comparative U.S. Studies (BLSUS)

## 327 History of U.S. Labor Institufions (5)

Examines the evolution of the institutions that have shaped labor. By investigating indentured servitude, slavery, apprenticeship, schooling, wage labor, unions, and the laws that surround each of these institutions, we gain a better understanding of the dimensions of freedom and the forces for change in our society.

## 335 Human Rights in America (5)

Study of the literature of civil liberties, civil rights, and human rights in the United States. Examines the way writers try to justify specific rights and communicate the need for social change in American society.

## 353 Getting Across America: <br> Mobility and Freedom (5)

Many Americans define themselves and their sense of freedom through the narrative of a mythical mobility: the journey across an ocean, through a forest, onto a plain, onto a desert-always going to a mythical west. This course studies images of the voyager and those financial, historical, and folkloric forces that have developed and maintained for Americans the sense of a mythical mobility.

## 447 Education and the American Indian (5)

Critical examination of Indian education from a historical and topical perspective; review of federal, state and tribal policies and programs; and discussion of the educational aspirations of Indian people within the context of national educational goals.

## 487 Topics in American Literature: Vietnam War in Literature (5)

Advanced study in Americanliterature concentrating on individual writers or literary movements, specific critical approaches to literature, or literary canons and their critics.

## Liberal Studies: Comparative International Studies (BLSIN)

## 338 World History in the Classical Age (5)

Covers the formative period of the main civilizations of the world, focusing on the principal ideas and institutions of each area. Emphasizes the ways in which the evolution of those institutions has affected the present. Also stresses the interaction between civilizations during the formative stage of their growth.

## 362 Contemporary Political Ideas and Ideologies (5)

The juncture of political ideology with political experience is explored in the context of such widespread ideas as nationalism, democracy and socialism and their diverse manifestations in contemporary political movements and systems. The importance of critical thinking about fundamental political questions and its linkage with political perspectives are emphasized.

## 390 Special Topics: Circa 1500: Arts of East and West (5)

Concentrates on world history at a pivotal moment about 1500 A.D., during the era of early European expansionism into Africa, the Americas, and Asia. Focuses on parts of Mediterranean and northern Europe, the Islamic spheres of the ancient Near East and Africa, the Inca and Aztec cultures, Ming China, and Muramachi Japan. General lectures on select historical topics are interspersed with discussion of specific readings related to political, philosophical, and religious issues that inform the artistic productions.

## 402 Modern China (5)

History of modern China since the beginning of the Qing dynasty, 1644 to the present. Focuses on the major social, political, and economic developments, and the relationship between ideas and institutions. Topics include the impact of the West, and changes resulting form internal causes.

## Tacoma Branch Campus

## Education Programs (TEDUC)

501 Education in U.S. Society: Polifical, Economic and Cultural Perspectives (3)
An inquiry into the social forces that impinge upon, augment, or contradict the educational mission of public school. Topics include relationships between education and social power, issues of gender, race, and class, the sources of the crisis in learning and schooling, school reform, and the potential for teacher-led educational change.

## 502A U.S. Education in Society: Socio-Psychological Contexts (3)

This course seeks to expand teachers' understanding of the socio-psychological context within which students conduct the educational process.

It will explore contemporary theories of learning, cultural meditations in the learning processes, the nature of intelligence and the social construction of knowledge, among other topics. Prerequisites: TEDUC 501 or permission of instructor.

## 5204 Multicultural Education: Critical Issues (3)

A critical exploration of the major intellectual, political, and pedagogical issues in multicultural education. We will consider the major proponents and critics of multicultural education, study institutional and cultural discrimination related to race, class, and gender, and weigh the relationships between schooling and the reproduction of stratification and discrimination.

## 530* Integrated Curriculum: Critical Issues (3)

Deals with reading, writing, and thinking as it occurs in various specific and integrated content areas of the school curriculum in grades $\mathrm{K}-12$. The goal of this course is to equip teachers with ideas and strategies to enhance instructional effectiveness across the curriculum.

## 591 Special Topics in Education <br> A. Children's and Young Adult Literature (3)

This course addresses the trends and issues pertaining to contemporary children's and young adult literature. Students will become familiar with the variety and richness of trade books currently available. Theory and techniques for creating a lit-erature-based literacy program will also be presented.

## $591 \triangle$ Special Topics in Education B. Teaching Thinking/Thinking Teaching (3)

A hands-on workshop reviewing current theories and research focuses on the development and practice of exploring, defining, identifying, and applying thinking within either a basic or integrated curriculum design. A curriculum project designed to implement thinking skills in the classroom.

## Liberal Studies (TLS)

## 420- Women in the Global Economy (5)

Explores impact of "modernization" and "development" on the status and roles of women in selected western and non-western societies. Critical analysis of assumptions about women's responses to social change which have guided research and development planning. Examines cultural prac-
tices, economic arrangements, and government policies in order to understand opportunities and obstacles confronting women in developing countries today.

## Liberal Studies: Comparative International Study (TLSIN)

## 324* Modern Latin America (5)

Amulti-disciplinary examination of Latin America with a social science emphasis. The course includes a brief history of the region, sociological analysis of various Latin American institutions (the church, the military, the labor movement, etc.), a consideration of migration issues and development economics, and a brief section on culture. Concludes with an examination of contemporary Latin American political and social issues.

## 382 Arts and Cultures of East Asia (5)

A study of the diverse cultural orders represented by the architecture and visual images produced in China, Japan and neighboring countries. Topics include the nature and role of images and buildings in the constitution of East Asian concepts of nature, reality, social organization, foreign relations, personal identity, aesthetics and ethics. Recommended: TLSTN 381.

## 425 Contemporary Issues in International Polifical Economy (5)

As the 20th century draws to a close pressing issues confrontingboth industrialized and underdeveloped societies are addressed. Topics and themes vary and may include one or more of the following: the international debt crisis, the changing international division of labor, poverty and inequality in the world economy, liberation movements, internationalization of production and regional disruptions in the United States.

## 450- Contemporary Theories of Culture (5)

Recent anthropological theory and contemporary cultural theory. The course will be organized either around trends in cultural theory such as structuralism and semiotics, British cultural studies, critical theory, and post-modernism; or topically, such as ideology, culture, and cultural resistance;ethnocentrism, relativism; class and cultural; the social body;self and other; gender and sexuality. May be repeated for credit with instructor's approval.

## 490^ Special Topics

M. Russian History Through Film (5)
Soviet cinema was inordinately concerned with history during its more than seventy years of existence. This course will look at the ways the cinema was used in the USSR to convey the ideological , political, and cultural line of the Soviet govern-
ment at several important periods inSoviethistory. The course will examine the historical eras portrayed, and consider how the current "general line" of the Communist Party affected those depictions. Films or segments of films included will be Andrei Rublev, Peter the First, War and Peace, Lady With the Little Dog, Mother, Battleship Potemkin, Enthusiasm, The Cranes are Flying, and Moscow Does not Believe in Tears.

## MA. Vietnam and Indochina in South-East Asian Politics (5)

The politics of Vietnam from dynastic, pre-colonial times through the present will be studies from a comparative politics and international relations perspective, with special attention to nationalism, colonialism, independence movements, warfare, socialist economic model, relations with other nations and their economic models in Southeast Asia. The course will also chart the shift from socialism to market economic forces in Vietnam today.

## X. Shakespeare and His World (5)

Students in this course will explore six to eight of Shakespeare's major plays. The class will include some secondary readings (political, social, philosophical, etc.), and students will view selected videos. The approach will be interdisciplinary, and will combine lecture and discussion. Students will be expected to write three to four interpretive essays.

## Liberal Studies: Comparative U.S. Studies (TLSUS)

485 Media Genres: Delight in Anxiety-American Film Noir 1944-55 (5)
A celebrated strain of feature films which French critics labeled "film noir"-dark film-exhibit the underside of America's victorious postwar mentality. From detective film to western to melodrama, these movies attest to profound insecurity, even paranoia, as their male heroes are caught up in mysterious and byzantine quests, and their "heroines" are often not to be trusted. This course will explore sociological, economic, political, and psychological factors that may have given rise to the film noir tendency, and it will study in detail remarkable style and structure of eight films of the genre. Included will be Gun Crazy, Kiss Me Deadly, Out of the Past, Mildred Pierce, Touch of Evil, and While the City Sleeps.

[^20]
## UW Summer 1993 Time Schedule

Courses may have been added or deleted after the course description section in this bulletin was finalized. To verify the availability of a course, please check the following time schedule or contact the academic department offering the course. Departmental phone numbers and course descriptions are included in the courselisting section, pages 8-66. For information about STAR registration, see How to Register Using STAR, pages 124-125. See pages 137-139 for a list of department, major, and college codes which may appear on your registration confirmation.

## Abbreviations and symbols used to indicate course requirements

Some courses have special requirements for registration. These requirements, listed below the course title in the Time Schedule section, are indicated by the following abbreviations and symbols:

## $>$

Entry code required to enroll.

## EC (Building and room number)

The entry code can be obtained in the indicated building and room. See pages $140-141$ for a list of building abbreviations and a campus map.

## CR/NC ONLY

Grades assigned only as credit or no credit. See page 131 for more grade information.

ARR
Days and times to be arranged.

## PD.1, PD. 2, PD. 3

Registration period for which the indicated restriction applies. If no period is indicated, the restriction applies to all registration periods. See page 119 for registration period dates.

## Offered jointly with

Classes taught in the same room at the same time: students register and receive credit for one course only.

## Special program codes

(H) $=$ Honors
(\%) = New course

## Comment and registration restrictions

PD. 1 = Period I ED = Entry or Drop Code
PD. 2 = Period II or DC followed by the
PD. 3 = Period III
PERM = . Permission location where they are available to be
INSTR = Instructor picked up.

* = To be arranged

Credit
2.5 means $21 / 2$ credit
(/) means "or"
$(-)$ means "to"
VAR means variable credit and any number of credits may be elected (however, fractional credit registratione.g., $1 / 2$ credit is not allowed in variable-credit courses).

## Time Schedule

Abbreviations and symbols used to indicate course requirements

Sample of a Time Schedule listing

Sample of a Time Schedule listing
















[^21] See pages 8-66 for course descriptions. See page 67 on how to read time schedule.


$>$ Limited enrollment in this section is limited, and students must obtain entry codes. \% New course H Honors See pages 8-66 for course descriptions. See page 67 on how to read time schedsle.

















[^22]









## Independent Study by Correspondence

With Independent Study by Correspondence courses, you can study on your own schedule, in your home, for credit or for personal enrichment. You can enroll at any time in Independent Study by Correspondence courses through the Distance Learning Office. You have one year to finisheach course. Teachers can use unlimited Independent Study by Correspondence credits for certification and endorsements.

## How to register

Complete the registration form on page 111. If you prefer to register by telephone and have a MasterCard or VISA, call (206) 543-2350. Please specify the course schedule number (CSN) when registering. To request an Independent Study by Correspondence Bulletin, call (206) 543-2320 or 1-800-543-2320.

## Fees

The cost of these courses is increasing from $\$ 55$ to $\$ 62$ per credit (effective July 1, 1993). Any supplemental fees for tapes (T), readings ( R ), lab kits ( L ) and videos $(\mathrm{V}$ ) are at the end of each course listing. For descriptions or additional information on optional supplemental materials, call (206) $543-2350$. Full refunds minus the $\$ 15$ registration fee are available if you withdraw within one month of registration.

## Continuing Nursing <br> Education

Independent study courses are also offered by Continuing Nursing Education. For more information, call (206) 543-1047, or write Continuing Nursing Education, SC-72, University of Washington, Seattle, WA 98195.

## Accounting

ACCTG C210 Introduction to Accounting (3) CSN1545 (R\$2.75)
ACCTG C220 Fundamentals of Financial Accounting (3) CSN1535

American Indian Studies
AIS C311

W North American Indians: Pacific Northwest (5) CSN1243 ( $\mathrm{R} \$ 45$ )

## Anthropology

ANTH C100 Introduction to Anthropology (5) D CSN1585
ANTH C202 Principles of Sociocultural Anthropology (5) D CSN1583 (R\$5, V\$15)

## Astronomy

ASTR C101 Astronomy (5) D CSN1515
ASTR C150 . The Planets (5) D CSN1296
Atmospheric Science
ATM S C101 Weather (5) D CSN1586.

## Business Communications

B CMU C301 Basic Written Business
Communications (4) CSN1643
Chemistry
CHEM C140 General Chemistry (4) D
CSN1517 (T\$10)
CHEM C150 General Chemistry (4) D CSN1580 (T\$10)

## Communications

CMU C498 Problems in Communications (5)
CSN1576 (R\$11)
Danish
DAN C101 Elementary Danish (5)* $\mathbf{P}$ CSN1303 (T\$8)
DAN C102 Elementary Danish (5)* $\mathbf{P}$
CSN1304 (T\$8)
DAN C103 Elementary Danish (5)* $\mathbf{P}$
CSN1131
Ećonomics
ECON C200 Introduction to Microeconomics
(5) D CSN1520 (Optional PC disk \$10)
ECON C201 Introduction to Macroeconomics
(5) D CSN1547 (Optional PC disk \$10)
ECON C300 Intermediate Microeconomics (5) CSN1588

## Educational Psychology

EDPSY C490 Basic Educational Statistics (3) CSN1533

## Engineering

ENGR.C331 Advanced Technical Writing (3) CSN1549
TC C401 Style in Scientific and Technical Writing (3) CSN1534 (R\$10)

## English

ENGL C200 Reading Literature (5) D CSN1250 (R\$2.50)
ENGL. C231 W Shakespeare (5) D CSN1532
ENGL C271 Intermediate Expository Writing
(5) P CSN1610

ENGL C274 Beginning Verse Writing (5) CSN1653
ENGL C277 Beginning Short Story Writing (5) CSN1608
ENGL C309 W The Bible as Literature (5) D CSN1589
ENGL C314 W Shakespeare to 1603 (5) D CSN1590
ENGL C315 W Shakespeare after 1603 (5) D CSN1025
ENGL C321. English Literature: The Late Renaissance (5) D CSN1516
ENGL C322 Milton (5) D CSN1276
ENGL C333 W English Novel: Early and Middle 19th Century(5) D CSN1311(R\$15)
ENGL C340 W The Modern Novel (5) D CSN1271
ENGL C352 W American Literature: The Early Nation (5) D CSN1315
ENGL C353 W American Literature: Later 19th Century (5) D CSN1509
ENGL.C354 W Àmerican Literature: The Early Modern Period (5) D CSNI 109
ENGL C355 W American Literature: Contemporary America (5) D CSN1319
ENGL C359 W Contemporary Novel (5) D CSN1314
ENGL C363 W Children's Literature (5) CSN1659
ENGL C370 W Fantasy (5) D CSN1544
ENGL C379 Advanced Expository Writing (5) CSN1611
ENGL C386 Intermediate Seminar: Verse Writing (5) CSN1578
ENGL C388 Intermediate Seminar: Short Story Writing (5) CSN1514
ENGL C422 Advanced Seminar: Verse Writing (5) CSN1579
ENGL C442 W Language Learning (5) CSN1309 (R\$15)
ENGL C489A W Special Studies in Literature: Autobiographical Literature (5) CSN1312

## Forestry

$\begin{array}{ll} & \text { FRM C383 } \\ & \begin{array}{l}\text { Interpreting the Environment (5) } \\ \text { FPE C430 }\end{array} \\ & \text { Aerial Photos/Remote Sensing } \\ & \text { Natural Resources (3) (R } \$ 3.50, \\ & \text { L\$40) }\end{array}$
French
FREN C101 Elementary French (5) P . CSN1536 (T\$20)
FREN C102 Elementary French (5) P CSN1550 (T\$20)
FREN C103 -Elementary French (5) P CSN1558 (T\$20)

## Geography

GEOG C102: World Regions (5) D CSN1523
Germanics
GERM C101 First-Year German (5) P CSN1040 (T\$20)
GERM C102 First-Year German (5) P
CSN1041 (T\$25)
GERM C103 First-Year German (5) P
CSN1042 (T\$12)

## Gerontology

UCONJ C440 Biological Aspects of Aging (3) CSN1240 (R\$10, L\$35)

History
HST C113 W The Modern World (5) D CSN1641
HSTAA C432 W History of Washington and the Pacific Northwest (5) CSN1538 (R\$20)

## International Business

I BUS C300 The International Environment of Business (3) CSN1537

## Italian

$\begin{array}{ll}\text { ITAL C101 } & \text { Elementary Italian (5)* } \mathbf{P} \\ & \text { CSN1521 (T\$25) }\end{array}$
ITAL C10̣2 Elementary Italian (5)* $\mathbf{P}$
CSN1078 (T\$4, R\$20)
ITAL C103 Elementary Italian (5)* $\mathbf{P}$ CSN1079 (T\$4, R\$20)

Linguistics
LING C200 W Introduction to Linguistic Thought (5) D CSN1548
LING C457 Language Development (4) CSN 1636

Marketing
MKTG C301 Marketing Concepts (4) CSN1639
MKTG C340 Advertising (4) CSNi298 (R\$15)
Mathematics
MATH CA Survey of Elementary Algebra (0)* (\$186) CSN1267
MATH CB Survey of Elementary Algebra (0)* (\$186) CSN1290

MATH Cl01 Intermediate Algebra (0)* (\$186) CSN1568 (Optional videotapes $\$ 80$ )
MATH Clll Algebra with Applications (5) DP CSN1615 (R\$4)
MATH C1 12 Applications of Calculus to Business and Economics (5) DP CSN1623
MATH Cl20 Precalculus (5) CSN1581
MATH C124 Calculus with Analytic Geometry (5) DP CSN1506

MATH C125 Calculus with Analytic Geometry (5) D CSN1522

MATH C126 Calculus with Analytic Geometry (5) D CSN1546

MATH C170 Math for Elementary School Teachers (3) D CSN1660
MATH C205 Elementary Linear Algebra (3) CSN1556

Oceanography
OCEAN C101 Survey of Oceanography (5) D CSN1552

Organization and Environment
O EC200 Introduction to Law (5)
CSN1593 (V\$15)

## Philosophy

PHIL CI 14 Philosophical Issues in the Law (5) CSN1607
PHIL C120 Introduction to Logic (5) DP CSN1212

Political Science
POL S Cl01 W Introduction to Politics (5) D CSN1513 (R\$15)
POL S C201 Introduction to Political Theory (5) D CSN1501 (R\$5)
POL S C202 W Introduction to American Politics (5) D CSNI320 (T\$24, R\$4.50)
POL S C203 W Introduction to International Relations (5) D CSN1612
POL S C305 W The Politics of Mass Communication in America (5) CSN1582 ( $\mathrm{R} \$ 30, \mathrm{~V} \$ 15$ )
POL S C321 W American Foreign Policy (5) D CSN1262 (R\$2.50)

## Psychology

PSYCH C101 W Psychology as a Social Science (5) D CSN1657
PSYCH C205 W Introduction to Personality and Individual Differences (4) D CSN1620
PSYCH C209 W Fundamentals of Psychological Research (4) CSN1313
PSYCH C213 Elementary Psychological Statistics (6) P CSN1595
PSYCH C305 W Abnormal Psychology (5) D CSN1621

PSYCH C345 W Social Psychology (5) D CSN1596
PSYCH C355 Survey of Cognitive Psychology (5) D CSN1622

Religious Studies/
Comparative Religion
RELIG C202 W Introduction to World Religions: Eastern Traditions
(5) D CSN1540

Russian
RUSS C101 First-Year Russian (5) P
CSN1528 (T\$20)

## Sociology

SOC Cl10 Survey of Sociology (5) D CSN1285 (R\$6, Optional PC disk \$15)
SOC C271 W Introduction to the Sociology of Deviance (5) D CSN1307
SOC C347 ${ }^{\text {- }}$ Socialization (5) D CSN1539
SOC C352 The Family (5) D CSN1642 (R\$5.25)
SOC C371 W Criminology (5) CSN1542
Spanish
SPAN C101 Elementary Spanish (5)* P CSN1524 (T\$24)
SPAN C102 Elementary Spanish (5)* P CSN1530 (T\$24)
SPAN C103 Elementary Spanish (5)* P CSN1519 (T\$32)
SPAN C201 Intermediate Spanish (5) D CSN1551 (T\$25)
SPAN C202 Intermediate Spanish (5) D CSN1567 (T\$25)

## Statistics

STAT C220 Basic Statistics (5) DP CSN1598
STAT C301 Basic Statistics with Applications (5) CSN1604
STAT C311 Elements of Statistical Methods (5) DP CSN1599

Technical Communication
ENGR C331 Advanced Technical Writing (3) CSNI549

TC C401 Style in Scientific and Technical Writing (3) CSN1534 (R\$10)
Women Studies
WOMEN C310 Women and the Law.(5) CSN1600 (R\$10)

## Independent Study by Correspondence

Registration form

0 Mr .
$\square \mathrm{Ms}$.


To register by phone using
VISA or Master Card, call:
(206) 543-2350 or 1-800-543-2320

FAX: (206) 685-9359 TDD: (206) 543-0898

To request disability accommodations, contact UW Extension as early as possible at (206) 543-2310; (206) 543-0898 (TDD); (206) 685-9359 (FAX).

Mair completed form and fees to:
促
5001 25th Ave. NE
Seattle, WA 98195
$\qquad$

Occupation
Correspondence Program? Independent Study by
$\square$ UW advisor (9)
Other college advisor (7)
$\square$ UW Extension catalog (13)
O UW Time Schedule (19)
$\square$ Nowspaper
$\square$ Other (26)


| Department name/course number |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Course section number (4-digit CSN) |  |  |  |  |  |  |  |
| Type of credit requested (ctreck one) |  | 0 regular | $\square \mathrm{S} / \mathrm{NS}$ | O noncredit, audit | $\square$ regular | $\square \mathrm{S} / \mathrm{NS}$ | $\square$ noncredit, audit |
| Number of credits |  |  |  |  |  | - |  |
| Course fee (\$55/credit; \$62/credit effective July 1, 1993) |  |  |  |  |  |  |  |
| Supplemental materials: | Tapes | $\cdot$ |  |  |  |  |  |
|  | Readings |  |  |  |  |  |  |
|  | Lab kit |  |  |  |  |  |  |
|  | Other |  |  |  |  |  |  |
| Foreign postage ${ }^{1}$. |  | 1 | . |  |  |  |  |
| Total course cost (Not including registraion fee) |  |  |  | . |  |  |  |

Course information

## Fée summary

| Course 1 total cost: | $\$$ |
| :--- | :---: |
| Course 2 total cost: | $+\$$ |
| Registration fee: | $+\$ 15$ |
| Total paid | . |

## Method of payment <br> All fees must be paid at the time of registration.

$\square$ Check (made payable to the University of Washington)

- Third-party payer-separate document (purchase order or letter of authorization to bill) must accompany registration form.
$\square$ VISA $\square$ MasterCard
Cand number Expermatration date

Note: Distance Learning reserves the right to adjust fees, discontinue courses or change instructors as circumstances warrant.
'Foreign postage must be paid by students living outside the United States, Canada or Mexico when lessons and materials are to be sent through international mail. The fee for $1-3$ credits is $\$ 15$, and for 4 or more credits it is $\$ 25$.

## Summer Quarter Admission

## Continuing UW students

If you are enrolled as a matriculated student at the UW Spring Quarter 1993 or completed Winter Quarter 1993 and took Spring Quarter off, you need not submit an application for Summer Quarter. Simply register usingSTAR just as you would for any other quarter.

## Applying for admission

Which application you use depends on your goals and current student classification. Select the student classification that applies to you. It's important that you read the detailed information below regarding each classification. If you have questions after reading the appropriate sections, please call UW Admissions, (206) 543-9686, or Summer Quarter Academic Advising, (206) 543-6160.

## Student classifications

Summer Quarter students are either: new or continuing matriculated students; or new or returning nonmatriculated students attending UW classes only during Summer Quarter 1993.

## Summer-only nonmatriculated

The nonmatriculated (not degree-seeking) status allows you to enroll even though you are not pursuing a degree at the UW. The credits you earn usually can be transferred to other institutions. These credits also may apply to the requirements for a UW baccalaureate degree if you are later admitted to an undergraduate degree program. Admission as a nonmatriculated student does not affect an applicant's chances for later acceptance into a degree program and it does not permit you to continue in this status Autumn Quarter.
A nonmatriculated student may enroll in a graduate-level course with the permission of the instructor and the departmental chair. Credits earned as a nonmatriculated student do not apply to UW graduate programs.
A nonmatriculated student may be:

- A high school student participating in the Advanced Study Program (see page 116);
- A student at another college attending the UW only during Summer Quarter;
- Anyone wishing to obtain credit who is not pursuing a degree;
- A teacher or administrator taking courses for special interest [but if you are pursuing your continuing certificate, you should see Continuing Teaching.Certificate (fifth year) students, this page];
- A person who has already earned a bachelor's degree (including those who earned baccalaureate degrees at the UW) and is taking a few courses but is not interested in formal admission to a graduate or second undergraduate program; or
- An auditor, a person who wants to attend courses but not receive a grade. Auditors pay standard tuition and fees and must be officially admitted and registered. Atten-
dance in a course as an auditor is by consent of the instructor and is on a space-available basis. Permission to audit is ordinarily granted only for lecture classes. Auditors do not participate in class discussions or take examinations; registration may be canceled at the discretion of the instructor. No transcript record of audited courses is kept. To receive credit for an audited course, you must register for the class for credit in a subsequent quarter.


## Continuing Teaching Certificate

## (fifth year) students

If you have previously attended the UW as a postbaccalaureate student in a teaching certificate program, you can be admitted as a returning student in this status. To apply, contact the Registration Office;PD-10, 225 Schmitz, University of Washington, Seattle, WA 98195, for a returning student application and submit the form by June 1 to the address on the form.
If you are a new student, a former UW undergraduate or a graduate student applying to work toward a Continuing Teaching Certificate, you may apply for either postbaccalaureate or nonmatriculated status. Postbaccalaureate status is the only status you may apply for if you plan to start your studies in the summer and continue through the next academic year. Apply for postbaccalaureate status by May 15 using the application for undergraduate admission (see page 113). This application requires two official transcripts from each college you have attended.
If you plan to attend the UW only during the summer, nonmatriculated status is probably the most appropriate. Use the application form in this bulletin. You may call the Teacher Education Advising and Certification Office at (206) 543-1820 for information about the continuing certificate.

## Graduate nonmatriculated students

Nonmatriculated and graduate nonmatriculated students are two different categories at the UW. For more information about which students need graduate nonmatriculatedstatus and how to pursue it, see Special Enrollment Information for Graduate Nonmatriculated Students, page 114.

## Visiting graduate student

If you are a graduate student pursuing an advanced degree at another institution, you may be admitted to the UW as a visiting graduate student. Visiting graduate students are not assured admission to any particular program of study but they may register in courses if they are considered eligible by a faculty adviser or the course instructor.

## Returning UW students

The following information applies to those who are not currently enrolled at the UW:

- If you have previously attended the UW as a nonmatriculated student, you may apply for that status again provided you are still in good standing at the University.
- If you have completed a degree at the UW, you may take Summer Quarter courses as a nonmatriculated student. Please see the introductory information on nonmatriculated students.
- If you were pursuing an undergraduate or professional degree or a teaching certificate when you last attended the UW and were not awarded that degree or certificate, you will be readmitted in this same status. This also applies to graduate students returning from "on leave." Graduate students who are not officially "on leave" must be accepted by the Graduate Admissions Office before they can return in that same status.
Returning students who are accepted as matriculated (into a degree or teaching certificate program) for Summer Quarter may register for Autumn Quarter without reapplying for admission, provided the Summer Quarter application was submitted by the June 1 deadline and they attend classes in the summer.


## International students

See International Students, page 115.

## Types of applications

## Application for Summer Quarter-only admission

The Summer Quarter-only application, on the inside back cover of this bulletin, is designed for summer-only nonmatriculated students and former UW students eligible to be readmitted to their previous admission status. This includes graduate students who have official "on-leave" status. This application should be used if students want to take courses in Seattle or at the UW Branch Campuses at Bothell and Tacoma. Students applying for new matriculated status (undergraduate or graduate) should use one of the forms described below.

## Application for undergraduate admission

Undergraduate admission applications are available from the Office of Admissions, PC-30; 320 Schmitz Hall, Seattle, WA 98195. Telephone: (206) 543-5150.
This form is to be used by all new students (except international students) seeking an undergraduate degree or certificate including those wishing to begin during Summer Quarter and continue into Autumn Quarter, and by former UW students who are changing to a new undergraduate status (including postbaccalaureate).
Teachers who are attending the UW for the first time as postbaccalaureates to work on Continuing Teaching Certificates should read Continuing Teaching Certificate (fifth year) students, page 112.
A former UW student who has previously been enrolled as a postbaccalaureate student and is now seeking a Continuing Teaching Certificate should submit a returning student application to the Registration Office, PD-10, 225 Schmitz Hall, Seattle, WA 98195. Telephone: (206) 543-8580.

## Application for admission to the graduate school

Applications for admission to the graduate school are available from the appropriate academic department or from the Office of Graduate Admissions, AD-10, 98 Administration Building, Seattle, WA 98195. Telephone: (206) 543-5929.
This form is to be used by students applying for admission as graduate students, including those seeking administrator's credentials; or visiting graduate students; or by former graduate students who did not request "on-leave" status.

## Application for undergraduate international student admission

See International Students, page 115.

## Application for admission to professional schools

Those interested in the schools of medicine, law or dentistry should write those schools directly.
School of Medicine, Office of the Dean, Committee on Admissions, SM-22, University of Washington, Seattle WA 98195
School of Law, Law School Admissions, Condon Hall, JB-20, -University of Washington, Seattle, WA 98195
School of Dentistry, Office of Student Services, SC-62, D323 Health Sciences, University of Washington, Seattle, WA 98195


## Other Admission Information

## Other Admission Information

Summer/Autumn Quarter admission

Autumn Quarter admission
Special enrollment information for graduate nonmatriculated students

## Summer/Aułumn Quarter admission

If you would like to begin pursuing a UW undergraduate degree in Summer Quarter and continue in Autumn Quarter, you should apply for matriculated status as a freshman, transfer or postbaccalaureate student as described below. For more information, contact the Admissions Office or the unit listed. Please read Types of applications, page 113.
Students who are accepted for Summer/Autumn must register for Summer Quarter if they wish to enroll in Autumn Quarter. Summer/Autumn students who officially withdraw from Summer Quarter classes on or aftet June 21 may register for Autumn Quarter without submitting a new application. Withdrawal from Summer Quarter prior to June 21 , however, invalidates your status as a continuing student and you must be re-admitted to the University; you must submit a new admission application for autumn by the closing dates noted in the Student Action Guide, pages 117-118.

## Freshman

This admission classification applies to the individual who is entering college for the first time since graduating from high school. The application priority date for Summer/ Autumn Quarter was Feb. 1.Admission is competitive. Not all qualified applicants can be admitted.

## Transfer

This admission classification applies to the student who has eamed college credits since graduating from high school and is applying to complete a first baccalaureate degree. The application closing date is May 15 (March 1 for international students). Admission is competitive. Not all qualified applicants can be admitted.

## Postbaccalaureate

This status applies to the student who has completed a fouryear baccalaureatedegree and wants to pursue an additional bachelor's degree or a teaching certificate, or wants to take further coursework to prepare for another degree program. Application closing date is May 15(March 1 for international students). If you are interested in obtaining a teaching certificate, you should also contact the Education Advising Office, 211 Miller, (206) 543-1820. Admission is competitive. Not all qualified applicants can be admitted.

## Graduate

This status applies to the student who is seeking a master's degree, a doctoral degree, or a school administrator's credential. Application deadlines vary by department. More information about requirements can be obtained from the appropriate academic unit or the Office of Graduate Admissions, (206) 543-5929.

## Visiting graduate status

This status applies to a graduate student who is pursuing an advanced degree at another institution but wishes to attend the UW. Students admitted as visiting graduate students are not guaranteed admission to any particular program of study. They may register only for courses for which they are considered eligible by a faculty adviser or the course instructor. More information about requirements can be obtained from the Office of Graduate Admissions, (206) 543-5929.

## Autumn Quarter admission

Summer-only nonmatriculated students who wish to attend Autumn Quarter must apply and be accepted as matriculated (degree-seeking) students. Autumn admission is competitive because space is limited. Some admission categories close before Summer Quarter begins (for dates see Student Action Guide, pages 117-118). Therefore, you may not be eligible to apply. For more information, contact the appropriate admission office. You'll find the addresses in Types of applications, page 113 . If your intention is to seek a degree at the University of Washington and you wish to begin enrollment during the summer, it is recommended that you apply for matriculated status for the term called "Summer/Autumn" on the matriculated application form, if you can do so by the appropriate deadline. This will eliminate the need to submit two separate application forms and fees. See Summer/Autumn Quarter admission, this page.

## Special enrollment information for graduate nonmatriculated students

Under certain limited conditions, departments, schools or colleges may offer enrollment in their graduate courses to graduate nonmatriculated students. This status is designed for the person who does nót plan to pursue a graduate program at this time, but would like the credits to be applicable to a degree in the future. A maximum of 12 credits taken as a graduate nonmatriculated student may be applied toward an advanced degreeif the graduate nonmatriculated student is later admitted into a graduate program.
For detailed information regarding admission requirements and materials, you should contact the graduate program coordinator in your area of interest or Student Records, (206) 543-2300, Ext. 425. Acceptance as a graduate nonmatriculated student confers no priority for later admission into the Graduate School for pursuit of a degree.

## International Students

International students are welcome to apply to the University in any admission classification. International students are those who are not U.S. citizens and are not refugees or immigrants to the United States.

## Summer-only admission

An international student who is not seeking a degree from the UW and who wishes to enroll in courses only during Summer Quarter may use the application in this bulletin. He or she will be admitted as a nonmatriculated student for Summer Quarter only and may not continue in Autumn Quarter.
The Unịersity cannot provide I-20 forms or give other assistance in obtaining $\mathrm{F}-1$ (student) status for attendance in Summer Quarter only. Summer-only students must have F-1 (student) status already through enrollment at another U.S. college or university, or be able to enter the United States on a visitor's visa or other non-student visa. Additional information will be sent with your offer of admission to Summer Quarter only.

## Summer/Autumn Quarter admission

If international students wish to begin their studies Summer Quarter and continue Autumn Quarter, they must be admitted into a degree program (matriculated). An Undergraduate. International Student Application and all required credentials must be filed with the Office of Admissions by Feb. 1 for freshmen and by March 1 for transfers and postbaccalaureates. Admission is granted only forSummer/Autumn or Autumn Quarter. More information is available from the Office of Admissions, 1400 NE Campus Parkway, 320 Schmitz Hall, PC-30, Seattle, WA 98195. Telephone: (206) 543-9686. International students who seek admission as graduate students must contact the Office of Graduate Admissions for appropriate application materials. These forms can be obtained by writing the Office of Graduate Admissions, 98Administration, AD-10, University of Washington, Seattle, WA 98195. Telephone: (206) 543-5929.

## Student insurance

International students must subscribe to the University's medical insurance or obtain insurance waivers by presenting proof of other medical coverage to the University's International Services Office prior to July 9, the tuition due date. (See page 128 for additional insurance details.)

## English for international students

Students granted Summer/Autumn Quarter admission in matriculated status may be required to take English As A Second Language (ESL) courses, and should contact the Office of Special Services, 460 Schmitz Hall, (206) 543-6122, for information about this requirement. Students admitted in nonmatriculated status for Summer Quarter only, however, have no ESSL requirement; the following information applies to these nonmatriculated students only.

If your native language is not English, you may wish to seek academic counseling before you enroll. An adviser can help you learn the level of English language competence needed to successfully complete the courses you plan to take. Academic counseling is strongly recommended for international students whose scores are less than 580 on the Test of English as a Foreign Language (TOEFL) or below 90 on the Michigan Test. Academic advising is available from English As A Second Language, (206) 543-6242; Summer Quarter Advising, (206) 543-6160; Arts and Sciences Central Advising, (206) 543-2551; or departments offering the courses you plan to take.
Students seeking to improve their English skills are encouraged to take noncredit English As ASecond Language (ESL) courses offered each quarter by UW Extension. These students should not submit an application to the Office of Admissions or the Office of Graduate Admissions to take ESL courses, but should apply directly to the English As A Second Language Program. Information about ESL courses and ESL can be obtained by writing to the English As A Second Language Program, University of Washington Extension, 103 Lewis Hall, DW-12, Seattle, WA 98195. Telephone: (206) 543-6242.
For students who are not native speakers of English, two programs are offered. The Academic English Program offers courses for matriculated (degree-pursuing) students. Successful completion of these courses is one way to satisfy the University's English language requirement. See departmental listing under English (ENGL) and contact the Office of Special Services, 460 Schmitz, (206) 543-6122.
The Intensive English Program offers noncredit courses designed to prepare students for college-level work, as well as help for students who want to improve their English skills. Applications for this program must be made through English As A Second Language, UW Extension, 103 Lewis Hall, (206) 543-6242.

## Foundation for International Understanding Through Students

The Foundation for International Understanding Through Students (FIUTS), located in 302B Student Union Building (HUB), (206) 543-0735, is a nonprofit community organization. FIUTS administers a host family program, an international speakers bureau, group discussions and cultural and educational activities for students.

## International Students

Summer-only admission
Summer/Autumn Quarter admission

Student insurance
English for international students

Foundation for Intermational
Understanding Through Students

International Services Office

# Programs for Middle and High School Students 

## Programs for Middle and High School Students

For middle school students
Advanced Study Program for high school students

Evening and correspondence courses

During the summer, the UW offers two special programs for middle and high school students interested in challenging, fast-paced courses.

## For middle school students

The Halbert Robinson Center for the Study of Capable Youth each.summer offers high school level courses in English (analytical reading), history, geography, mathematics, chemistry, and biology for students who have completed the seventh, eighth, or ninth grades. The program, which in 1993 - will have three weekly class meetings of five hours each from June 21 to July 22; allows a student to complete the equivalent of a full academic year of study in one subject.
Some high schools award credit for these courses; for more information, students or parents can call the center at (206) 543-4160.

Besides vigorous academic challenge, the capable youth summer program provides students with the opportunity to complete high school requirements earlier.
Admission is based on the students' performance on the Scholastic Aptitude Test (SAT) or Washington Pre-College Test (WPCT). Some students have taken the SAT through the Johns Hopkins Talent Search; the WPCT can be taken at the center. The cost is $\$ 435$ per student; scholarships and payment plans are available. The application deadline is May 15; late applicants will be accepted on a spaceavailable basis.

The center also offers a two-part program for bright young people who are ready for college-level work before they enter high school. The program is for the few extraordinary students ( 14 or younger) with the outstanding ability and high motivation that are best matched by a university academic setting.
The Transition School, the first phase, is an intensive, selfcontained program which provides a bridge between the junior high or middle school and enrollment in the University. Limited to 15 students a year, the Transition School pre-- pares participants for full-time university work in the second phase, the Early Entrance Program (EEP). The EEP provides a support system for young undergraduates and ensures that their personal, social, and academic needs are met appropriately.
For more information and application procedures, call the center at (206) 543-4160.

## Advanced Study Program for high school students

Through the Advanced Study Program, high school students can enroll in UW courses during the summer. Students can take regular UW courses-for example, mathematics, science, architecture or one of the UW's popular intensive language programs.

Each student enrolling for credit establishes a UW transcript. The grades earned in the Advanced Study Program are calculated into the overall grade-point average if a student later applies for and is accepted by the UW as a matriculated student.
Some school districts grant students credit toward high school diplomas for the UW courses taken. For more information, a student or his or her parents should consult the student's guidance counselor regarding the district policy.
The Advanced Study Program is designed for high-achieving students who have completed their high school freshman year by June 15. Applicants should have grade-point averages of at least 3.3 (B+).
To apply, a student should send the following materials to the UW. Office of Admissions, PC-30, Seattle, WA 98195:

- a completed copy of the summer application on the inside back cover of this bulletin;
- a letter of recommendation from the student's high school principal or guidance counselor;
- a copy of the student's high school transcript; and
- the nonrefundable $\$ 35$ application fee.

Students who will graduate from high school in 1993 can use the application on the inside back cover of this catalog and do not need to send a letter of recommendation or a copy of their high school transcript.
Advanced Study Program participants pay undergraduate course fees (page 129).
Students should also review the information on pages 112114 and 117-136. It is in each student's interest to review course descriptions and prerequisites in this bulletin or the University of Washington General Bulletin or to contact an academic adviser in the department offering the course, the Arts and Sciences Central Advising Office, (206) 543-2551, or the Summer Quarter Academic Advising Office, (206) 5436160, for additional information.
For more information about the Advanced Study Program, students, parents and teachers can call the Summer Quarter Academic Advising Office at (206) 543-6160.

## Evening and correspondence courses

High school students can also supplement their high school coursework and earn college-level credit with the evening credit classes and correspondence study available through UW Extension. Independent Study by Correspondence courses are listed on pages 109-110. For information about evening credit classes, refer to the quarterly UW Extension catalog, available by calling (206) 543-2320.

## Student Actioṇ Guide

| Application deadlines |  |  |  |
| :---: | :---: | :---: | :---: |
| plication deadline for summer-only students. (Apply in person after this date.) $\qquad$ |  |  |  |
|  |  |  |  |
| Application deadline for transfers and postbaccalaureates <br> applying for summer/autumn. $\qquad$ May 15 $\qquad$ May 15 $\qquad$ May 15 |  |  |  |
| Application deadline for international transfers and <br> postbaccalaureates applying for summer/autumn $\qquad$ March 1. $\qquad$ March 1 $\qquad$ March 1 |  |  |  |
| UW faculty/staff and Washington state classified employees |  |  |  |
| Last day to return approved applications for credit by examination to 248 Schmitz $\qquad$ July 5 $\qquad$ July 5 $\qquad$ July 30 |  |  |  |
| Application deadline for baccalaureate degrees (all schools and colleges) to be conferred for the quarter. (Submit to Graduation Office, 207 Schmitz) $\qquad$ July 9 $\qquad$ July 9 $\qquad$ July 9 |  |  |  |
| Credit by examination (students must make arrangements with the Educational Assessment Center, 543-1170) $\qquad$ | $\begin{gathered} \text { 4th we } \\ \text {.... of quart } \end{gathered}$ | $\begin{aligned} & \text { 4th we } \\ & \text {.... of ter } \end{aligned}$ | 4th week .... of term |
| Registration |  |  |  |
|  Registration Period II |  |  |  |
|  |  |  |  |
|  |  |  |  |
| STAR closes at 6 p.m. for preparation of instructor's <br> class lists. $\qquad$ June 17 $\qquad$ June 17 $\qquad$ June 17 |  |  |  |
| Registration Period III ....................................................June 21-July 2.......June 21-July 2......June 21-July 2 |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
| Last day entry codes are valid to add a course .....................................July 2 ..................July 2 ...............July 28 |  |  |  |
|  |  |  |  |
|  |  |  |  |

## Adding/dropping courses or University withdrawal

Last day for complete withdrawal without owing tuition $\qquad$ June 25 $\qquad$ June 25 July 28
Last day for graduate students to apply for on-leave status
$\qquad$
Last day to add, drop or change a non-STAR transaction in Registration Office without being assessed a $\$ 20$ change fee and possible tuition forfeiture $\qquad$ June 25 $\qquad$ June 25 $\qquad$ July 28
Last day to add, drop or change a course through STAR without being assessed a $\$ 20$ change fee and possible tuition forfeiture $\qquad$ .June 27
June 27 $\qquad$ July 28
Entry codes required to add courses. June 28-July 2 .......June 28-July 2 .....June 28-July 28
$b$ Term courses may be added at the Registration Office, 225 Schmitz Hall. Students adding courses that require entry codes should obtain this code before coming to register $\qquad$ July 6-28
One-half tuition due if officially withdrawing completely from the quarter

June 28-July 9 .June 28-July 9 ....July 29-A ....July 29-Aug. 11
Last day to drop a course without entry on transcript
.July 4 June 27 July 28
Last day to add a course July 2 July 2 July 28

## Student Action Guide

Application deadlines
Registration
Adding/dropping courses or University withdrawal

## Student Action Guide (con't)

Adding/dropping courses or University withdrawal (con't)

Tuition/fee assessments and deadlines

Grades

## Final examinations <br> Commencement information .



## Tuition/fee assessment and deadlines


Late tuition payment period (requires a late-payment fee) July 12-16.............July 12-16 July 12-16
Full tuition due if withdrawing completely from the quarter
July 12
.July 12
Aug. 12

Last day to re-register if cancelled for non-payment of tuition (additional $\$ 75$ fee assessed)

Aug. 13 $\qquad$ July 14 Aug. 13

## Grades



## Final examinations

There is no separate final examination week during Summer Quarter. Finals are given during the scheduled last class unless all students, their instructor and the Time Schedule Office agree on another time.

## Commencement information

Undergraduates who plan to graduate in August and want to participate in the June 1993 commencement must have a graduation application on file by April 23, 1993.

## Registration for Summer 1993

## STAR registration

Registration is easy using the University of Washington's STAR touchtone telephone registration system. You may register by STAR as soon as you receive notice of acceptance (beginning April 26, 1993). Early registration is recommended. Through STAR, students may add and drop courses. STAR lists alternative sections available if the requested sections are closed or canceled, reports the open/ closed status of specified course sections, provides a spoken listing of the confirmed registration schedule, tuition balance, financial aid status, date and amount of last payment, optional charges and previous quarters grades. STAR is available all weekdays and most holidays and weekends. Weekend hours not specifically scheduled are not guaranteed and may be subject to equipment and software maintenance requirements. For instructions on how to register, please see How to Register Using STAR, pages 124-125. The four Summer Quarter registration periods are described below.
Students enrolled Spring Quarter at the Seattle, Bothell, or Tacoma campuses are eligible to enroll at any campus without applying for separate admission. This applies to Summer Quarter registration only.

## Registrotion Period I aju STAR

## April 26-May 28'

- Monday-Friday, 6 a.m-midnight
- Saturday and Sunday, 9 a.m.-midnight

This period is open to continuing students currently enrolled Spring Quarter 1993 or students who completed Winter Quarter 1993 and took Spring Quarter off, matriculated and nonmatriculated, and tonew and returning students applying early enough to be notified of registration eligibility. Students may call STAR to make changes to their schedules after initial registration.

## Registration confirmation

Students registering through May 28 will have their registration confirmations mailed on June 1.

## Kewistration Perion II vin STAK

May 31-June 20

## - Monday-Friday, 6 a.m.-midnight <br> - Saturday and Sunday, 9 a.m.-midnight

STAR closes at 6 p.m. on June 17 to produce class lists.
This period is open to continuing students who were enrolled Spring Quarter 1993 and to newly admitted students and returning former students who did not apply early enough to be eligible for Registration Period I, or who missed that period.

## Registration confirmation

Registration confirmations are mailed two working days following a completed registration transaction. Call 543-3868 to record your current address.

## Change of registration confirmations

Registration change confirmations are mailed periodically. Students may also confirm their registration schedules by calling STAR and using the List Schedule Transaction (L\#). This listing includes building and classroom locations.

## Remistration Pervol III vin STAR

June 21-July 2
■ Junie 21-25, 6 a.m.-midnight

- June 26-27, 9 a.m.-midnight
- June 28-July 1, 6 am-midnight (\$20 change fee charged) - July 2, 6 a.m. 6 p.m.

Registration Office, 225 Schmitz, is open for non-STAR transactions Monday-Friday, 8 a.m.-5 p.m.
This period is open to all students for late registration and for changes to registration. A $\$ 25$ late registration fee is assessed and billed to students registering for the first time, except for faculty/staff tuition exempt and ACCESS students. $\mathrm{A} \$ 20$ fee is charged for all changes made on or after June 28.
Students are encouraged to register and complete changes to registration prior to this. period since many course sections will be closed and completing a schedule will be difficult.
Students may add courses on STAR through July 2 only. No adds are permitted affer July 2 for full-quarter or a Term courses.

## New registration confirmations

Registration confirmations will be mailed in two working days following a completed registration transaction. Call 543-3868 to record your current address.

## Change of registration confirmations

Change confirmations will be mailed periodically. Students may also confirm their registration schedules by calling STAR and using the ListSchedule Transaction (L\#). This listing includes building and classroom locations.

## Kegistrulim Parion IV ivin STAR

July 6-Aug. 8

E Monday-Friday, 6 a.m.-midnight

- Saturday and Sunday, 9 a.m.-midnight

During this period, a $\$ 20$ fee is assessed for all changes of registration.

## Adding and dropping courses

Students may drop courses on STAR during this period. No course drops for full-quarter courses after Aug. 8 or for $a$ Term courses after July 10. Term $b$ courses only can be dropped between Aug. 9 and 11 in person at the Registration Office. If you drop all courses, a complete withdrawal date is recorded on your transcript. Official withdrawals may be made at the Registration Office, 225 Schmitz or by mail. Some courses require drop codes which are available through the departments.

$\square$
$\square$

## Registration

 for Summer 1993All students are urged to review the Registration eligibility section, page 121, before registering.

See page 124-125 for instructions on how to register by phone using STAR. If you register for courses and find that you cannot attend, you must completely withdraw from the University or you will be committed to pay tuitions

.

## Registration for Summer 1993

Courses added after registration period II

- Special-date courses

Academic advising
Address change telephone service

Class attendance guidelines
Overload guidelines
Late registration fees

## Courses added after registration period II

An entry code is required to add courses after June 27; no full-quarter or $a$ Term course may be added after July 2 . Term $b$ courses may be added at the Registration Office between July 6 and 28.
Courses audited may not be changed to credit registration after July 2 for full-quarter or a Term courses, and after July 28 for $b$ Term courses.

## Special-date courses

In general, the registration, fee payment, and grading requirements of special-date courses will depend on whether the course is identified as an $a, b$ or full-quarter course.
For courses that begin or end on dates other than the standard dates of $a$ Term, $b$ Term, or full-quarter, observe the following:

- Late registration fees: A $\$ 25$ late registration fee will be charged when registering on the first day of the course or later.
- Drop/add fee: A \$20 drop/add change fee will be assessed for either dropping or adding a special-date course beginning the first day of the course.
- Tuition refunds: Full refund is possible if course is dropped no later than the first day of course instruction. One-half refund is possible if course is dropped during the first 40 percent of course. After 40 percent of the course is completed, no refund is possible.
- Grading: No grade and no entry on record if course is dropped by first day. Free drops permitted with "W" grade through first 40 percent of course. No drop permitted after 40 percent of course is completed except complete withdrawal for the quarter. No drops of any kind are permitted on last day of course.


## Academic advising

Students platring on continuing their summer studies into Autumn Quarter and beyond are encouraged to see an academic adviser to discuss educational objectives and assess progress toward completion of degree requirements. For information regarding registration, course restrictions, requirements, etc., see an adviser or staff member in the Undergraduate Advising Center, 9 Communications, (206) 543-2551; call UW Extension and Summer Quarter Advising at (206) 543-6160; or, if you are a declared major, see your departmental advising office. It is the student's responsibility to make and maintain contact with advising resources. Summeronly students, or those who plan to complete degrees elsewhere, do not need to see an academic adviser. If they have questions, they are free to call any of the above numbers.

## Address change telephone service - call 543-3868

Students are responsible for notifying the Registrar's Office when their addresses change. An Address Change Telephone Answering Service is available 24 hours a day, seven days a week, for changes of local and permanent addresses and telephone numbers, restricting release of directory information, and where to mail registration confirmations and ID cards, tuition billing statements, and final grades. Students should always leave a forwarding address with the U.S. Postal Service whenever they move. Addresses may also be changed at the Registration Office, 225 Schmitz Hall.
If you have applied for financial aid, you must also report your address change to the Office of Financial Aid.

## Class aftendance guidelines

To provide enrollment space for others, students who do not attend regularly scheduled class meetings during the first week of the quarter are subject to being dropped at the discretion of the teaching departments. Affected courses may be identified in the Time Schedule and posted in departmental offices.
Students must not assume that departments will automatically initiate a drop for nonclass attendance. Students who register for courses they do not attend are responsible for officially dropping the courses through the Registrar's Office. The consequence of not officially dropping courses is a 0.0 grade.
Students should contact the instructor or teaching department if they plan to be absent any day during the first week of the quarter.
No person, other than a faculty member attending informally with the approval of the instructor, may attend a University course in which that person has not been officially registered through the Registrar's Office. An instructor may allow a student to attend his or her class only if the student's name appears on the official class list from the Registrar's Office. Instructors may permit students attending class under a faculty/staff tuition exemption or the Washington state classified employee tuition exemption program to attend class prior to registration on Wednesday or Thursday respectively of the first week of the quarter provided space is available.

## Overload guidelines

For reasons of public safety and instructional quality, course enrollment in each section will be limited to the approved classroom capacity. The Registrar's Office monitors course enrollments throughout the quarter according to the following guidelines:

- Prior to the sixth class day, a student may add a section unless the class is full or requires permission; then an entry code is required. STAR will accept course overloads up to 115 percent of classroom capacity to compensate for expected course drops.
- No course adds are accepted after the 10 th class day for full-quarter and $a$ Term courses. No course adds for $b$ Term are permitted after July 28.


## Registration tampering

A student who tampers or attempts to tamper with the registration records of another student, including but not limited to dropping courses and adding courses, may be subject to disciplinary sanctions as defined in the Student Conduct Code (WAC 478-120).

## Private Access Code (PAC) to secure your registration and grade data

Before you call STAR for the first time, select your four- to six-digit Private Access Code (PAC), unless you have previously entered your PAC onSTAR. For more information, see Calling STAR for the first time, page 124.

## Full-fime student requirement

To be considered full-time, an undergraduate or professional student must register for 12 or more credits and a graduate student must register for 9 or more credits.
It is important to note that differing criteria and standards for full-time enrollment exist for eligibility in certain programs, e.g., veterans benefits, athletic eligibility, Bureau of Indian Affairs, Vocational Rehabilitation, and various forms of financial aid. Information on full-time requinements of the Department of Veterans Affairs may be obtained at 460 Schmitz, or by calling (206) 543-6122. Consult the Financial Aid Office at 105 Schmitz, or by calling (206) 543-6101, for its requirement on satisfactory student progress.
Full-time immigration and naturalization requirements may be obtained at the International Services Office, 459 Schmitz, or by calling (206) 543-0840.

## $\mathbf{\$ 2 0}$ change-of-registration fee

The $\$ 20$ change-of-registration fee is assessed for any number of add, drop or change transactions (including change of grading option) processed during a given day beginning the eighth calendar day of the term. The $\$ 20$ fee is a service charge, not a penalty, and is in addition to any change in tuition or forfeiture as a result of adds, drops or changes.
There is no charge for changes made in Registration Periods I, II and the first week of Period III. This "free" period gives students an incentive to complete their schedule before the quarter is too far advanced.
Fee waivers are rarely approved. If you think your change is necessitated by a University error or is at the University's request, you must pay the fee and submit a petition for a refund to the Registration Office, 225 Schmitz. You will be notified of the decision by the Registrar's Office. The fee will be waived only if the change is necessitated by a University error or is at the University's request.

## Undergraduate satisfactory progress

Students admitted to the University to pursue baccalaureate. degrees are expected to make satisfactory progress toward the attainment of that degree, and are expected to enter a major and graduate after completion of a reasonable number of credits. Refer to the UW General Catalog for additional information.

## Graduate students on leave

Students who are registered for any portion of a quarter may not go on-leave for that quarter unless they officially withdraw at the Registration Office, 225 Schmitz Hall prior to the first day of the quarter. To avoid liability for tuition and fees, students must withdraw before the sixth calendar day of the quarter. See Tuition forfeitures or refunds, page 128, for schedule.

## Registration eligibility

## All students

Guaranteed registration eligibility. All students at the University who remain in good standing and in compliance with other rules and regulations, with no outstanding financial obligations, are guaranteed the opportunity to register each quarter as long as they maintain continuous enrollment (Summer Quarter excepted). Continuation must be in the same classification, e.g., undergraduate, post baccalaureate (fifth-year), graduate, etc. Once a student earns a baccalaureate degree, he or she must apply for readmission as a post baccalaureate (fifth-year), nonmatriculated, or graduate student. Exceptions to the guarantee are: (1) students under disciplinary action, (2) students with a registration hold, (3) students not meeting their departmental continuation policies, or (4) students not meeting the U'niversity's satisfactory progress policy (see General Catalog).

## Undergraduate and professional students

Quarter-offeligibility policy. Subject to college, school; and departmental enrollment, policies, undergraduate and professional students who have completed a quarter at the University of Washington may take the following quarter off and remain eligible to register in Registration Period I for the subsequent quarter without reapplication as returning students. For example, a student completing Winter Quarter may, without registering for or completing Spring Quarter, register during Registration Period I for Autumin Quarter without reapplying. Any quarter from which a student has completely withdrawn, or from which he/she is canceled, does not constitute a completed quarter. Summer Quarter enrollment is not required to maintain continuous registration eligibility.
Returning students who do not meet the criteria described in the above paragraph must submit a Returning Student Application by the published deadline.

## Graduate students

On-leave status. The quarter-off eligibility policy is not available to graduate students. Graduate students who do not maintain continuous enrollment (Summer Quarter excepted) must file a Petition for On-Leave Status with the Graduate School. Students who are registered for any portion of a quarter, may not go on-leave for that quarter unless they officially withdraw at the Registration Office, 225 Schmitz Hall prior to the first day of the quarter. On-leave graduate students returning to the University on or before the termination of their authorized periods of leave must

## Registration

for Summer 1993

Registration fampering
Private Access Code (PAC)
Full-time student requirement
$\$ 20$ change-of-registration fee
Undergraduate satisfactory progress

Graduate students on leave
Registration eligibility

## Registration

 for Summer 1993Center for Career Services
UW ID card
U-PASS
ACCESS program for older adults
apply as returning former students (through the Registration Office by the published deadlines).

## Center for Career Services

The Center for Career Services provides comprehensive career and job search information and services for students and alumni to facilitate their transition from academic programs of the UW to the broader society. Services are available to UW students and alumni who are registered with the office. Registration is free for students; alumni must pay applicable fees for the period of time during which services are desired.
Services include individual career counseling, job search seminars, a career information library, a Minority Job Placement'Program, on-campus interviews, job opportunity bulletins, a placement/credential file service, and career- and degree-related summer jobs/internships. To participate in the on-campus interview program, students mustattend an orientation session. For more information, please come to the Center for Career Services at 301 Loew Hall, FH-30, or call (206) 543-0535.

## UW ID card

Carry your UW ID card with you at all times since it is required for a variety of transactions and services on campus. In some situations, you may be asked to provide additional pieces of identification, including one containing your photo. A quarterly validation sticker is mailed with your registration confirmation. The sticker should be affixed to the permanent ID Card as soon as it is received. Lost ID Cards may be replaced at the Student ID Center, 229 Schmitz. A $\$ 5$ fee is charged for replacements. A $\$ 10$ fee is charged for replacement photo IDs issued to students living in university housing. These fees are nonrefundable.

## U-PASS

A U-PASS validation sticker is mailed with students' registration confirmation each quarter. The U-PASS is valid on all regular Metro routes and most Community Transit routes at all times and provides parking privileges to carpoolers, riding privileges to vanpool passengers, and merchant discounts. The quarterly fee of $\$ 20$ will be included on the tuition bill. Students who do not wish to participate in the UPASS program must return the validation sticker to the university by the tuition payment deadline. The sticker can be returned by mail in the return envelope provided, or mailed with the tuition payment, or returned in person at the Student Accounts and Cashiers Office.
Students who withdraw through the seventh calendar day of the quarter without returning the U-PASS sticker will owe $\$ 75$ for the U-PASS. Students who withdraw after the sev-
enth calendar day will be charged the applicable tuition and may retain the pass for $\$ 20$ or return it no later than the tuition due date to have the $\$ 20$ fee waived. There will be no U-PASS refunds after the tuition payment deadline.
Students who did not receive their U-PASS in the mail will be asked to sign a certifying statement and will be issued a replacement sticker at no charge through the first week of the quarter. Replacement stickers issued after the first week will cost $\$ 10$. Lost ID cards bearing a U-PASS sticker will be replaced for a $\$ 15$ fee, which includes a new U-PASS sticker. Replacement fees are nonrefundable. Students issued replacement stickers will not be permitted to cancel the $\$ 20$ U-PASS fee by returning a sticker.
Students who have not already purchased a U-PASS sticker may do so at the Registration Office, 225 Schmitz, any time during the quarter. The fee will remain $\$ 20$ throughout the quarter.
The U-PASS is the property of the University of Washington and is not transferable. The U-PASS program and replacement policies are subject to change without notice.

## ACCESS program for older adults

Wednesday, June $23 ; 8$ a.m. to 5 p.m.
Registration Office, 225 Schmitz Hall Registration time is based on last name.
(ACCESS students do not register through STAR)

| 8-9 a.m. ............F-H | noon-1 p.m. ......S |
| :--- | :--- |
| 9-10 a.m. ........I-L | 1-2 p.m. ..........T-Z |
| 10-11 a.m. .......M-O | $2-3$ p.m. .........A-B |
| 11-noon ..........P-R | $3-4$ p.m. .........C-E |

The University of Washington waives tuition for Washington residents 60 years or older who wish to attend classes as auditing students, on a space-available basis. Courses marked with a greater than sign ( $>$ ) require an entry code to register. Contact the offering department to obtain entry codes prior to coming to the Registration Office. The fee is $\$ 5$ whether one or two courses are attended and will be billed if registration in a course(s) is completed. The payment is due by July 9 . As auditors, students do not receive credit and are not expected to do laboratory work or to take examinations. ACCESS students may register for all courses except UW Extension, Distance Learning; studio, laboratory courses, and honors sections. ACCESS students may also register in 500level graduate courses with the approval of the instructor by obtaining an entry code through the department. A transcript is not maintained. Students who attend the University under the ACCESS program are limited to two courses per quarter.
For additional information about the program, call UW Extension Student Records, 543-2300, Ext. 425, between 8 a.m. and 5 p.m., weekdays.

## Tuition exemption programs for UW faculy/staff and Washington state classified employees

Students enrolling under these exemption programs must be full-time permanent employees and meet the criteria established for faculty and staff of the University of Washington or by the employing agency of the state of Washington for non-University employees. UW employees must have been continuously employed full-time for six months or more with the University immediately prior to the academic quarter in which they are enrolling. Those who meet the requirements and are admitted to the UW may take up to six credits per quarter under the tuition exemption programs. According to legislative action, all registration must be on a space-available basis after other matriculated students have registered. Students cannot register for graduatelevel independent study courses numbered 600,700 , or 800 . Students admitted as nonmatriculated in order to use one of these exemption programs may only register for classes when using the exemption and the exemption request form has been submitted. Matriculated students will be permitted to register even when they are not using the exemption: full tuition and fees will be charged. Deadilines and registration dates are listed below by category:

## UW faculty/staff

Friday, May 28 Tuition exemption request card due to Registration, 225 Schmitz, PD-10.
Wednesday, June 23 Registration begins on STAR. Open from 6 a.m. until midnight.
Friday, July $9 \$ 5$ registration fee due. Fee is billed if a student successfully registers.

Washington state classified employees
Friday, May 28 Tuition exemption request card due to Registration, 225 Schmitz, PD-10.
Thursday, June 24 Registration begins on STAR. Open from 6 a.m. until midnight.
Friday, July $9 \$ 30$ registration fee due. Feee is billed if a student successfully registers.
Students enrolling under these exemption programs may attend class beginning the first class day if space is available. Please check with the department offering the course to determine the correct classroom location. The building and room number may have been changed by the department since the Time Schedule was printed.

## Admission status

Matriculated-program participants who wish to enroll as new matriculated students or in a new matriculated category must apply to the Office of Admissions, 320 Schmitz Hall, by the regular admission closing date; May 15 is the closing date for Summer/Autumn applications. Students applying to the GraduateSchool must contact the applicable academic department for application information.
Nonmatriculated-program participants who are applying as new nonmatriculated students should apply at the Office of Admissions. Applications will be accepted up to the beginning of the quarter.
Returning students-program participants who are former students returning in the same classification or as nonmatriculated students should apply at the Registration Office, 225 Schmitz Hall. Applications will be accepted up to the beginning of the quarter.

## How to register

If the tuition exemption request has been received by the Registration Office in time, program participants may call STAR on or after the appropriate eligibility dates. Registration continues through Sunday, June 27, on STAR without assessment of late fees. Effective Monday, June 28, a $\$ 25$ late registration fee is billed if the student is initially registering for the quarter, and a $\$ 20$ change fee is charged for registration changes. Students participating in the exemption programs will be billed these fees, if applicable, plus the registration fee when registration in a course is successful.
Students will not be permitted to convert to the tuition exemption program if they have already registered for Summer Quarter, and they will be required to pay regular tuition for those credits.
Students participating in these programs are not entitled to other student services such as those available at the Hall Health Center and the Intramural Activities Building. Therefore, UW student cards will not be issued to students enrolling under the faculty/staff or Washington state classified employee exemption programs. Fäculty/staff identification cards may be used for library services. Washington state employees participating in the program may contact the Student ID Card Center in 229 Schmitz Hall for an ID card to be used for library services.

## Registration for Summer 1993

Tuition exemption programs for UW faculty/staff and Washington State classified employees

# How to Register Using STAR 

Using STAR

General information

## General information

## Touchtone telephone

Use only a touchtone telephone to make entries on STAR. Touchtone phones make a different tone after each key is pressed. Telephones that make no tone or only a monotone will not work on the registration system. Your touchtone phone acts as a computer keyboard, enabling you to enter your course requests just as if you were sitting at a computer terminal. Within minutes, you will know your confirmed schedule.

## Calling STAR

STAR is available during published registration dates and times (see page 119). STAR is closed on holidays and may close earlier than midnight on a few days to produce registration confirmations and instructors' class list. If STAR does not answer your call, it is not in operation. If the phone line is busy, all lines are being used. Call back later. You may call STAR during, or after, your initial registration date to add, drop, check section status, etc.

## Calling STAR for the first time

When you call STAR for the first time, enter your date of birth when STAR asks you to enter a Private Access Code. Select a Private Access Code (PAC) of four to six digits that you can easily remember. Enter the PAC that you selected when prompted by STAR. You will then use your PAC for all future calls to STAR. If you wish to change your PAC, you may do so at any time using transaction code 9. Please refer to the STAR Work Sheet, page 127, for instructions. If you forget you PAC, you will need to go to the Registration Office, 225 Schmitz Hall and present photo ID to obtain your code or select a new one.

## Voice response

A voice response will guide you after each transaction. If you do not understand a response or instruction and would like it repeated, press the star key ( ${ }^{*}$ ) first, and then the number sign key (\#).

## If you make a mistake

If you make a mistake before finishing an entry, press the star key and the number sign key (*), and your entry will be discarded.

## To speed up your registration

To expedite your registration, you may enter data during the voice response. Be cautious about doing this, since you may miss some important information.

## Disconnect action

Time limits are built into the system, so if you are holding on the STAR line for an extended period of time, you will be disconnected. Error limits are also a part of the STAR system, so if you do not enter the correct information after the second try, STAR will disconnect. You may immediately call back to STAR.

## Transactions

The transactions you enter on your touchtone telephone communicate to the computer what action to take (such as add a course, drop a course, check a section status, etc.) and what data you want considered. Refer to the STAR Worksheet for the transaction codes.

## Entry codes

Entry codes are five digit random numbers issued to you by academic departments as authorization to add or drop restricted course sections. Academic departments have the ability to establish varying levels of enrollment control for coursesections in each registration period, or they can maintain the same level of control throughout.
Courses requiring entry codes are designated with the symbol $>$ to the left of the schedule line number (SLN) in the Time Schedule section of this bulletin.' Please note that departments reserve the right to require entry codes whether the course is so designated in the Time Schedule or not. Usually information on where to obtain entry codes is found in the body of the Time Schedule, either as a comment before the course listing or just after the title of the course. Contact the department offering the course if STAR advises you an entry code is required and the location for obtaining one is not identified in the Time Schedule.
Instructors may issue entry codes to students when a class is full. You may use this code to override the system but not if the overload will increase enrollment over 115 percent of room capacity.
Once you have used an entry code, the computer removes it from the list of viable codes and will not accept it again. If you drop a section that required an entry code to add, then - you must obtain another entry code from the department if you wish to re-add the section.
When you use an entry code to register, it becomes a part of your registration record, and is visible with your name on computer terminal screens. Entry codes are required to add courses during the second week of the quarter.

## Lecture/lab/quiz/conference

These are combined under one SLN for each possible combination of time and day. OnSTAR, when you register for a course SLN associated with a lecture, lab and/or quiz or conference, you will be registered for all the lecture, lab, quiz or conference combinations as listed under one SLN .in the Time Schedule.

## Alternate selections

If the section requested is closed you will be informed by STAR of open section alternates (including new sections added after the publication of the quarterly Time Schedule). You can then immediately select an alternate section to be added to your schedule. Have a pencil ready and be prepared to write down schedule line numbers (SLN) and meeting times of alternate sections.

## Time conflict

You may not register on STAR for two courses that meet at the same time or for courses with overlapping meeting times. If you want the second course instead of the one you are registered for, you must drop the first one before adding the second course on STAR. If you want two time-conflicting courses, you must add the second course, in person, at the Registration Office, 225 Schmitz. Time conflicts of one hour or less require the permission of the instructors. Time conflicts of more than one hour a week require instructors' signatures for both courses involved.

## Registration holds

If you have a hold on your registration, you will not be permitted to register or add courses until the hold has been released by the initiating office. If you attempt to register on STAR before your hold has been released, the voice response will indicate which office has.placed the hold, and where to go to get it released. You may make other transactions on STAR.

## Electing S/NS grading option

You must register for a course on STAR, and then go in person to the Registration Office, 225 Schmitz Hall, to elect the Satisfactory/Not Satisfactory grading option. S/NS may be elected through July 2 for full quarter and $a$ Term courses and July 28 for $b$ Term courses.

## Audit

You must first register on STAR for the course you wish to audit, and then go in person to the Registration Office, 225 Schmitz Hall, to select the audit grade option. You may change to audit through the seventh week of the quarter. After the 10th class day a " $W$ " and the week of the quarter in which the grade option change occurred will be recorded on your transcript. A $\$ 20$ change fee is charged beginning the sixth class day.

## Credit limitations

Undergraduates will be limited to 19 credits during Registration Periods I and II to allow all students a chance to develop a basic schedule. Additional credits may be added during Registration Period III. Thirty credits is the limit per quarter.

## Variable credits

Some courses are offered for a variable number of credits. See the department to obtain the appropriate number of credits for a variable credit course and be prepared to enter the number of credits when requested to do so by the voice response on STAR. To change variable credits beginning the sixth class day, an entry code is required to add the new course credits. After the 10th class day, changes are made at the Registration Office, 225 Schmitz.

## Section II on STAR worksheet

Since Section II requires selection decisions only during your first telephone call each quarter, you may proceed directly from Section I to Section III through Section XII in a random manner when making subsequent calls. Selections may be changed on STAR. Faculty/staff or Washington state classified employees using a tuition exemption program, and branch campus students will not be asked to make decisions for Section II.

## Merlin telephone

If using an AT\&T Merlin telephone to call STAR, press the \# sign key twice to send transactions.

## Registration in sequence courses

Departments may establish a registration priority for students enrolled in sequence courses. For example, students enrolled in a foreign language 101 course would have priority to register in the next course sequence (102) for the succeeding quarter.

## Follow these steps before calling STAR

Step 1: Read Registration for Summer 1993, pages 119-123, How to Register Using STAR, and the STAR Work Sheet, page 127, carefully.
Step 2: Academic advising is highly recommended, and it is suggested that you make an appointment with your adviser before selecting your courses: Use the Trial Schedule Form provided on the following page to draft your schedule.
Step 3: Obtain entry codes from departments for courses requiring entry codes.
Step 4: Organize your registration materials. Use the Time Schedule listing in this bulletin, pages 68-108, to obtain the schedule line number (SLN) for each course section. SLNs change every quarter. Develop your program on the Trial Schedule Form. Prepare an alternate course section list because some sections may be full. Complete the STAR Work Sheet. By completing the work sheet before calling STAR, you will have all the information you need at your fingertips, and will reduce the chances of being disconnected.
Step 5: Take care of all University financial obligations before calling STAR, since STAR will not permit you to register if there is a "hold" on your registration.
Step 6: Select a four- to six-digit Private Access Code (PAC) that you can remember easily. If you are calling STAR for the first time, enter your birthdate when STAR asks you to enter your PAC:
Step 7: Call STAR from a touchtone telephone and begin with Section I on the STAR Work Sheet. You will be asked to provide information in Section II during your first telephone call to STAR. Always exit STAR using the " T " transaction followed by the number sign key (\#), so that you can find out how to obtain your registration confirmation.
Step 8: Remember once you have initially registered, you can call STAR as often as you want to check the status of sections, have your confirmed schedule listed, add/drop courses, check your account balance, etc.

## Using STAR

General information (con't)
Follow these steps before calling STAR

## Questions?

If you have questions regarding registration, please call Registration, (206) 543-8580, Monday through Friday, 8 a.m.5 p.m.

## Trial schedule form

Plan your schedule on this form.


## University Of Washington Student Telephone Assisted Registration (STAR) Summer Quarter 1993 STAR Work Sheet



# Tuition, Billing and Student Insurance 

## Tuition, Billing and Student Insurance

Tuition forfeitures or refunds
Tuitionffee assessments and deadines

Application of payments to a student's account

Student insurance

## Tuition forfeitures or refunds

Students will be billed for the number of credits, including audit hours, on their programs at the beginning of the quarter. Courses added after this date may result in additional fees. Only partial fee reductions will be made for courses dropped after the 7 th calendar day of the term.
For each category of courses (full-quarter, Term $a$ or Term b), there is a period during which students owe one-half the fees associated with dropped courses.

$$
\begin{array}{ll}
\text { Type of course } & \text { Half-payment period } \\
\text { Full-quarter } & \text { June 28-July } 9 \\
a \text { Term } & \text { June 28-July } 9 \\
b \text { Term } & \text { July 29-Aug. } 11
\end{array}
$$

After these half-payment period dates, there is no reduction in the fees owed, due to drops or withdrawal. The effective drop date is the date the drop is processed on STAR or in Registration, 225 Schmitz.

## Tuition/fee assessments and deadlines

It is the student's responsibility to see that tuition is paid in full by the tuition due date (third Friday of each quarter). Bills are sent at the beginning of each quarter to facilitate payment. However, failure to receive a tuition bill does not nullify the student's responsibility for payment by the due date. Account balances are available through STAR. Students must select their permanent or local address on STAR for feestatement mailing, or cgll 543-3868 if they need to make a change of address. Students who have not received a fee statement by July 6 should contact the Student Accounts and Cashiers Office, or call STAR for the amount of tuition due.

Students may pay fees in person in the Student Accounts and Cashiers Office or mail them to UW,Stu-

## Important information

- Drops or withdrawals after the first week of the term will cost you $\$ 20$ plus at least half of tuition reduction (see Tuition forfeitures or refunds section).
- Tuition for all summer terms is due July 9.
- Charges incurred after tuition due date must be paid in one to three days (see Tuition/fee assessments and deadlines section). dent Accounts and Cashiers Office, 129 Schmitz, PE10, Seattle, WA 98195, before the tuition due date. Fees must be paid by July 9 for all summer terms whether or not a billing statement has been received. Checks and money orders must be in U.S. dollars and drawn on a U.S. or Canadian bank. If a person other than the student is paying tuition, the student may use STAR by pressing $11 \#$ to determine if the account has been paid. Payments postmarked on or before the due date are accepted without a late fee. Mail postmarked after the due date is subject to the penalties described below.
If students fail to pay by the deadline, they may continue to pay their tuition the week following the due date, plus a late fee as follows:

| Past Due Balance | Late Fee |
| :--- | :--- |
| Over $\$ 250$ | $\$ 30$ |
| $\$ 30-\$ 250$ | $\$ 10$ |
| Less than $\$ 30$ | $\$ 0$ |

If payment has not been received in the Student Accounts and Cashiers Office by July 16, students' registrations will be canceled. Students permitted to reregister after cancellation for nonpayment will be charged a $\$ 75$ fee, in addition to their tuition.
Charges incurred after the tuition due date (July 9) must be paid within three business days to avoid registration cancellation, except during last week of instruction, when charges must be paid by next business day.
If reregistering, all classes on a student's schedule at the time of registration cancellation must be re-added. (Fees will include appropriate charges for classes dropped during the forfeiture period.) If students want to drop any course after reregistering, they may do so on STAR until Aug. 8 for a full-- term course, July 9 for $a$ Term, and Aug. 11 for $b$ Term. A $\$ 20$ change fee will be processed. No reregistration will be possible after the last day of instruction. Please note: Even if registration is canceled, students will continue to owe one-half of their tuition.
Credit cards are not accepted.
Tuition and fees not paid by the end of the academic quarter will be subject to an interest charge of one percent per month, or fraction of a month ( 12 percent A.P.R.), beginning with the month following the end of the quarter. Delinquent unpaid accounts may be referred to a collection agency and - reported to a credit bureau.

## Application of payments to a student's account

As a rule, payments received for a student's account are applied to charges in order of their due dates. For charges with the same due date, payments are applied first to tuition and related University fees and then to other charges on the account. A payment may be applied to a specific charge by contacting the Students Accounts Office at 129 Schmitz Hall. Financial aid from Federal.Title IV programs is applied only to required tuition and fees and to loan and aid repayment obligations. The University may not apply such aid to pay insurance and some other optional charges. .

## Student insurance

The University offers a.voluntary accident and sickness insurance plan to supplement the services available at the Hall Health Center. Seattle campus students (except nonmatriculated students and those enrolled in programs administered by UW Extension and UW faculty/staff or Washington state classified employees attending classes under the employee tuition exemption program) who remain registered through at least the first six days of instruction in the quarter are eligible to enroll in the plan.
Students may sign up for the plan when they register for classes. If students are registered for classes by their academic departments, and no plan is indicated, they will be enrolled in the student-only quarterly plan. The insurance
premium will be included on the quarterly tuition statements and must be paid by the quarterly tuition due date. In most eases, financial aid will not pay insurance directly so students must make sure the premium is paid on time. There is no late payment period for the insurance premium.
Students who wish to add, cancel, or change their insurance selection, may do so on STAR and remit the correct balance by the tuition due date. Or, students may make changes when paying tuition in person at the Student Accounts and Cashiers Office, by the tuition due date.
International students must subscribe to the student insurance plan unless they are covered by another plan. Summeronly nonmatriculated students and students admitted for Summer/Autumn must submit proof of coverage to the International Services Office by July 12. Waivers for continuing students who have already presented proof of coverage for the current academic year (Autumn 1992 through Spring 1993) are valid through Summer Quarter. Students holding insurance policies that expire during the academic year are responsible for obtaining new waivers, as necessary.
Brochures describing the plan in more detail are available at the Hall Health Center, the HUB, and the second floor information window in Schmitz Hall. Plan benefits may change each academic year, so students are encouraged to review the brochure carefully.

## Shudent associations

Washington Student Lobby (WSL)
The Washington Student Lobby (WSL) is a voluntary, independent organization of university students whose purpose is to influence the Washington State Legislature and other decision makers on higher education matters of special interest to students. Students may choose to support the WSL by contributing $\$ 1$ each quarter. Support for the WSL may be indicated during registration and the voluntary contribution will be included on the tuition billing statement for payment with tuition.

## Washington Public Interest Research Group (WashPIRG)

The Washington Public Interest Research Group (WashPIRG) is a student-directed, non-profit and non-partisan organization which works on issues affecting the quality of life in Washington State. Students participate in WashPIRG as decision makers, volunteers and credit interns producing research reports, lobbying the legislature, and organizing students and citizens around consumer, environmental, and governmental issues. Students may choose to support WashPIRG by contributing $\$ 2$ each quarter. Support for WashPIRG may be indicated during registration and the voluntary contribution will be included on the tuition billing statement for payment with tuition.

## Summer tuition schedule*

Tuition schedule subject to change without notice.
Undergraduafe: Resident and nonresident (including nonmatriculated and fifth-year)
Full-time (More than 9 credits) $\$ 773$
Part-time

| 9 credits | $\$ 696$ |
| :--- | ---: |
| 8 credits | 619 |
| 7 credits | 542 |
| 6 credits | 465 |
| 5 credits | 388 |
| 4 credits | 311 |
| 3 credits | 234 |
| 2 credits (minimum) | 157 |

Graduate and Law: Resident and nonresident
Full-time (More than 6 credits) $\$ 864$
Part-time
6 credits . . $\$ 741$
5 credits . 618
4 credits . 495
3 credits . 372
2 credits (minimum) - 249
Medical and Dental Resident Nonresident
Full-time

| (More than 12 credits) | . | $\$ 1,976$ |
| :--- | ---: | ---: |
| Part-time | $\$ 5,027$ |  |
| 12 credits |  |  |
| 11 credits | $\$ 1,824$ | $\$ 4,640$ |
| 10 credits | 1,672 | 4,253 |
| 9 credits | 1,520 | 3,866 |
| 8 credits | 1,368 | 3,479 |
| 7 credits | 1,216 | $.3,092$ |
| 6 credits | 1,064 | 2,705 |
| 5 credits | 912 | 2,318 |
| 4 credits | 760 | 1,931 |
| 3 credits | 608 | 1,544 |
| 2 credits (minimum) | 456 | 1,157 |

*The additional fee per credit hour for more than 18 credits does not apply to Summer Quarter.
This tuition schedule does not reflect full-time load requirements for loan deferments, teaching assistantships, or other programs. For more information, consult the section titled Full-Time Student Requirements, page 121.

## Special course and laboratory fees

The amounts charged for tuition and fees normally cover University charges for course registration. Some courses, however, have extraordinary expenses associated with them and in such cases the University may charge additional fees in amounts approximating the added instructional or laboratory costs.

## Withdrawal Information

## Withdrawal Information



Course withdrawals
Withdrawing from the quarter
Complete withdrawal from the University

Withdrawal for military service

## Course withdrawals

A course drop made during Registration Period IV (July 6Aug. 8) is recorded on an undergraduate student's transcript with a $W$ grade and a number designation of the week of the quarter in which the course drop was transacted. A W grade only is recorded on the transcript of graduate or professional students.

## Withdrawing from the quarter

Students may withdraw under the guidelines described below. Undergraduate and professional students (dental, law or medical) who have completed the preceding quarter may take a quarter off under the Quarter Off Eligibility Policy. Review the Registration Eligibility section for complete details.
Students who drop their last course on STAR and do not add a course will be considered withdrawn for the quarter. The last date to add or drop courses is listed in the Student Action Guide, pages 117-118. The $\$ 20$ change fee is charged for all course drops beginning the eighth calendar day of the term.

## Complefe withdrawal from the University

## Dropping all courses for the quarter

It is the student's responsibility to withdraw completely if -he or she is unable to attend for the quarter. Students must write the Registration Office, 225 Schmitz Hall, PD-10, University of Washington, Seattle, WA 98195, or withdraw inperson at 225 Schmitz Hall. Withdrawals by mail are effective on the date of the postmark.
Tuition owed will be based upon the date the complete withdrawal is received in person at the Registration Office, the postmark date for withdrawals received by mail, or the date the last drop is recorded on STAR. No withdrawals are accepted after the last day of instruction for the quarter.
Students who withdraw before the first day of the quarter will be required to submit a former student application to the Registration Office by the published deadline. New students must reapply through the Admissions Office.
Courses dropped as part of a complete withdrawal from the University during the first two weeks of a quaiter are not recorded on the student's UW transcript; however, the date of the complete withdrawal is recorded.
Students are required to turn in their student ID cards when they withdraw from the University and are not eligible to continue using University services or facilities after their withdrawal.
Continuing students who withdraw during the first week of two consecutive quarters (Summer Quarter excepted) will not be eligible to register as continuing students for the third quarter. Such students must reapply as former students returning to the University. For example, a student who withdraws during the first week of Spring Quarter and Autumn Quarter must reapply as a returning former student for Winter Quarter.

## The forfeiture schedule for completely withdrawing from the University is as follows:

- Students withdrawing by the seventh calendar day of the term do not pay tuition. New and returning students forfeit their $\$ 50$ enrollment confirmation deposit.
- Students withdrawing between the 8 th and 21st calen dar day of the term continue to owe one-half of their tuition.
- Students withdrawing after the 21st calendar day of the term continue to owe full tuition.
- Students whose registrations are canceled for nonpayment of fees will continue to owe the University one-half their tuition and fees.
- International students who are registered for an English As A Second Language course must make a separate request for a refund for that course by contacting the ESL Office in 102 Lewis Hall at the same time they withdraw from the University.
- Students who drop classes between the 8th and 21st calendar day of the term that result in lower tuition, will owe one-half of the tuition associated with the reduced credit hours.


## Hardship withdrawal

Hardship withdrawals are for dropping individual courses only after the seventh week of the quarter. The $\$ 20$ change of registration fee will be assessed. See section on Complete withdrawal from the University, this page, for procedure to follow for dropping all courses for the quarter:
A student may petition the Registrar for a hardship withdrawal if: (1) the student is unable to complete the course in question because of a severe mental or physical disability, or (2) unusual or extenuating circumstances beyond the student's control prevented the student from dropping the course by the drop deadline. See the University of Washington General Catalog for complete information.

## Withdrawal for military service

Students conscripted into the Armed Forces or called to active military duty may withdraw through the end of the 7 th week of instruction and receive a full refund but no academic credit. Students withdrawing after that date receive either a full refund or credit and no refund. Please consult with the Office of the Registrar for complete details.

## Grade Information

## Transcripts

An official UW transcript is established when the first credit course is taken, and
ll future credit course activity is recorded on this permanent record of academic work at the UW. For a copy of your transcript, write the Transcript Department, 260 Schmitz Hall, PD-10,Seattle, WA 98195 . Include $\$ 3$ per transcript copy, and note your student identification number or Social Security number, the most recent quarter in attendance and all former names. Transcripts for current quarters courses will be available approximately three.weeks after the end of the quarter

## Numeric

The University of Washington uses a numerical grading system. Instructors may report grades from 4.0-0.7 in 0.1 increments and the grade. 0.0 .
For graduate and GNM students, grades reported in the range $1.6-0.0$ will be converted to 0.0 . A grade of at least 2.7 is required for courses used to meet GraduateSchool requirements.

Numerical grades may be considered equivalent to letter grades as follows:
A 4.0-3.9
B- 2.8-2.5
D+ 1.4-1.2
A- 3.8-3.5
C+ 2.4-2.2
D 1.1-0.9
B+ 3.4-3.2
C. 2.1-1.9
D- 0.8-0.7*
B 3.1-2.9
C. 1.8-1.5
E 0.0**
*Lowest passing grade for undergraduates
*Failure or unofficial withdrawal. No credit.
An undergraduate student whose grade-point average falls below a 2.0 will be warned about low scholarship. Failure to maintain a 2.0 will result in probation. Refer to the UW General Catalog for details.

## Satisfactory/not satisfactory

Students may elect to take certain courses on a satisfactory/ not satisfactory (S/NS) basis. Advisers should be consulted, and in no case are undergraduate students allowed to register for more than six credits (or for one course, if that course is offered for more than six credits) on a satisfactory/not satisfactory basis in a given quarter.
Students must register for the course on STAR, and then go in person to Registration in 225 Schmitz Hall to elect the S/NS grade option. STAR will not accommodate the S/NS grade option.
The S/NS grade option can be elected only through the 10 th class day (July 28 for $b$ Term). A $\$ 20$ fee is charged beginning the sixth class day.
For undergraduates, a course in which an " $S$ " is earned may not be used to satisfy ạny department, college, or University requirement, except that the credits may be applied to the minimum of 180 credits required for graduation. Each instructor will report conventional grades to the Registrar, who will convèrt satisfactory grades ( 2.0 or greater) to " S ;" and unsatisfactory grades (less than 2.0) to "NS" for the student's transcript. No more than $25 \mathrm{~S} / \mathrm{NS}$. credits will apply to an undergraduate degree.

Graduate students earning grades of 2.7 or above receive a grade of $S$ (satisfactory), while 2.6 or below is recorded as NS (not satisfactory). With the approval of his or her graduate program adviser or supervisory committee chairperson, a.graduate student may elect to take any course for which he or she is eligible outside of his or her major academic unit on an S/NS basis.
In cases of withdrawal, a W is recorded. Neither S nor NS is included in the grade-point average. $\mathrm{N}, \mathrm{I}$, or X is recorded until the instructor reports the final grade or, in cases of incompletes received by undergraduates, until the $I$ is converted by the Registrar.

## Credit/no credit

Some courses are offered on a credit/no credit (CR/NC) basis. It is not possible to registerS/NS to take these courses, because the only grades assigned by the instructor are CR (credit) or NC (no credit). Neither CR nor NC is included in the grade-point average. In cases of withdrawal, a W is recorded. N, I, or X is recorded until the instructor reports the final grade or, in cases of incompletes received by undergraduates, until the I is converted by the Registrar.

## Auditors

Students must register on STAR for courses they wish to audit and then select the audit option in person at the Registration Office, 225 Schmitz Hall. Students may select the audit option through the seventh week of the quarter. Attendance in courses as an auditor is by consent of the instructor involved and is conditional on the space available. Permission to audit is ordinarily granted for lecture classes only. An auditor may not participate in class discussion or laboratory work, and his or her registration may be canceled at the discretion of the instructor. No entry is made on the permanent record for courses audited. However, registered courses changed to audit after the second week of the quarter will be recorded on academic transcripts with a "W." To receive credit for an audited course, the student must register for the class for credit in a subsequent quarter.
Auditors, except ACCESS program students, pay standardtuition and fees and must be regularly admitted and registered in the course. Although credits for audited courses are not listed on transcripts, they are included in the billing on fee statements.

## Incomplete grades

Incomplete grades may only be awarded if the student is doing satisfactory work up until the last two weeks of the quarter. Undergraduate students must not reregister for courses in which they have received an Incomplete. A grade earned in a repeat caurse will not be recorded as an incomplete conversion grade. See the UW General Catalog on incomplete conversion deadlines.

## Grade appeals

See the UW General Catalog for appeal procedure.

## Grade Information

Transcripts
Numeric
Satisfactory/not satisfactory
Credit/no credit
Auditors
Incomplete grades
Grade appeals

## University Notices

## University Notices

Accommodations for disabilities

Associated Students of the Univérsity of Washington (ASUW)

## Disclosure of student records

Equal opportunity
Following rules and regulations

Graduation rates
International students
Privacy rights of students
Student directory information

The University and its colleges and schools reserve the right to change fees, rules, and the calendar regulating admission and registration; instruction in and graduation from the University and its various divisions; and any other regulations affecting the student. The University also reserves the right to withdraw courses and programs at any time.

## Associated Students of the University of Washington (ASUW)

The Associated Students of the University of Washington is a voluntary association of students designated by the University Regents to carry out a variety of student activities. In order to vote in ASUW elections or hold ASUW office, students must be members. A student's membership choice will not affect tuition payment in any way. Information about the ASUW can be obtained from the ASUW Office in Room 204L of the Student Union Building.

## Disclosure of student records

As a general rule the University will not release a student's education records to a third party without written consent of the student. The complete University policy on student education records and the location of such records may be found in the Washington Administrative Code under WAC 478-140. Manuals containing the code are available at reference stations on campus and at the Visitor's Information Center, 4014 University Way NE. The policy covers such items as accessibility, review and expunging of inaccurate records, and costs to be charged for copies of student records.

## Accommodations for disabilities

Various support services, including priority registration, are available to students with disabilities. Contact the Coordinator for Disabled Student Services (DSS), 482 Schmitz, (206) 543-8924, (206) 543-8925 voice and TDD, for information on equipment services, accessibility, and accommodations to meet individual needs.
Students with disabilities who require special accommodations for science labs, internships, etc., should contact the DSS Coordinator and the academic adviser of that department for appropriate services.
The STAR Work Sheet and instructions are available from DSS in alternate media, including tape recording and large print. Students with disabilities which would limit their ability to use STAR may register through DSS or at the Registration Office, 225 Schmitz Hall.

## Equal opportunity

The University of Washington reaffirms its policy of equal opportunity regardless of race, color, creed, religion, national origin, sex, sexual orientation, age, marital status, disability, or status as a disabled veteran or Vietnam era veteran. Any discriminatory action can be a cause for disciplinary action. This policy applies to all programs and facilities including, but not limited to, admissions, educational programs, employment, and patient and hospital services. Discrimination is prohibited by Presidential Executive Order 11246, as amended, Titles VI and VII of the Civil Rights Act of 1964, Title IX of the Education Amendments of 1972, Sections 503 and 504 of the Rehabilitation Act of 1973, Age Discrimination in Employment Act Amendments of 1978, Vietnam Era Veteran's Readjustment Assistance Act of 1974, Americans with Disabilities Act of 1990, State of Washington Gender Equity in Higher Education Act of 1989, and other federal and state statutes and regulations, and University policy. Coordination of the compliance efforts of the University of Washington with respect to all of these laws and regulations is under the direction of the Assistant Provost for Human Rights and Affirmative Action, Dr. Helen Remick, University of Washington, Equal Employ. ment and Affirmative Action Office, JA-08, 4045 Brooklyn Ave. NE, Seattle, WA 98195; telephone: 543-1830 (V/TDD).

## Following rules and regulations

It is the University's expectation that a student will follow University rules and regulations as they are stated in the General Catalog. In instances where no appeal procedure is spelled out and the student believes that a special set of circumstances makes appeal reasonable, he or she may appeal the application of specific rules or regulations in an academic matter to the office of the dean of the school.or college in which he or she is enrolled, or in a nonacademic matter to the Office of Student Affairs. These offices will either render a decision on the appeal or refer the student to the proper office for a decision.

## Graduation rates

The graduation rates of fulltime freshmen beginning their studies at the University-either Summer or Autumn Quarter 1986 are $55.5 \%$ in five years and $63.25 \%$ in six years.

## International students

International students must subscribe to the student insurance plan unless they are covered by another plan. For details, refer to Student insurance, page 128.

## Privacy rights of students

Under the provisions of the Family Educational Rights and Privacy Act (FERPA), students have the right to: 1) inspect and review information contained in education records, 2) challenge the contents of their education records, 3) a hearing if the outcome of the challenge is unsatisfactory, 4) submit an explanatory statement for inclusion in the education record if the outcome of the hearing is unsatisfactory, 5) prevent disclosure, with certain exceptions, of personally identifiable information, 6) secure a copy of the institution policy, and 7) file complaints with the Department of Education concerning alleged failures by institutions to comply with the Act. Written complaints should be directed to FERPA, Department of Education, Room 4074, Switzer Building, Washington, D.C. 20202.

## Student directory information

The University will routinely release student directory information, unless requested otherwise by the student. Directory information is defined as student's name, telephone number, dates of attendance, degrees and awards received, and place of birth, weight, and height of members of athletic teams. If you do not wish to authorize directory information release and do not want your name and phone number to appear in the Student Directory, you may call the address change service at (206) 543-3868 to restrict access to this informàtion. The University will releasenoinformation regarding these students including dates of attendance and degrees granted without a written release from the student. If you wish to change your authorization and allow release, you must go to the Registration Office, 225 Schmitz and present photo identification.

# UW Student Services and General Information 

## Academic advising

For details, please see page 120.

## Address change telephone service - call 543-3868

Students are responisible for notifying the Registrar's Office when their addresses change. An Address Change Telephone Answering Service is available 24 hours a day, seven days a week, for changes of local and permanent addresses and telephonenumbers, restricting release of directory information, and where to mail registration confirmations and ID cards, tuition billing statements, and final grades. Students should always leave a forwarding address with the U.S. Postal Service whenever they move. Addresses may also be changed at the Registration Office, 225 Schmitz Hall.
If you have applied for financial aid, you must also report your address change to the Office of Financial Aid.

## Bookstore

Textbooks and supplies for all courses may be purchased at the University Book Store, 4326 University Way NE. (hours: Monday through Saturday, 9 a.m.-6 p.m.; Thursday, 9 a.m.9 p.m.; Sunday, noon-5 p.m.). Telephone: (206) 634-3400.
The University Book Store also operates two small branches on campus (hours as posted). The HUB (Student Union Building) Branch stocks many classroom and personal supplyitems. TheSouth Campus Center Branch stocks all books for courses in the health and marine sciences as well as general books and supplies. Required textbooks for courses taught at the branch campuses are available at the bookstores on those campuses: Bothell, (206) 485-4725, or Tacoma, (206) 272-8080. A Bellevue branch of the University Book Store, which does notstock textbooks but carries general books and supplies, is located at 990 102nd Ave. NE, just north of Bellevue Square. Telephone: (206) 646-3300.

## Burke Memorial Washington State Museum

The Burke Museum is a natural history and anthropology museum with collections numbering well over four million specimens. Long-term exhibits focus on the natural and cultural heritage of the Pacific Region. Many special exhibits are featured throughout the year.
Hours: Monday through Friday, 10 a.m. to 5 p.m., Thursdays, $10 \mathrm{a} . \mathrm{m}$. to $8 \mathrm{p} . \mathrm{m}$, and Saturdays and Sundays, 10 a.m. to $5 \mathrm{p} . \mathrm{m}$. The cafe is open Mondays through Fridays, 7 a.m. to 8 p.m., and Saturdays and Sundays, 9 a.m. to 5 p.m.
Location: The museum is located near the 17th Ave. NE and NE 45th St. entrance to the campus.
Telephone: (206) 543-5590.
Admission: By donation, requested $\$ 2.50$. Free for UW students and senior citizens.

## Center for Career Services

For details, plense see page 122.

## Childcare program

For students who are parents, a childcare locator directory is designed to help students find licensed childcare facilities. This resource is available in the Office of the Vice President for Student Affairs, the Student Union Building (HUB),
and the South Campus Center. For more information, visit the Childcare Coordinating Office, 466 Schmitz. Telephone: (206) 543-1041.

## Computing services

UW Computing \& Communications supports computing for instruction and research for the entire campus. Students, faculty, and staff can use computers for coursework and independent research projects, or write their own programs or use existing programs for statistical analysis, managing data, graphics, and many other applications. IBM-compatible or Macintosh personal computers are also available for use.
UW Computing \& Communications also offers noncredit classes in general computer knowledge, programming, selecting microcomputers, using available resources, and other topics. A list of courses can be obtained by calling (206) 685-2763.

UW Computing \& Communications maintains a central facility at 3737 Brooklyn Ave. NE. Computer sites also have been installed in some residence halls. For a complete list of remote sites, or information about services or class schedules and fees, or a copy of The Guide to Computing, call (206) 543-5970.

## Correspondence study

Many UW courses are available by correspondence. You can study wherever you are, on your own schedule. You have as much as a year to complete a course. Independent Study by Correspondence courses are listed on pages 109-110. For an IndependentStudy by Correspondence catalog, call (206) 543-2320.

## Counseling Center

All matriculated students (carrying nine or more hours) at the University may use the services of the Counseling Center and its staff of psychologists and vocational counselors to discuss educational progress, personal adjustment or career goals.
A.free intake appointment is available to determine if the Counseling Center's services are needed. Individual and vocational counseling appointments cost $\$ 10$ each. For students financially unable to pay the fee, efforts are made to find other alternatives. The center is located in 401 Schmitz Hall. Telephone: (206) 543-1240.

## Financial aid

Students who need financial assistance during Summer -Quarter should inquire at the Office of Student Financial Aid, 105Schmitz, telephone (206) 543-6101, concerning Pell Grant eligibility for summer and the Guaranteed Student Loan (through a private lender, bank, or credit union). In order to be eligible for any type of need-based aid, a student must be a regularly admitted, matriculated student. Students who wish to apply for a Summer Quarter Guaranteed Student Loan should begin the application process with the Office of Student Financial Aid in early spring. Student loans can take between three and four months to arrange.

## Student Services and General Information

## Academic advising

Address change telephone service

## Bookstore

Burke Memorial Washington
State Museum
Center for Career Services
Childcare program
Computing services
Correspondence study
Counseling Center
Financial aid

## Student Services and General:Information (con't)

Friday Harbor Laboratories

Henry Art Gallery
Housing
Applications for campus housing

## Friday Harbor Laboratories

Friday Harbor Laboratories in the San Juan Islands provide year-round facilities for research in various areas of marine science.

The schedule for Summer Quarter extends over a 10-week period, June 14-Aug. 21, and is divided into two terms of five weeks each. Each five-week course consists of laboratory studies and field work and is an intense full-time endeavor running five days a week and half-days on Saturday. Courses may be taken sequentially, but not concurrently. Although courses are structured with the graduate student in mind, a very qualified undergraduate may be admitted to a course with the consent of the director and the instructors. Preference is given to students who qualify for both sessions.
The schedule for this summer includes coursework in marine botany, molecular methods in algal research, invertebrate zoology, comparative invertebrate embryology, fisheries, oceanography, and a workshop in bioacoustics. Graduate research may be available through academic departments during both terms.
Students may be admitted to the Friday Harbor Laboratories course program only if they meet regular entrance requirements of the University of Washington. Non-UW students apply for admission to the University of Washington after they have been accepted to Friday Harbor Laboratories.
Application for summer admission to the Friday Harbor Laboratories must have been made to the director before March 1. Requests for additional information and all correspondence concerning application, courses, research facilities, and room and,board costs should be addressed to the Director, Friday Harbor Laboratories, 620 University Road, Friday Harbor, WA 98250. A bulletin is available on request.

## Henry Art Gallery

The Henry Art Gallery, donated by Seattleite Horace C. Henry in 1926, is the University of Washington's art museum showing nationally-acclaimed exhibitions of the art of our times.
Hours: Tuesday through Sunday, 10 a.m. to 5 p.m.; and Thursday, 10 a.m. to 9 p.m. It is closed Mondays. Location: The gallery is located near the 15th Ave. NE and NE 41st St. entrance to campus. Telephone: (206) 543-2280.

Admission: UW students, faculty, and staff, children ages 11 and under, and Henry Gallery Association Members, free; non-UW students and senior citizens, $\$ 1.50$; general admission, $\$ 3$. Admission to the gallery is free to all on Thursdays.

## Applications for campus housing

To obtain an application for housing for Summer Quarter, contact the Housing and Food Student Services Office, 301 Schmitz Hall, PC-50, University of Washington, Seattle, WA 98195. Telephone: (206) 543-4059.

## Housing

Residence halls
Convenient accommodations are available during Summer Quarter in the residence halls. A limited number of parking spaces are available for an additional fee.
Half- and full-quarter accommodations: For single students staying at least one half-term, accommodations are usually provided in double occupancy rooms. Some single rooms are available at a higher rate. Each room is furnished with twin beds. Bathrooms are shared. Students provide their own linens.
Accommodations in a double room, with a dining plan, costs approximately $\$ 1,000$ for the full quarter.

To obtain an application for housing for Summer Quarter, contact the Housing and Food Student Services Office, 301 Schmitz Hall, PC-50, University of Washington, Seattle, WA 98195. Telephone: (206) 543-4059. If you plan to continue your UW studies Autumn Quarter and would like residence hall accommodations for the academic year, request a separate application for this purpose.
Workshop and short course accommodations: If you will be attending a Summer Quarter or Extension program that does not follow the $a$ or $b$ Term or full-quarter schedule, you can obtain on-campus housing on a space-available basis through the Conference Housing and Special Services Office, McCarty Hall, GR-10, University of Washington,Seattle, WA 98195. Telephone: (206) 543-7636. Rooms are available June 20-Sept. 11.
Accommodations are double or single rooms furnished with twin beds. Linen is provided. Bathrooms are shared. Rates vary, but an overnight stay in a single room and breakfast will cost approximately $\$ 36$. Special rates apply for those sharing rooms and for those staying longer than two weeks.
For more information about the on-campus accommodations available for short programs, contact the Conference Housing Office at least 30 days prior to the workshop or class you will be attending.

## Privately owned accommiodations

Listings of off-campus rental properties, such as rooming and boarding houses, housekeeping rooms, apartments, and houses, are maintained at the Student Union Building (HUB), Room 105. Telephone: 543-8997. The University does not inspect these accommodations, and, therefore, students and parents must accept full responsibility for making a selection. Because these listings change frequently, they cannot be mailed out and must be consulted in person.

## Language Learning Center

The Language Learning Center (LLC) provides technological and pedagogical resources for faculty and students to teach, learn, and research languages and cultures. LLC develops and acquires software, audio, and video materials for coursework, reading and aural/oral testing, and assignments. LLC has audio and video, satellite, and cable-TV facilities and services; multi-standard video and videodisc equipment are available upon reservation. A laminator protects large poster-sized visuals used in classrooms. The recording studio allows native speakers to make voice recordings. Audio cassette materials for sale to large language classes augment the audio cassette duplication service. Computer-assisted language materials integrating interactive digitized audio and digitized video are developed for student use in the center and other campus computer labs. The Language and Cultural Corner is a general purpose facility used for informal language practice, moderated conversation groups, and special events, such cultural activities, feature and documentary video and film viewings, and technology and pedagogy seminars. Staff associates serve as liaisons between the LLC and the language departments, and are available to assist instructors with special projects, or provide appropriate resource referrals.
The LLC is located in the daylight basement of Denny Hall. 113 Denny provides access to the computer lab, the freestudy audio lab, satellite/cable/video viewing, and access to the two electronic classrooms. It is open during regular academic sessions weekdays, most nights, and on weekends. Call 685-9403 for current hours, and general information, or 543-0536 for personal assistance.

## Libraries

The University of Washington Libraries are composed of the Suzzallo Library and the Allen Library, with collections primarily in the social sciences and humanities; the Odegaard Undergraduate Library; the Health Sciences Library and Information Center; the EastAsia Library; and 17 specialized branch libraries.
All students, staff, faculty and other researchers with valid University identification cards may borrow from these libraries. Student cards must have the correct validation sticker for the current quarter. Information on the card, loan periods and other circulation policies are available at all circulation desks.
Reference service is available in all library units for users needing information about library facilities, services and guidance with research problems. Formal instruction sessions in the use of library resources and group orientation tours of individual libraries are scheduled throughout the year.
The Summer Quarter hours for the libraries are available at all crrculation desks. Telephone: (206) 543-0140.

## Medical care

The University provides outpatient health and medical care for students through the Hall Health Center. All undergraduate and graduate students, registered for full- or part-ime courses and paying student fees, are eligible for health service upon presentation of a current University student identification card. Students must pay for pharmacy prescriptions, mental health services, physical examinations, and some other services as well as for outside laboratory work. Services provided through the Hall Health Center should not be confused with the student health insurance, available through the University and purchased at the time of registration (see page 136). A student may use Hall Health Center services without having student insurance. For details, consult the Hall Health Center brochure. Telephone: (206) 685-1011.
The University Hospital Emergency Room handles emergencies when the Health Center is not open. University police assistance may be obtained for first aid at the scene of an accident or for emergency ambulance transportation from any University building or on-campus location by dialing the emergency call number, $9-911$. University Hospital services are not covered by regular student fees. If you have accident and sickness insurance, you most likely will have - to pay for a portion of the charges for University Hospital emergency room care.

## Minority affairs

The Educational Opportunity Program, administered by the Office of Minority Affairs, provides a variety of services to students from minority and economically.disadvantaged backgrounds. These services include recruitment, admissions, academic advising, tutoring, personal and career counseling, housing and financial aid advising, and other assistance. For more information, call (206) 543-6598.
Educational Opportunity Program counselors are available on the third floor of Schmitz Hall, Monday through Friday, from 8 a.m. to 5 p.m. Those who would like to discuss the possibility of enrolling in the University, whether for Summer Quarter or sóme other quarter, are welcome; no appointments are necessary.

The Office of Minority Affairs also operates the Instructional Center, which provides instructional support for courses offered at the University and special programs in reading, composition, mathematics, sciences, and basic study skills. The center, located at 1307 NE 40th, is open Monday through Friday from 8 a.m. to 5 p.m. Telephone: (206) 543-4240.
The Ethnic Cultural Center and Theatre offer a variety of educational, cultural, and performing arts programs for student and community participation.

## Parking for students

The University encourages alternate forms of transportation. Carpools of two or more in which all members have a U-PASS can park free in Montlake lot E-1 by entering at the south gate before $9: 30 \mathrm{a} . \mathrm{m}$. Spaces are available in the Central Plaza Garage, Padelford Garage, and lot N-5 for U-PASS carpools of three or more. The daily parking fee for non-UPASS carpools is $\$ 1.50$ in lot $\mathrm{E}-1$ and is payable at the exit in quarters or with a parking card. This card is available at the IMA, near the telephones; and at the HUB, room G-9 (TV lounge).
If driving alone is your only option, student parking is available on a daily-pay basis in Montlake lots $\mathrm{E}-1, \mathrm{E}-4$, and $\mathrm{E}-5$ for $\$ 1.50$.
Summer quarter permits (automobiles $\$ 80$ per quarter, motorcycles $\$ 30-35$ per quarter) may be purchased the first day of the quarter at the Parking Division, 3901 University Way NE. Student ID validated for the summer quarter is required. A complimentary U-PASS comes with each permit. Limited permit parking adjacent to the residence halls is available for students living in the halls and may be purchased for the miniterm or the quarter. Parking in covered garages is available at a higher rate. All parking rates are subject to change. For a brochure, call (206) 685-1543.
Students with disabilities with a confirming letter of disability from Hall Health Center may apply to the Parking Division for assignment to parking in areas convenient to class locations. A free campus shuttle bus for disabled students is also available. Call (206) 685-1511 for information.

## Recreational sports programs

The Department of Recreational Sports Programs manages several recreation facilities on campus, including the Intramural Activities Building (IMA), (206) 543-4590; the Golf Driving Range, (206) 543-8759; and the Waterfront Activities Center (WAC), (206) 543-9433. For information about operational hours and activities offered, call the telephone numbers indicated above.
Intramurals provide an opportunity for students and faculty/staff to participate in special events, leagues, and tournaments such as soccer, softball, tennis, and volleyball. For further information, call the IMA Sports Line, (206)543-8558, daily between noon and 8:30 p.m.
Instruction in a variety of sports is available at the Intramural Activities Building (IMA) on a noncredit basis. Class time schedules will be available at the IMA after May 17, 1993. Contact the Sports Skills Office at (206) 543-2571 for more information.
Club sports are student organizations that provide a program of instruction, recreation, and competition. For further information, stop by the IMASports Club Office or call (206) 543-9499.

## Student Services and General Information ( $\operatorname{con}^{\prime} t$ )

## Libraries

## Medical eare

## Minority affairs

Parking for students
Recreational sports programs

## Student Services and General Information (con't)

## Student affairs

Student associations
Student Employment Office
Student insurance
Student Union Building
Transit services
U-PASS
UW Extension
UW ID card
Veterans information

Note to UW matriculated students:Spring Quarter students not attending Summer Quarter may purchase a Summer IMA Facility Use Card for $\$ 17.25$, beginning Tuesday, June 1,1993 . The card is valid from the date of purchase through the beginning of Autumn Quarter. The card may be purchased in the IMA Administration Office, Monday through Friday, $8 \mathrm{a} . \mathrm{m} .4: 30 \mathrm{p} . \mathrm{m}$. or in the Intramural Sports Office, 4:30-8:30 p.m., Monday through Friday, and all operational hours on Saturday and Sunday. Spring Quarter students who do not wish to purchase quarterly privileges may purchase a Single Use Ticket (on each occasion of use) for $\$ 2$ beginning Saturday, June 26, 1993. Remember, you must retain your Spring Quarter Student ID Card to purchase summer facility use privileges.

## Student affairs

The Vice President for Student Affairs is responsible for a range of services designed to address the extracurricular needs and interests of University students and to foster their general welfare. The services offered are admissions and registration, financial aid, counseling, housing and food, as well as placement, supervision of student activities and recreational programs, among others. In addition, the vice president advises the president and other University officers on student issues and concerns.
Students are encouraged to contact the Vice President's Of-: fice, 476 Schmitz, telephone: (206) 543-4972, for additional information on the services mentioned above or other aspects of campus life.

## Student associations

Washington Student Lobby (WSL)
For details, please see page 129.

## Washington Public Interest Research

Group (WashPIRG)
For details, please see page 129.
Associated Students of the University of Washington (ASUW)
For details, please see page 132.

## Student Employment Office

The Student Employment Office, a division of the Office of Student Financial Aid, 172 Schmitz, has job listings for part-time, temporary, and summer jobs, most of which are off campus. Currently registered students and those who graduated in the past quarter are welcome to use this service.

## Student insurance

For details, please see page 128.

## Student Union Building

The Student Union Building (HUB) facilities include the Husky Den, which provides food service from 7 a.m. to 4 p.m.; the games area, in the basement; a campus-wide lost and found; an information center; meeting rooms; study lounge; music listening lounge; ticket office; and an art gallery exhibiting student work. Other services include a selfservice postal vending station; a micro-computer lab; a branch of U.S. Bank offering limited services; two cash machines; a bike repair shop; a carpool listing; an off-campus housing center; and a branch of the University Book Store. Telephone: (206) 543-8131.

The South Campus Center is a branch of Student Activities and Union Facilities, and offers many of the same services as the HUB. It is located on Portage Bay. Telephone: (206) 543-0530.

## Transit services

Thirty-one Metro and Community Transit bus routes come directly to campus, and 20 other routes serve the University District. The U-PASS is valid on all regular Metro routes and most Community Transit routes at all times. Pierce Transit is not part of the U-PASS program. Timetables are available at nine Commuter Centers around campus, including the HUB, Parking Division, and Health Sciences T-466A. Information can be obtained by calling Metro, (206) 553-3000; Community Transit (Snohomish County), (206) 778-2185; or the UW Transportation Office, (206) 543-0450.

## U-PASS

For details, please see page 122.

## UW Extension

Credit, professional development, and personal enrichment certificate programs and courses on- and off-campus are offered through UW Extension. For a free copy of the quarterly catalog, write UW Extension, 5001 25th Ave. NE, GH24, Seattle, WA 98195. Telephone: (206) 543-2320.

## UW ID card

For details, please see page 122.

## Veterans information

Veterans and military personnel who entered military service on or after Jan. 1, 1977, may be entitled to educational benefits from the Department of Veterans Affairs. Those individuals with active duty prior to the above date may have eligibility under certain exceptional circumstances. Veterans receiving compensation for a service-connected disability may be eligible for educational benefits under the Vocational Rehabilitation Program. Children and spouses of certain deceased or disabled veterans are also entitled to assistance. Students who enlisted in the selected reserve for a period of six years or more on or after July 1, 1985, are entitled to a modified benefit program.
Individuals who are eligible or have questions concerning eligibility should contact the Office of Special Services in 460 Schmitz Hall for information. Telephone: (206) 543-6122.

## Tuition and fee exemptions

and reduction for veterans
Veterans who served in Southeast Asia or had service during World War II are eligible for reduced tuition. Children of a parent who was a Washington resident who was declared to be in POW or MIA status after Feb. 19, 1961, are eligible for tuition and fee waivers under certain conditions. Check with the Office of Special Services for details.

## Department, Major and College Codes

The following department, major, and college codes may appear on your registration confirmation.

## Nonmatriculated <br> College Code: A

001 ..Nonmatriculated
Architecture and Uban Planning College Code: B


## Arts and Sciences <br> College Code: C

| ES .................. 100 ..American Ethnic Studies |
| :---: |
| AAS ............. 109 ..Asian American Studies |
| AFRAM .......114... Afro-American Studies |
| CHSTU ........113 ...Chicano Studies |
| AIS............... 101 .. American Indian Studies |
| ANTH............... 102 ..Anthropology |
| ARCHY ........ 103 .. Archaeology |
| PHY A .......... 104 ..Physical Anthropology |
| ART ................. 105 ..Art |
| ART H .......... 106 ..Art History |
| ASTR................ 107 ..Astronomy |
| ATM S ................ 108 ..Atmospheric Sciences |
| AAS................. 109 ..Asian American Studies |
| SISAF ................ 110 ... African Studies |
| EEP ..................... 111 ...Child Dev Res Group |
| BIOL................ 112 ... Biology |
| CHSTU .............113 ...Chicano Studies |
| AFRAM .............114 ...Afro-American Studies |
| BOT ...................115... Botany |
| $116 . . . C l a s s i c a l ~ S t u d i e s ~$ |
| CHEM................117 ...Chemistry |
| CLAS ............... 118 ...Classics/Classical |
| Languages |
| GRK.............119...Greek |
| LAT............. 120 ..Latin |
| CLAR ......... 121 ..Classical Archaeology |
| CL. LI ........... 122 ..Classical Linguistics |
| NE .................... 123 ..Near Eastern Languages |
| ARAB .......... 124 .. Arabic |
| COPTC......... 179 ..Coptic |
| HEBR .......... 125 ..Hebrew |
| PRSAN......... 127 ..Persian |
| TKISH ......... 128 ..Turkish |
| CMU ................ 131 ..Communications |
| C LIT ................ 132 ..Comparative Literature |
| DANCE ............ 133 ..Dance |
| DRAMA ............ 134 ..Drama |
| ECON ............... 135 .. Economics |
| ENGL ................ 136 ..English |
| ENV S ................. 137 ..Institute for Environment |
| Studies |
| S .................. 138 ..International Studies |
| SISAF ........... 110 ... African Stu |

SISLA ........... 153 ..Latin American Studies
SISCA ........... 154 ..Canadian Studies Program
SISEA ........... 139 ..East Asian Studies
SISJE ............. 204 ..Jewish Studies
SISME........... 140 ..Middle Eastern Studies
SISRE ............ 141 ..Russian and East European Studies
SISSA ............ 142 ..South Asian Studies
SISSE ............ 205 ..Southeast Asian Studies
RELIG ........... 143 ..Comparative Religion
ASIAN
144 ..Asian Languages and Literature
CHIN ........... 145 ..Chinese
HINDI .......... 147 .. Hindi
INDON ......... 148 ..Indonesian
INDN ........... 149 ..Indian
VIET ............ 150 .. Vietnamese
JAPAN ......... 151 ..Japanese
KOR............. 152 ..Korean
SNKRT ......... 155 ..Sanskrit
TAMIL ......... 157 ..Tamil
THAI ............ 159 ..Thai
TIB ............... 160 ..Tibetan
TKIC
161 ..Turkic
SISLA
. 153 ..Latin American Studies
SISCA ................ 154 ..Canadian Studies Program
SNKRT ............... 155 ..Sanskrit
TAGLG ............... 156 ..Tagalog
TAMIL ............... 157 ..Tamil
THAI .................. 159 ..Thai
TIB
160 ..Tibetan
TKIC
161 ..Turkic
SEALC $\qquad$ 162 ..South East Asian
Languages
SLAVC ................ 163 ..Slavic Languages and
BULGR......... 165 ..Bulgarián
CZECH ........ 167 ..Czech
HUNGR ....... 168 ..Hungarian
POLSH ......... 169 ..Polish
ROMN ......... 170 ..Romanian
RUSS ............ 171 ..Russian
SER C ........... 172 ..Serbo-Croatian
SLAV ............ 174 ..Slavic
UKR* ............ 175 ..Ukranian
COPTC
179 ..Coptic
LATAM
181 ..Latin American Studies Program
GIS $\qquad$ 183 ..General and Interdisciplinary Studies
COLST ................ 184 ..College Studies
GST
185 ..General Studies
GENET
186 ..Genetics
GPHYS .............. 187 ..Geophysics
GEOG ................ 188 ..Geography
GEOL ................. 191 ..Geological Sciences
GERM ................. 192 ..Germanics
HST
193 .. History
HSTAA ......... 194 .. History of the Americas
HSTAM ....... 195 ..Ancient and Medieval History
HSTAS..
196 ..History of Asia
HSTEU
. 197 .. Modern European History
HA\&S
CHID
201 ..Honors: Arts and Sciences
202 ..Comparative History of Ideas


## Business Administration

## School Code: E



387 ..Spanish
388 ..Sociology
389 ..Speech Communication
390 ..Communication Disorders
391 ..Norwegian or Swedish
392 ..Individually Assigned
EDC\&I
. 394 ..Educational Curriculum and Instruction
EDPSY
EDSPE
$\qquad$ 397 ..Educational Psychology
. 398 ..Special Education
399 ..Natural Sciences
EDPGA $\qquad$ . 475 .. Policy, Governance, and Administration
EDLPS $\qquad$ 476 ..Educational Leadership and Policy Studies

## Engineering

College Code: J


## Reserve Officer Training.Programs

AS $\qquad$ . 442 ..Aerospace Studies
MSCI 444 '.. Military Science
NSCI $\qquad$ .446 ..Naval Science

## Ocean and Fishery Sciences

 College Code: K

## Evening Degree Program

## College Code: $\boldsymbol{D}$



## Forest Resources

College Code: L
FOR R $\qquad$ .501 ..Conservation of Wildland Resources
502 ..Forest Resources and Pre Major
503 ..Wildlife Sciences
504 ..Forest Science
505 ..Outdoor Recreation
506 ..Logging Engineering
507 ..Forest Management
508 ..Pulp and Paper Science
509 .. Wood and Fiber Science
UHF .................. 511 ...Urban Horticulture
512 Úrban Forestry
FRM $\qquad$ . 517 ..Forest Resources Management
FPE $\qquad$ . 519 ..Forest Products Engineering
520 ..Visiting Student For

## Nursing

## School Code: $N$



## Interdisciplinary Graduate Programs

 College Code: $R$BTG
652 .. Biology Teaching Group
C PHY
.. 661 ..Comparative Physiology
G MN
666 ..Graduate Unassigned
VISĠ. . 668 ..Graduate Visiting
P PSY 673 ..Physiology-Psychology
QERM
.. 674 ..Quantitative Ecology and


School Code: S
LIBR $\qquad$ 671 ..Library and Information Science

| Public Health and Community Medicine <br> School Code: M |
| :---: |
| BIOST ............... 700 .. Biostatistics |
| ENVH ................ 702 .. Environmental'Health |
| EPI .................... 704 ..Epidemiology |
| MEDXD ............. 705 ..MEDEX (Degree Program) |
| HSERV .............. 706 ..Health Services |
| MEDXC .....:....... 707 ..MEDEX (Certific Program) |
| PABIO ............... 708 ..Pathobiology |
| HIA ................... 709 ..Health Information |
| Administration |
| PC ................... 715 ..Public Health and |
| Community Medicine |
| ............... 717 ..Visiting Student Public |
| Health |

Interschool or Intercollege Programs School Code: 0


## Dentistry

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## North Branch Campus

(Bothell-Woodinville Area)
School Code: V
BLSUS............... 8
861 .. Bothell Liberal Studies: United States
BLSIN
862 .. Bothell Liberal Studies: International
BLS . . 863 .. Bothell Liberal Studies
P PROF 866 .. Pre Professional
B NURS 870 ..Nursing
B EDUC
.875 ..Education
B UND $\qquad$ 892 ..Undergraduate Fifth-year
B VIS $\qquad$ 897 .. Visiting (Bothell)
NM. $\qquad$ 899 .. Nonmatriculated

## Law

School Code: X


| OT ................... 920 ..Occupational Therapy |  |
| :---: | :---: |
|  |  |
| ORTHP ............. 922 ..Orthopedics |  |
| OTOHN .............. 923 .. Otolaryngology, Head and |  |
|  | PATH ................ 924 ..Pathology |
| PEDS ................. 925 ..Pediatrics |  |
| PHCOL ............. 926 ..Pharmacology |  |
| IMMUN .............. 927 ..Immunology |  |
| REHAB .............. 928 ..Rehabilitation Medicine |  |
| MHE ................. 929 ..Medical History and Ethics |  |
| PT .................... 930 ..Physical Therapy |  |
| P BIO ................... 932 ..Physiology and Biophysics |  |
| PBSCI ................. 936 ..Psychiatry and Behavioral |  |
| R ONC .............. 937 ..Radiation Oncology |  |
| RADGY ............. 938 ..Radiology |  |
| SURG ................ 941 ..Surgery ${ }^{\text {¢ }}$ |  |
| UROL ................946 ..Urology |  |
|  | 947 ..Visiting Student Medicine |
| LAB M .............. 948 ..Laboratory Medicine |  |
| FAMED .............. 949 ..Family Medicine |  |
| 950 ..Medicine, Concurrent |  |
|  | Degree Program |

## Sauth Branch Campus <br> (Tacoma Area)

School Code: Z
TLSUS 960 ..Tacoma Liberal Studies: United States
TLSIN ................. 962 ..Tacoma Liberal Studies: International
TLS .................... 963 ..Tacoma Liberal Studies
P PRO 966 ..Pre-Professional
TNURS
970 ..Nursing
TEDUC
...... 975 ..Education
T VIS
992 ..Undergraduate Fifth-Year
NM $\qquad$ 999 Non atriculated

## Guide to Classroom Locations

The threeletter abbreviationis spoken onSTAR and accompanied by the classroom number when the list schedule transaction (L\#) is performed. The classroom abbreviation is also printed with the classroom number on your printed registration confirmation.

| ACC | Academic Computing Center (13-C) |
| :---: | :---: |
| AER | Administration Building (10-G) |
|  | Aerospace and Engineering Research |
|  | Building (12-I) |
| AND | Anderson Hall ( $15-\mathrm{H}$ ) |
| ARC | Architecture Hall (11-F) |
| ART | Art Building (6-I) |
| ATG | Atmospheric Sciences-Geophysics Building (12-G) |
|  | .. |
| BAG | Bagley Hall (13-G) |
| BGH | Botany Greenhouse (14-F) |
| BL1 | UW Bothell Campus |
| BLD | Bloedel Hall ( $15-\mathrm{H}$ ) |
| BLM | Balmer Hall ( $5-\mathrm{H}$ ) |
| BMM | Burke Memorial Washington State Museum (4-F) |
| BNS | Benson Hall (13-G) |
| BRY | Bryant Building (14-A) |
| $\mathrm{CAB}^{*}$ | Cabrini Hospital |
| CDC | Child Development and Mental Retardation Center (19-H) |
| CHL | Chemistry Library Building (12-F) |
| CDH | Condon Hall (9-B) |
| CLF | 3731 University Way NE (14-D) |
| CLK | Clark Hall (7-J) |
| CMA* | Ceramic and Metal Arts Building |
| CMH* | Con Bela Mental Health |
| CMU | Communications Building (8-1) |
| CNH | Canoe House (19-M) |
| $\mathrm{COH}^{*}$ | Children's Hospital |
| CQS | Center for Quantitative Science (15-D) |
| CSB ${ }^{*}$ | Seattle Central Community College |
| CSH | Conibear Shellhouse ( $13-\mathrm{M}$ ) |
| CTU | Clinical Training Unit (within CDC) (19-H) |
| DEN | Denny Hall ( 6 -G) |
| DSC | 3939 University Way NE (11-D) |
| ECC | Ethnic Cultural Center (11-C) |
| EDP | Edmundson Pavilion (14-L) |
| EEB | Electrical Engineering Building (13-1) |
| EEU | Experimental Education Unit (within CDC) (19-H) |
| EGA | Engineering Annex (12-J) ${ }^{\text {- }}$ |
| EGL | Eagleson Hall (7-E) |
| ELB | Engineering Library (11-J) |
| EMC* | Eastside Mental Health Center |
| EVH* | Evergreen Hospital |
| FIS | Fisheries Center (18-G) |
| FLK | Fluke Hall (10-K) |
| FRH* | Friday Harbor Laboratories |
| FSH* | Foss Sunset Home. |
| FTR | Fisheries Teaching and Research Building (14-B) |


| GA1 | Guthrie Annex 1 (12-E) |
| :---: | :---: |
| GA2 | Guthrie Annex 2 (11-E) |
| GA3 | Guthrie Annex 3 (11-E) |
| GDR* | Golf Driving Range |
| GHH* | Group Health Hospital |
| GLD | Gould Hall (11-D) |
| GTH | Guthrie Hall (12-F) |
| GUG | Guggenheim Hall (11-1) |
| GWN | Gowen Hall (9-H) |
| HAG | Henry Art Gallery (9-E) |
| HCK | Hitchcock Hall (Biological Sciences Building) (14-E) |
| HHL | Harris Hydraulics Laboratory (17-E) |
| HLL | Hall Health Center (9-K) |
| HMC* | Harborview Medical Center |
| $\mathrm{HMH}^{*}$ | Harborview Community Health Center |
| HND | Henderson Hall (10-A) |
| HPH | Hughes Playhouse (9-D) |
| HRC* | Fred Hutchinson Cancer Research Center |
| HS2 | Magnuson Health Sciences Annex 2 ( $16-\mathrm{F}$ ) |
| HSA | Health Sciences Building wings A, B, and $C$ ( 16 -G) |
| HSB | Health Sciences Building wings AA and $\mathrm{BB}(17-\mathrm{H})$ |
| HSD | Health Sciences Building wings D, E, F, G , and $\mathrm{H}(16-\mathrm{F})$ |
| HSI | Health Sciences Building wing I (16-F) |
| HSJ | Health Sciences Building wing J (15-E) |
| HSR | Health Sciences Building wing RR (18-H) |
| HST | Health Sciences Building wing T (15-G) |
| HUB | Student Union Building (10-J) |
| HUT | Hutchinson Hall (5-1) |
| HWS* | Highline-West Seattle Mental Health Center |
| ICH | Cunningham Hall (11-F) |
| ICT | Instructional Center/Theater (10-C) |
| IMA | Intramural Activities Building (12-M) |
| JHA | Johnson Annex A (11-G) |
| JHN | Johnson Hall (11-G) |
| KHD* | King County Health Department |
| KIN | Kincaid-Hall (13-F) |
| KLN* | Kline Galland Nursing Home |
| KNE . | Kane Hall (8-G) |
| LEW | Lewis Hall (6-J) |
| LOW | Loew Hall (11-J) |
| MAR | Marine Studies Building (14-C) |
| MDG* | Madigan General Hospital |
| MEB | Mechanical Engineering Building (12-J) |
| MKZ | Mackenzie Hall ( $6-\mathrm{H}$ ) |
| MNY | Meany Hall (10-F) |
| MLR | Miller Hall (8-I) |
| MOR | More Hall (14-) |
| MSB | Marine Sciences Building (14-C) |
| MUE | Mueller Hall (formerly Roberts |
|  | Underground) (14-I) |
| MUS | Music Building (7-I) |

NOC Not on Campus
NPL Nuclear Physics Laboratory (4-K)
NRB Nuclear Reactor Building (13-J)
NSC* North Seattle Community College
NSM* Northshore Manor
OBS Observatory (4-G)
OCE Oceanography Building (18-F)
ORB . Ocean Research Building (16-D)
OTB Oceanography Teaching Building (16-E)
OUG Odegaard Undergraduate Library (9-F)
OVL* Overlảke Hospital
PAR Parrington Hall (8-F)
PDL Padelford Hall (8-J)
PHH* U.S. Public Health Hospital
PHY Physics Hall ( $11-\mathrm{H}$ )
PLT Plant Laboratory (14-G)
PMC ${ }^{+}$Pacific Medical Center
PSC* Pacific Science Center
PTH Penthouse Theater (4-H)
RAI Raitt Hall (7-H)
RCC* Ravenna Convalescent Center
ROB Roberts Hall (14-J)
SAV Savery Hall (8-G)
SDP* Seattle Doctors Pavilion
SGH* Seattle General Hospital
SHC* Shoreline Community College
SHD* Snohomish Community Health
Department
SIG Sieg Hall (11-I)
SKV* Skagit Valley Community College
SMH* Seattle Mental Health Center
SMI Smith Hall ( $9-\mathrm{H}$ )
SMZ Schmitz Hall (9-D)
STC* Seattle Treatment Center
STV* Stevens Memorial Hospital
SUZ Suzzallo Library (10-H)
'SWH* Swedish Hospital
SWS - Social Work/Speech and Hearing Sciences Building (8-E)
TGB Graves Building (13-L)
THO Thomson Hall (9-I)
TL1 UW Tacoma Campus
UMC University Medical Center wings CC, EE, NE, NN, NW, SE, SS, and SW ( $18-\mathrm{H}$ )
UME University Medical Center wings EA, EB, and EC (18-I)

VAH* Veterans Administration Hospital
VGH* Valley General Hospital
VMH* Virginia Mason Hospital
WCL Wilson Ceramic Laboratory (15-J)
WFS Winkenwerder Forest Science
Laboratory (15-I)
WIL Wilcox Hall (14-J)
WLN* Wintonia House
WLS* Wilsònian Ballroom

* Off-campus facilities
() Map coordinates



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## University of Washington summer-only 1993 application form*

A $\$ 35$ nonrefundable application fee must accompany the application. Make check or money order payable to the University of Washington in U.S. funds. Applications will be processed as soon as possible. However, due to the volume of applications received, processing time may take four to six weeks.
Mail completed application form and $\$ 35$ fee to:

- If you have never attended UW credit classes return to: Office of Admissions, PC-30, 320 Schmitz Hall, University of Washington, Seattle, WA 98195.
- If you have previously attended UW credit classes and have been assigned a student I.D. number, return to: Registration, PD-10, 225 Schmitz Hall, University of Washington, Seattle, WA 98195.
Please type or print clearly:


1. Social Security number
2. Sex: Male Female
3. Legal name (last)

> (first)
(middle)
4. Former name(s)

8. $\frac{1}{L} \frac{1}{\text { Date of birth }}-\frac{1}{-1}{ }^{-}-1$

Place of birth
9. Are you a veteran? Yes No
10. Are you a Washington resident? Yes No If not, what is your home state?

How long have you resided in Washington? From $\qquad$ To

Country of Citizenship, if not USA $\qquad$ International students: carefully read the information on page 17.
Type of visa $\qquad$
11. If UW or state classified employee, will you be attending on the tuition exemption program? Yes No
12. Have you ever enrolled for a credit course at UW? Yes No

If yes,
(Student number)
(Last quarter and year enrolled)
(Major)
Have you earned a bachelor's degree at another college since last attending the UW? Yes No
If yes, $\qquad$ $\begin{array}{lll}\overline{\text { (College issuing degree) }} \overline{\text { (Date) }} \\ \overline{\text { (Location) }} & \\ & \\ \text { (Dates attended) }\end{array}$
Last school atended: $\qquad$
(Name)
13. Will you still be enrolled in high school in 1993-94? Yes No

If yes, the following materials must be included with this application:
A. A statement from your high school principal or counselor giving permission for you to attend Summer Quarter.
B. A copy of your high school transcript (Note: a 3.30 GPA is required.)
14. (Optional) What race do you consider yourself to be?

| $\begin{aligned} & \text { White } \\ & \text { P Eskimo } \\ & \text { Print name of the e } \end{aligned}$ | O Black / African American anrollod or principal tribe | a Incian (Amer.) |  |
| :---: | :---: | :---: | :---: |
| Asian or Pacific Islander (API) |  |  |  |
| O Chinase | a Filupino | O Hawail |  |
| - Viotnamese | - Other API (Pleaso p |  |  |
| - Other face (Ple | base print |  |  |

Are you or are you not of Spanish/Hispanic origin?

- No (not Spanish/Hispanic)
- Yes, Mexican, Mexican-Am, Chicano
- Yes, Puerto Rican
- Yes, Cuban
- Yes, other Spanish/Hispanic
(Print one group, for example: Argentinian, Colombian, Dominican, Nicaraguan, Salvadoran, Spaniard, etc.)

15. (Optional) Do you have a physical, sensory, or mental impairment that substantially limits one or more life activities (e.g, walking, seeing, hearing, breathing or learning)?

- No Yes (Please describe)

16. In signing this form, I certify that the above information is complete and accurate. Failure to disclose complete and accurate information may result in denial of admission or dismissal from the University.


## Attend the University of Washington this summer

- Choose from over 1,500 courses in Seattle. See pages 65-66 for summer classes at UW branch campuses in Bothell and Tacoma.
- Earn a year's language credit in nine weeks.
- It's easy to apply and register. See page 1 for details.
- Nearly 100 College of Education courses are scheduled. See the Guide to Courses for Educators, page 46.
- High-achieving high school students may also attend. For more information, see Advanced Study Program, page 116.

University of Washington
Summer Quarter
5001 25th Ave. NE, GH-24
Seattle, WA 98195

Postage Paid at
Seattle, WA


[^0]:    University of Washington Bulletin (USPS 078-880)
    General Series No. 1269
    April 1993

[^1]:    See the Time Schedule section, pages 68-108, for class dates and times.

[^2]:    See the Time Schedule section, pages 68-108, for class dates and times.

[^3]:    See the Time Schedule section, pages 68-108, for class dates and times.

[^4]:    See the Time Schedule section, pages 68-108, for class dates and times.

[^5]:    See the Time Schedule section, pages 68-108, for class dates and times.

[^6]:    See the Time Schedule section, pages 68-108, for class dates and times.

[^7]:    See the Time Schedule section, pages 68-108, for class dates and times.

[^8]:    See the Time Schedule section, pages 68-108, for class dates and times.

[^9]:    See the Time Schedule section, pages 68-108, for class dates and times.

[^10]:    See the Time Schedule section, pages 68-108; for class dafes and times.

[^11]:    See the Time Schedule section, pages 68-108, for class dates and times.

[^12]:    See the Time Schedule section, pages 68-108, for class dates and times.

[^13]:    See the Time Schedule section, pages 68-108, for class dates and times.

[^14]:    See the Time Schedule section, pages 68-108, for class dates and times.

[^15]:    See the Time Schedule section, pages 68-108, for class dates and times.

[^16]:    300 Professional Forestry
    Infernship (3-5, max. 8)
    Comprehensive examination of an acceptable experience in professional forestry within a public or private agency, including operational policies and procedures. Preparation of professional assessment report and presentation of seminar based on

[^17]:    See the Time Schedule section, pages 68-108, for class dates and times.

[^18]:    See the Time Schedule section, pages 68-108, for class dates and times.

[^19]:    See the Time Schedule section, pages 68-108, for class dafes and times.

[^20]:    - a term: June 21-July $21 \Delta$ b term: July 22-Aug. 20 No symbol: full term June 21-Aug. 20

    Courses listed are subject to revision.

[^21]:    $>$ Limited enrollment in this section is limited, and students must obtain entry codes. \% New course H Honors

[^22]:    $>$ Limited enrollment in this section is limited, and students must obtain entry codes. \% New course H Honors See pages 8-66 for course descriptions. See page 67 on how to read time schedule.

