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**University of Washington Undergraduate Capstone Courses,
Practica and Internship Opportunities,
and Feedback from Employers**

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University of Washington

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The Higher Education Coordinating Board has identified six areas as requiring assessment programs. One of these is the assessment of undergraduate student outcomes associated with university education in majors. Assessment within the major can take on many forms, and, indeed, a great deal of assessment activity already takes place at UW. There are, however, several natural areas in which assessment activities may already exist or can be added to existing educational opportunities for students. This report deals with three such areas: capstone courses, internships or practica, and feedback from employees. Its purpose is to present current course offerings and activities in these areas.

Data collection for this report began with searching the UW course catalogue for entries that sounded like capstone experiences and practica. Where these were found department chairs, advisors, or administrative assistants were contacted to clarify the purpose of the course. This work was followed by a questionnaire to all departments to assure that no relevant courses were overlooked. All information on the employer feedback portion of this report was obtained from this questionnaire.

The questionnaire was sent out in November of 1990 under the signature of Vice Provost Lujan. Approximately two months later, a follow-up letter and questionnaire was sent to all non-respondents. Ultimately, all but a few departments responded.

The questionnaire defined a capstone course as follows:

... one which is intended to provide an integrating experience for the students, such as a senior seminar or senior thesis. We are particularly interested in courses in which students must do a paper, demonstration, or project requiring an integration of content and skills learned in courses across the major. In most cases we would choose to exclude courses in which individual students enroll to do research with individual faculty (e.g., 499).

The questionnaire defined a practica or internship as follows:

... organized opportunities for students to practice and apply their university education to real world settings for course credit.

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Finally, the questionnaire defined employer feedback as follows:

Potential and actual employers of our graduates can be a source of information about the quality of our undergraduate programs. Please indicate any regular programs or other means by which you obtain evaluative information from employers.

This report begins with a summary table, followed by three major sections corresponding to the three categories of information above. Each major section is further subdivided as follows:

Capstone or Integrative Courses

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Internships and Practica

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Employer Feedback

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As an important, final note, there are two qualifications which must be offered. First, we accepted at face value what we were told by the departments. For example, if a department indicated that a course or set of courses fell under the capstone category, we placed the course(s) there without question. An objective analysis might determine otherwise in some cases. Second, while we have tried to make the course listings as complete and accurate as possible, the size, complexity, and constant evolution of the institution almost assures that some courses which should be included will be missing and others which are included will not be fully accurate or will have relevant data missing.

Capstone or Integrative Courses

I. Multiple Raters of Final Product

Architecture and Urban Planning, College of

CAUP Preprofessional Program -- Design Courses

- Enrollment:** Approximately 135 students each term are enrolled in one of five studio design courses, or they take an elective studio in Architecture, Landscape Architecture, or Urban Design and Planning.
- Description:** There are five design studio courses in which the student is expected to synthesize information from other CAUP courses and integrate the information, concepts, and insights into design projects. The introductory weeks of each studio course involve a "programming" task in which students and faculty set forth the goals of the design project. The subsequent task of the studio is to produce environmental conditions that meet these goals.
- Evaluation:** The process is continually evaluated by the instructor in regular critique sessions with each student. The instructor questions, probes, suggests alternatives, and provides further information to the student that will help him or her make the connections between project goals and design outcome. In addition to the student-instructor critique sessions, each studio has students present their projects to a guest "jury" at the end of each term. The guest critics are members of the College faculty as well as practicing professionals.

Dance

DANCE 470 Dance Production Activities

- Required?** All majors
- Enrollment:** 9-10 students per quarter
- Description:** Although its catalogue description does not specifically state it, DANCE 470 is offered as the capstone experience for Dance majors. During this course, majors choreograph a work, learn how to produce a full dance concert under the guidance of Dance faculty and Drama staff, and have their work viewed in a theater by a paying public.
- Evaluation:** The work is evaluated by a panel of three dance professionals. A student whose work is selected by the judges receives a monetary award and the opportunity to produce his/her work in yet another public forum.

English

ENGL 495 Major Conference for Honors in Creative Writing

- Required?** Honors only
- Enrollment:** 10-15 students per year
- Description:** Initially, students meet together in a group and each talks about what he or she will be doing. After this initial phase, students work independently; each student works one-on-one with a faculty member (called the "advisor").

Evaluation: The advisor meets with the coordinator at the end of the quarter to assign a grade to the student. Evaluation of the student is based on consensus between these two faculty members.

ENGL 492 Major Conference for Honors

Required? Honors only

Enrollment: 15 students per year

Description: This is the honors thesis for Literature.

Evaluation: Students are evaluated in this course in the same manner as in ENGL 495 (see above).

International Studies

SIS 491, 492 Seniors Honors Seminar

Required? All SIS honors students

Enrollment: 5-6 students per year

Description: Study of issues related to students' senior thesis topics. The purpose is for students develop thesis writing skills.

Evaluation: SIS 492 culminates in a 60 page paper which is read by an honors committee (three faculty). This is followed by an oral exam where the student is questioned by the three-faculty committee. No credit is given for 491 or 492 until 492 is successfully completed.

Fisheries, School of

Undergraduate Seminar (under development)

Description: The plan calls for seniors to register for a special one-credit seminar course. A faculty member would be assigned to work with the students in the selection of a topic and the preparation of visual aids for a 30-minute seminar which the students would present. Subject matter would be selected that would require demonstration of breadth and depth of knowledge on the part of the student. The seminars would be announced and attendance by faculty and undergraduates would be strongly encouraged.

Geography

GEOG 494 Senior Essay

Required? Honors only

Enrollment: 5 students sign up for credit each year. Another 6 write a Senior Essay without signing up for the course.

Description: Supervised individual research and writing of a major paper during the senior year. Unique Feature: There is a Senior Essay competition for a cash prize (\$150) which is judged by a faculty committee of three. Students can enter this competition whether they take 494 or not. The department strongly encourages entries for the Senior Essay Award, both because the effort will help the student produce professional-looking work and will also help the student integrate his or her coursework in an independent project. Submissions from all four concentrations within the major are encouraged. A student's entry may be an extended essay, a research paper, a literature review, or some sort of project. All entries should have at least an introduction and a conclusion, offer a thesis (hypothesis) and present data in support of the argument.

Evaluation: Criteria include the following: 1) general quality of writing: readability, proper grammar, spelling and punctuation, clarity of expression; 2) use of appropriate theory and methodology; 3) clarity and organization of argument; 4) use of appropriate supporting data; 5) display of data: tables, graphs, charts, maps, etc.; 6) ability to deal with a significant problem in Geography -- reference to ideas or texts discussed in prior geography classes is encouraged; 7) professional appearance of project.

Music

MUSIC 479 Senior Recital

Required? All students in the Bachelor of Music Program and students in the Bachelor of Arts/Bachelor of Music program.

Enrollment: 3 students per quarter

Description: Student receives private lessons in music from their professor; this is called "studio work". The student puts together and performs a recital. The performance requires an integration of all studio work undertaken.

Evaluation: The performance is evaluated by a jury consisting of the student's studio teacher and all the rest of the faculty in the division.

MUSIC 379 Junior Recital

Required? All students in the Bachelors of Music Program

Enrollment: 2 students per quarter

Description: See description of MUSIC 479 above.

Evaluation: See description of MUSIC 479 above.

Microbiology

MICRO 495 Honors Undergraduate Research

Required? Departmental honors students

Description: Honors students submit their research paper completed for MICRO 496 (see below under Category IV) for approval. Honor students have their research report reviewed not only by their faculty sponsor but by another faculty member.

Evaluation: Credit/no credit. Both reviewers must concur that the student merits credit for both MICRO 495 and 496.

Nursing, School of

CHCS 402 Strategies in Community Health Care Nursing

Required? All seniors

Enrollment: Approximately 85 students per year

Description: Analysis, application, and evaluation of the community health nursing process at the levels of the family and other small groups, community, and aggregate populations. Formulation of community health diagnosis as the basis for interventions to promote disease prevention, wellness and self care within and by the community. This course carries eight credits with two hours of lecture, four hours of clinical seminar, and nine hours of field work. It is taught by a team of faculty.

Evaluation: Evaluation includes clinical practice criteria, class participation, and a capstone senior project to assess health needs of an entire population or community and propose health education or community organization strategies that are health promoting.

Oceanography

OCEAN 460 Oceanic Data Interpretation

Required? Senior Oceanography majors

Enrollment: Approximately 22 students per year

Description: Students design a oceanographic research project, plan and execute the collection of data, and analyze and interpret the results. Students work as a class, in a team setting by sub-discipline, and individually.

Evaluation: Participation, quality of their scientific analysis, a written scientific report, and oral presentation of results. The course is taught by four faculty and, in addition, the written project is evaluated for scientific writing skills and integrative ability by Dr. Dean McManus.

Zoology

Senior Seminar (under development)

Required? At the start, enrollment will be strongly recommended but not required.

Enrollment: 7 - 10 students per year, estimated

Description: The course will consist of three, three-week sections of material: Cell and Development Biology, Ecology and Evolution, and Physiology. The last week will be a general discussion., integrating ideas from all parts of the course. For each section, the first week will be a lecture on several major topics in the area. The students will then read several papers from the original literature for discussion the second week, and then write a 5-10 page paper, discussing some question raised by the assigned reading. The third week would be discussion of the ideas and points of view raised by the students in their term papers.

Evaluation: The student essays will be read by all three faculty members who themselves come from three major disciplines within the department, thus eliminating any bias one reader might give to those students who have taken more course work in the area covered. There has been discussion about engaging a fourth reader from another scientific discipline or English or writing programs. The papers will be evaluated on scientific content, logic and reasoning, and writing skills. This course is viewed as different from other courses in that assessment of students' abilities to read and think critically and in depth about biological concepts is stressed. -- some of which will be new to at least some of the students because of the diversity of their course work.

II. Multiple Integrative Courses for Different Tracks

Aeronautics and Astronautics

AA 410, 411 Airplane Design

Required? Students must either take this eight hour sequence or AA 420, 421 (below).

Enrollment: About 30 students per year

Description: The students carry out a preliminary design of a modern airplane to satisfy a given set of requirements. They will estimate size, select configuration, and carry out weight and balance, performance, stability and control, and handling quality studies.

Evaluation: Students receive numerical grades based on reports submitted.

AA 420, 421 Space Systems Design

Required? Students must either take this eight hour sequence or AA 410, 411 (above).

Enrollment: About 30 students per year

Description: The students develop a methodology for treating the special power, transportation, attitude control, etc. systems required for current and anticipated spacecraft. Applications extend from communications to solar power from space.

Evaluation: Students receive numerical grades based on reports submitted.

Business Administration, School of

Required? All undergraduate Business majors (including accounting) must take one of the following three required capstone courses in business policy.

B POL 470 Business Policy

Enrollment: Approximately 500 students per year (15 sections)

Description: Case study of policy-making and administration from a general management point of view. Emphasis is on problem analysis, the decision-making process, administration, and control. This course integrates and builds upon the work of the core curriculum.

B POL 471 Small Business Management

Enrollment: Approximately 220 students per year (6 sections)

Description: Policy formation and implementation in smaller firms from the top manager's point of view is the focus of this course, which integrates and builds upon the work of the core curriculum. Course work includes analysis of cases and field projects related to small firms.

B POL 480 Business Simulation

Enrollment: Approximately 100 students per year (3 sections)

Description: Critical analysis of integrated business policy formation in a complex and dynamic industrial environment by means of simulation (business gaming).

Chemical Engineering

CHE 486 Process Design II

Required? All seniors

Enrollment: Approximately 50 students per year

Description: The students design a chemical process, including economic feasibility studies, process equipment design and optimization, and overall plant integration and layout. Students work in groups of four.

Evaluation: Based on a final paper of over two hundred pages in length giving the technical basis of their design. In addition, they must present the results of the design orally. The course is taught by a pair of faculty.

Communications

CMU 328 News Lab

Required? All editorial Journalism students

Enrollment: 52 students per year

Description: The course consists of full-time work in the School of Communications King County News Laboratory, reporting for the area's newspapers and radio stations, covering all county affairs/services. Involves a heavy writing schedule, deadlines, and advanced reporting.

Evaluation: Evaluation is based on the same professional standards that professional reporters must meet, such as: enterprise and initiative, productivity, accuracy and fairness of reporting.

CMU 339 Problems in Public Relations

Required? All Public Communications majors

Enrollment: Approximately 100 students per year

Description: The course provides group practice in applying Public Relations techniques to problems of local businesses and agencies.

Evaluation: Evaluation is based on the quality of individual student projects.

CMU 345 Advertising Campaigns

Required? All advertising majors

Enrollment: Approximately 100 students per year

Description: Preparation of an advertising plan for a product or service.

Evaluation: Based on the professionalism of the final group campaign.

CMU 358 TV News Reporting and Editing

Required? All Broadcast Journalism majors

Enrollment: Approximately 80 students per year

Description: Consists of writing and producing news stories and newscasts for broadcasting.

Evaluation: Based on students' final field reports.

Electrical Engineering

Required? All majors must take at least one of the following courses

Enrollment: 475 students annually in all courses

EE 411 Introduction to Network Synthesis

Description: Network representation in the complex frequency domain, realizability criteria for driving-point and transfer functions, canonical forms, and application of the digital computer in synthesis procedures.

EE 415 Computer Aided System Analysis and Design

Description: Concepts, principles, and techniques concerned with the design, testing, and application of general-purpose, problem-oriented computer programs for the design of large-scale systems.

EE 433 Electrical Circuit Design

Description: Electrical circuit design using modern electronic devices. Topics include application of integrated-circuit amplifiers and multipliers, design of solid state amplifiers for low noise, wide bandwidth, high frequency, high power output, and the application of modulation theory to modern systems. The design aspect of solid-state electronic circuitry is emphasized.

EE 443 Design and Applications of Digital Signal Processing

Description: Design of signal processing systems in digital computer circuits and their use in various commercial, industrial, and research applications. Digital signal microprocessors, digitalization and transform systems, case studies of applications in communications and audio.

EE 452 Fundamentals of Power Electronics

Description: Laboratory-oriented design and performance problems in power electronics. Solutions require effective use of electronic components, application of circuit theory, and the development of analytical tools for efficient electronic conversion, control, and conditioning of electric power.

EE 473 Wave Shaping

Description: Design of circuits for the generation and transmission of special waveforms. Design of oscillators, AM circuits, FM circuits, D/A and A/D circuits.

EE 474 Fundamentals of Operating Systems

Description: An introduction to operating systems. Hardware/software interface, process management, primary and secondary, storage management, processor management, performance, networks and case studies of current operating systems.

EE 478 Design of Computer Subsystems

Description: Design of digital computer subsystems and systems using SSI, MSI, and LSI digital components. Combination logic, sequential logic, ALU and control unit designs, memory hardware design, I/O hardware and interface designs, data acquisition system design, and digital troubleshooting.

EE 479 Micro Computer Systems Design

Description: An intensive course covering microprocessor architecture and operation, assembly language instructions and programming, system design criteria and techniques for integrating hardware and software into actual systems. Principles emphasis will be on system design and documentation. A weekly laboratory and design project is included.

EE 497 Design in Electronic Industry

Description: The work environment of design engineers in the electronics industry. Product definition, the design process, support of manufacturing. Design for both big systems and commercial products are covered. Most of the instruction is by lecturers from industry.

EE 499 Projects Course

Description: Assigned construction or design projects carried out under the supervision of the instructor.

Geography

GEOG 478 Intraurban Spatial Patterns

Required? All students in the Urban Concentration of the Geography major

Enrollment: 25-30 students per year

Description: An advanced survey course of topics related to the internal structure and processes of cities in North America. In general, topics may be organized around three major themes: economic, social, and political urban geography. However, as a result of increased emphasis on social theory the connections between these modes of thinking in the urban milieu will be stressed. The course will be based on a broad set of readings that touch on a number of important theoretical and practical issues such as industrial restructuring and the spatial division of labor, changing retail patterns residential segregation, neighborhood revitalization, public service delivery, urban images, and women in the city. The Seattle metropolitan region will figure prominently as a case study backdrop to those issues.

Geography 478 is an advanced course so all students are expected to have some background in urban studies if not urban geography. In addition, the course is a "W" course meaning that there is a heavy emphasis on writing.

GEOG 440 Regional Analysis

Required? No

Enrollment: 25 students per year

Description: Regional industrial structures and economic change. Application of shift-share cohort, multiplier, input/output and programming models to the analysis and projection of regional population and employment patterns, regional growth differentials, and regional impact analysis.

GEOG 450 Theories of Location

Required? No

Enrollment: 14 students per year

Description: The course surveys many of the location and spatial theories which have become the theoretical foundation of much of the work in Social, Human, and Economic Geography. We will derive basic micro-economic (marginalist), decision-theoretical, managerial, organization-theoretical and other principles underlying consumer, commercial, industrial and governmental frameworks. This theoretical discussion will draw upon "real world" examples from a variety of specific spatial choice situations such as those prevalent in residential, recreational, employment, migration, shopping, marketing, investment and regulatory behaviors. The discussion will cover (potentially) all spatially significant activities in the private, corporate and public sectors including spatial behaviors in uncertain and complex environments at local, national and international levels.

GEOG 460 Geographic Information Systems Analysis

Required? Students in the Cartography track

Enrollment: 24 students

Description: Geography 460 is an introductory course which covers the use and application of computerized geographic information systems (GIS). It combines an overview of general principles of geographic information systems and practical experience in the analytical use of spatial information. The lectures and readings cover a range of different types of systems and present alternate technologies that provide a basis for analysis. The presentation of alternatives is based on a case study approach, using published reports and demonstrations of real applications. The practical component involves the use of an analytical software package, MAP, on microcomputers in the Sherman Laboratory and in CSSCR. A data entry program ROOTS will also be used.

The course does not require previous course work in computer science, although a familiarity with the fundamentals of computing would help. Each student will be required to apply computer tools to an issue requiring spatial analysis, some of it outside of class hours. This course is designed for a broad range of students, but each student should have some exposure to the procedures used to make maps (e.g., drafting, surveying, airphoto interpretation, basic cartography) and some introduction to the use of spatial information (e.g., spatial analysis, site analysis, or land planning). Geography students should have Geography 360 or its equivalent from another campus or another discipline. Equivalent courses provide an introduction to mapping such as surveying, site analysis for landscape architects, or field courses in geology and forestry. A multi-disciplinary mix of students is encouraged.

GEOG 465 Analytical Cartography

Required? Students in the Cartography track

Enrollment: 13 students per year

Description: Cartography is the art, science and technology of making and using maps. This course provides a student with a conceptual background in analytical cartography as related to spatial information systems and practical experience in the development of computer-assisted cartographic software. Focus is on analytical techniques and interactive graphics. We will examine frameworks, components and algorithms of spatial information systems currently in use.

A structured systems methodology is emphasized throughout the course in developing software modules. We will use TIGER/Line data file extracts for all exercises. Students will form project groups according to their backgrounds. Software development will take place in an IBM PC/AT environment using a graphics subroutine package based on the graphics kernel system standard with the Fortran binding.

GEOG 426 Quantitative Methods in Geography

Required? No

Enrollment: 26 students per year

Description: The goal of this course is to provide a practical, working understanding of quantitative analysis in geography. Consequently, the emphasis is placed on solving problems that might normally be encountered in geographic research. Such a process includes problem recognition, research design, statistical manipulation, interpretation, and presentation. Six problem sets are designed to train students in each of these steps. In five of these sets students are required to prepare reports that reflect professional standards in both form and substance.

GEOG 442 Social Geography

Required? Students in Social/Urban concentration

Enrollment: 12 students per year

Description: The course reviews the concepts and methods of postwar social geography. Directions of human and social geography, their historical roots and their present orientations. Study of spatial systems. Society-environment relationship. Structures and functioning. Place, space and region. Spatial constraints to interaction, communication, movements and social processes. Study of networks, flows and resulting patterns. Environmental and institutional structures and their roles at various socioeconomic levels, systems of political organization and in various cultural areas. Time geography, approaches and findings.

The course is a follow-up of Geography 200 and assumes students' familiarity with the basic concepts, methods of investigation, and purposes of human-social geography. It aims to integrate various strands of geographical specializations.

GEOG 445 Population Distribution and Migration

Required? Majors emphasizing social geography

Enrollment: Approximately 25 students per year

Description: Relation of population distribution to environment, economic development, and culture. Frontier and rural settlement, urbanization and suburbanization. Regional variation age, ethnicity, fertility, and mortality. Causes and effects of migration from the world scale to the local scale.

History

HST 498 Colloquium in History

Required? All majors must take at least one HST 498 course.

Enrollment: Maximum 12 students in each of 30 HST 498 sections offered annually

Description: Classes are taught in a seminar format, stress active student participation in discussion, and require a significant amount of writing. Most require a 15 to 20 page research paper, although sometimes individual instructors will instead require several shorter papers. It is the expectation that all students will write at least 15 pages and all of these courses are designated as "W" courses.

HST 498 is offered by almost all faculty members on an annual basis. The topic of each course will vary with the instructor, but will tend to be on subjects on which the instructor is especially expert. This guarantees students the chance to experience first-hand the excitement of working on the frontiers of scholarship in an area. It also helps to reinforce

the message that we try to convey in all of our courses, that history is not a body of facts to be learned, but rather a process of enquiry, discussion and argument about the past. It is therefore particularly important that students engage in their own research, as well as participate in class discussions.

Evaluation: Students are evaluated on the basis of their participation in the seminar, and on their papers. The precise weighting of these factors will vary from instructor to instructor.

International Studies

SIS 495A-F The Task Forces

Required? All majors in the winter quarter of their senior year

Enrollment: Approximately 85-90 students per year

Description: The Task Forces are designed to prepare students to work with policy issues in government, international organizations, private business, etc. Students enroll in one of six sections, each addressing a different issue of contemporary international public policy. Following an initial period of intensive reading, the students write a series of short policy papers on different issues. Clear and concise writing is demanded.

Evaluation: Experienced high-level specialists in government and business evaluate the work of students, clarifying and expanding the issues raised in the policy papers.

SIS Area Studies

Required? Seniors majoring in each of the respective area studies

Enrollment: SISC4 498 (Canada): 1 - 3 students per year
 SISEA 451 (Japan): 20 -30 students per year
 SISEA 455 (China): 20 - 30 students per year
 SISRE 457 (Russia): 20 - 30 students per year
 SISRE 458 (East Europe): 5 - 10 students per year
 SISSA 498 (South Asia): 1 - 3 students per year
 SISJE 490 (Jewish): 1 - 3 students per year

Description: Students enroll in the seminar or colloquium within their subject area. Each represents a culmination and integration of courses taken throughout the major, and requires the writing of a major seminar paper.

Materials Science and Engineering

Required? Students must take at least one of the following three courses.

MET E 432 Corrosion of Engineering Materials

Enrollment: Approximately 15 students per year

Description: This course draws on the students' understanding of physical chemistry and metallurgy to develop knowledge of the reaction of materials with their environments. All aspects of the students' earlier coursework are required as they learn to analyze real problems in this area. The course contains a lab in which the students apply their background.

Evaluation: Exams 60%, homework and labs 40%.

MET E 463 Reliability and Design of Metallurgical Systems

Enrollment: Approximately 15 students per year

Description: This course draws on the students' understanding of metallurgical systems to develop knowledge of reliability of materials and the analysis of failures in metallurgical systems. All aspects of the students' earlier coursework are required as they learn to analyze real problems in this area. The course contains a lab in which the students apply their background.

Evaluation: Exams 50%, homework and labs 50%.

CER E 401 Equipment and Plant Design

Enrollment: Approximately 25 students per year

Description: This course draws on the students' understanding of ceramic engineering to develop knowledge of reliability of how to design equipment and plants for ceramic engineering materials production. All aspects of the students' earlier coursework are required as they learn to analyze real problems in this area. The course contains design projects in which the students apply their background.

Evaluation: Emphasis on the outcome of the design project.

MSE 499 Senior Project

Required? All students

Enrollment:

Description: A design or research project requiring a final report. It is designed to integrate the content and skills learned in the student's course of study.

Evaluation: Emphasis on the outcome of the design project.

Psychology

Required? All psychology majors are required to take at least one lab during their senior year.

PSYCH 231 Laboratory in Human Performance

Enrollment: 3 to 4 sections offered per quarter with about 20 to 30 students in each section

Description: Objectives are 1) to learn to write research papers in APA format and 2) to design, carry out and report an original experiment. Supervised by faculty and taught by graduate students. "W" course.

PSYCH 232 Laboratory in Animal Learning

Enrollment: 3 to 4 sections offered per quarter with about 20 to 30 students in each section

Description: The class is designed to give the student hands-on experience in the area of animal learning research. Students will be expected to familiarize themselves with the process of such research including the design, data analysis and reporting of findings. In addition the students will become acquainted with two key elements of research in this area: The rat, and the operant conditioning (Skinner) box.

In total there will be three papers required, the final one being the result of an independent research project carried out by the student from start to finish. Considerable library work and report writing will be expected of the students. Supervised by faculty and taught by graduate students. "W" course.

PSYCH 233 Laboratory in Animal Behavior

Enrollment: 3 to 4 sections offered per quarter with about 20 to 30 students in each section

Description: Experience with a variety of animal species and experimental procedures and instrumentation. Supervised by faculty and taught by graduate students. "W" course.

PSYCH 361 Laboratory in Social Psychology

Enrollment: 3 to 4 sections offered per quarter with about 20 to 30 students in each section

Description: Practice and discussion of methods of systematic observation, content analysis, laboratory and field experimental manipulation in social psychology; individual research projects. Taught by faculty.

PSYCH 419 Behavioral Studies of Zoo Animals

Enrollment: 3 to 4 sections offered per quarter with about 20 to 30 students in each section

Description: The study of zoo animals in terms of their ecology and social structure where known. Emphasis on behavior in the wild. Field observation techniques with the opportunity to conduct a research project. Relevant captive animal approaches and data collection. An understanding and scientific appreciation for animals in nature and their conservation and preservation.

This is an opportunity to obtain an understanding of animal behavior through the conduct of observational research and invited speakers. The student may choose the species to study and with the help of the instructor, design the project through which an intimate appreciation of the social structure and conservation of animal life may be acquired. Taught by faculty. "W" course.

III. Courses Taught by One or a Limited Number of Faculty

Afro-American Studies

AAS 480 Contemporary Issues In Afro-American Studies

Required? All majors

Enrollment: 25-30 students per year

Description: This course usually reviews five issues selected for their contemporary importance in Afro-American Studies, but the winter quarter, 1990, course reviewed three issues. The syllabus stated: Each of these issues is associated with a number of other equally important, but less central issues. Some attention will be given to these tangential issues, but they will not constitute the major focus of the course. The three issues that we will focus on are the African American family, the African American underclass, and the relationship between African Americans and the educational system in this country. All three of these issues are related and therefore some attention will be given to their articulation...

The course will be primarily a reading, writing and discussion course. It is expected that each student will read the assigned material before class and will be prepared to participate in seminar type format. There will be no lecturing in this course and therefore the quality of the course will be determined by the extent of student preparation and participation.

Evaluation: There will be no exams in this course, instead each student will be required to write three papers, one for each of the issues that are considered in the course. The papers must be seven to ten pages in length and should reflect the reading material, classroom discussions, and an attempt on the part of the student to add what he or she has read, either by supplementing the literature (being careful not to generalize too broadly on the basis of personal experience), synthesizing it or critiquing it.

Biology

BIOL 490 (under development)

Required? Required for honors majors, but open to non-honors students as well

Enrollment: 10 to 20 students per year anticipated

Description: This will be a seminar-type course in which different faculty members, primarily in the Botany and Zoology departments, present their research. It is meant to give students a feel for the faculty, their interests, and the wide variety of work being done here.

Evaluation: A paper delving into one of the areas being presented may be required. Grading may be credit/no credit.

Comparative History of Ideas

CHID 390 Colloquium in the History of Ideas

Required? All majors

Enrollment: Approximately 40 students per year

Description: This course was intended not only as a Coda but also as an orientation course, mapping out the structure of the interdisciplinary world the program attempts to address, and the kinds of interpretive methods and historical/comparative issues which recur within it. Majors are expected to take it near the end of their junior year, after they take introductory courses and before they move into specializations. The class is run as a discussion colloquium. Students are required to provide a weekly written commentary on the readings, lead a discussion, and write either two five-page papers or one ten-page paper.

Evaluation: By the instructor.

Computer Science and Engineering

CSE 477 Digital System Design

Required? All Computer Engineering majors

Enrollment: Approximately 40 graduating seniors per year

Description: The course is intended to provide a practical experience in the design of a useful digital system from basic components. Students use the laboratory to do weekly assignments and to design, simulate, construct, and debug a substantial project of their choosing. Lectures will focus on issues in composing large digital systems ranging from memory subsystems and interface logic to communication protocols and controllers. This course is being taught for the first time Winter Quarter, 1991.

Evaluation: Written and laboratory assignments, midterm exam, and final project.

Dental Hygiene

D HYG 465, 565 Theoretical and Scientific Basis for Dental Hygiene Practice

- Required?** All majors
- Enrollment:** Approximately 10 - 14 students per year
- Description:** Evaluation of theories, techniques and scientific literature related to dental hygiene patient care. Clinical techniques may be observed, assessed or applied in a variety of settings. The goal is to challenge the theoretical and scientific basis of knowledge from which dental hygienists establish standards of practice in order to advance students' critical thinking skills.
- Evaluation:** Graded credit/no credit based on oral presentation of six scientific articles (24%), written critique of a minimum of four field assignments (20%), active and informed participation during class (26%), and two three- to five-page essays on the unmet oral health needs of two different target populations (30%).

Education, College of

There is a very significant culminating experience for students in our teaching education program, and that is student teaching. Part of the experience of student teaching (and the observations that preceded it) is attendance at seminars in which the students' classroom work is discussed. There are at least six hours of these seminars each quarter when students are registered for observation or student teaching. These are supplemental to a student's primary enrollment in student teaching. Instructors for these seminars are part-time "faculty" who supervise placement of students in school settings for their observations of student teaching.

Engineering, College of

ENGR 493 System Engineering Project

- Required?** No
- Enrollment:** unknown at this time
- Description:** Forthcoming from department (ENGR 493 is the same course as CIVE 493.)

Forest Products Engineering

FPE 446, 447, 448, 449 Senior Forest Engineering Field Studies

- Required?** All seniors in the Forest Engineering program
- Enrollment:** 5 students per year
- Description:** Courses given concurrently on-location in cooperation with a public or industrial landowner. Students formulate a resource, harvest and transportation plan for a large forested area. Skills are developed and applied in areas of computer technology (GIS/CAD), heavy construction and harvesting equipment, road location and design, environmental assessment, and business administration.
- Evaluation:** Weekly reports, final projects, computer simulations.

Forest Resources, College of

FRM 488 Case Studies in Wildland Recreation

- Required?** Seniors in Forest Resources Management

- Enrollment: 6 students per year
- Description: Consideration of the natural resources bases, social factors, and management objectives in providing regional forest recreation opportunities. Emphasis on the forecasting of recreation demands, the development of environmental information systems, and the allocation of recreation use based on user-resource requirements. Case study approach.
- Evaluation: Attendance at all classes required; periodic papers summarizing specific cases; mid-term paper and final paper required. Course is evaluated on a graded basis.

Geological Sciences

GEOL 401 Field Geology

- Required? All undergraduate majors
- Enrollment: Approximately 15 - 30 students per year
- Description: This course carries 10 credits and is taught over six weeks in the summer. The nominal purpose of the course is to teach students how to make geological maps and cross sections. They must spend about 75% of the six week period actually working in the field, examining rock bodies and the contacts among them and preparing the individual maps. The fundamental, if implicitly, objective of the course, however, is to allow students to bring much of their "book" and "lecture-hall" learning to bear on actual geology as it is displayed in the field. There is simply no substitute for examining rocks, landforms, and structures where they naturally occur, and for being confronted with the necessity of fashioning the geological history of a region from first-hand observations. Students necessarily draw on the information and skills they learned in every one of the 300-level "core courses" required for the major. In addition to preparing maps, students are required to write several reports, including not only descriptions of rock units but also integrative geological histories of particular project areas.
- Evaluation: The evaluations are based on materials (maps, sections, reports) handed in and graded for accuracy, neatness, and overall professional presentation; on a student's general aptitude for field geology; and on his or her development of independent integrative skills.

Mechanical Engineering

ME 495 Mechanical Engineering Design

- Required? All majors
- Enrollment: Approximately 200 students per year
- Description: This course is a four credit design laboratory involving the identification, and synthesis of engineering factors to plan and achieve distinct project goals. It consists predominantly of a single project executed by groups of from two to five students.
- Evaluation: The results of the project are documented in detail and the students are evaluated on the basis of the quality of their design accomplishments as indicated by documentation and presentations.

Pharmacy, School of

PHARM 481, 484, and 485 Clinical Therapeutics

- Required? All majors
- Enrollment: Approximately 60-65 students per year

Description: This series of courses integrates knowledge obtained from several basic science courses and the psychosocial aspects of pharmacy courses and applies this knowledge to the diagnosis, treatment, and assessment of patient responses to a variety of diseases and therapeutic categories of drugs. This is a team taught series, coordinated by three faculty, but with lectures presented by a variety of academic and clinical faculty from the school, the University Medical Center, and practitioners.

Social Work, School of

SW 405 Field Work Seminar

Required? All seniors

Enrollment: Approximately 50 students per year

Description: This is a three quarter course which is designed to assist students in integrating their academic course work with their practicum experiences. (During the time they are enrolled in this course, they are also completing their practicum requirements.) The overall goal of the course is to assist students in attaining a beginning level of competence as professional practitioners. Teaching methods include lectures, discussion, student presentations, and case examples. Explicit efforts are aimed at assuring that the course builds on prior academic course work.

Evaluation: Students are expected to demonstrate their understanding of content from foundation social work courses and their ability to apply this knowledge to the practicum experience. Means for evaluating the extent to which they are able to make such application include the following:

- a log kept throughout the year in which students are expected to address applications of their course work to the field as well as discuss content from other courses and its relationship to the content of SW 405.
- papers throughout the quarter in which students address issues related to the social work profession, to their practicum agency, and specific social work interventions.
- an end-of-year paper in which students are expected to draw upon the practice literature, research and their practicum experience to analyze one field of practice (e.g., aging, child welfare services, chemical dependency).

Society and Justice

SO JU 400 Seminar in Society and Justice

Required? All majors

Enrollment: Approximately 25 students per year

Description: Students are required to write a major paper which seeks to achieve integration of content and skills learned from the major.

Speech Communications

SPCH 400 Theoretical Background in Speech Communication

Required? All majors

Enrollment: Approximately 120 students per year (1 section)

Description: This course surveys and integrates the various branches of communication studies. Its aim is to provide a conceptual integration of the field, following the students' more particular studies. The entire thrust of the course is to help students make some sense of the field in light of their studies in the field.

Evaluation: Exams and papers

IV. Independent Studies

Anthropology

ANTHR 499 Senior Honor Thesis

Required? No. Available only to those students with a GPA of 3.5 or better

Enrollment: Approximately 10% of the undergraduate majors write a senior thesis.

Description: A student must declare his or her intent to write a senior thesis by at least the last quarter of the junior year, as it is expected a thesis of quality will require at least one year's effort (nine credit hours) in conjunction with relevant non-499 courses. The honors thesis requires an integration of the content and skills learned across the major. The student may or may not be enrolled to do research in which a faculty member is directly engaged, but the thesis is written under the supervision of a faculty advisor with expertise and interest in the area of the topic chosen.

Comparative History of Ideas

CHID 491, 492, 493 Senior Thesis

Required? For honors

Enrollment: 3-5 students per quarter

Description: Research and writing of thesis under supervision of a faculty member.

Comparative Literature

C LIT 495 Honors Thesis

Required? For honors

Enrollment? 2 students per quarter

Description: Preparation of an honors thesis under the direction and supervision of a faculty member.

Computer Science

CSCI 498 Senior Project

Required? No

Enrollment: 10 students per quarter

Description: A report and perhaps demonstration describing a development, survey, or small research project completed by the student in an area in computer science or an application to another field. Objectives are: 1) integrating material from several courses; 2) introducing the professional literature; 3) gaining experience in writing a technical document; and 4) showing evidence of independent work. The work normally extends over more than one quarter.

Economics

ECON 496 Honors Seminar

Required? All honors

Enrollment: 9-10 students per year

Description: Honors and other superior students are given the opportunity to develop research techniques, to pursue topics in breadth and depth, and to apply their tools of economic analysis to selected topics in economic theory and current issues of national and international economic policy.

ECON 497 Honors Directed Study

Required? All honors

Enrollment: 9-10 students per year

Description: Students individually arrange for independent study of selected topics in economic theory and its application under the direction of a member of the economics faculty. The research paper, if accepted, is the student's senior thesis.

Food Science and Technology

FDSC 498 Undergraduate Thesis

Required? All Food Science majors

Enrollment: Approximately 3 to 5 students per year

Description: The thesis is intended to elicit a demonstration of competence and is commonly based upon laboratory research under the supervision of one of the faculty members.

Evaluation: The faculty member who is responsible for each student evaluates that student's performance.

Forest Resources Management

FRM 495 Senior Project

Required? All students in Forest Resources Management

Enrollment: 18 Students per year

Description: Individual study of a forest resource management problem under the direction of a faculty member.

Evaluation: Oral and written presentations of the research.

FRM 496 Senior Project

Required? All students in Wildlife Science

Enrollment: 6 students per year

Description: Review of literature, study design, statistical analysis, presentation of research results and discussion of results. Students work with faculty advisors to design and complete field or laboratory research and then prepare the senior thesis.

Evaluation: Attendance at weekly meetings; discussions with instructor about literature; interim written reports; final thesis (20 pages).

French

FREN 490 Honors Seminar

Required? For candidates for honors and distinction

Enrollment: 0-1 student per year

Description: Special studies in French literature.

General Studies

G ST 493 Senior Study

Required? All majors except those in Technical Communication

Enrollment: Approximately 95 students per year

Description: Since General Studies has no faculty of its own, students select an individual faculty knowledgeable in their field of interest and work with that person on an individual basis.

Evaluation: The final paper is graded by the faculty member and reviewed by General Studies.

Geological Sciences

GEOL 498 Undergraduate Thesis

Required: No

Enrollment: 1 or 2 students per quarter

Description: The thesis must be submitted at least one month before graduation.

Microbiology

MICRO 496 Library Research

Required? All Microbiology majors are required to take this course

Enrollment: 35-40 students annually

Description: The intent of this course is to provide students with the opportunity to explore a "microbiological" topic, of their own choice, at a depth not possible in the classroom. Normally students take this course after they have had some exposure to microbiology enabling them to decide which areas in Microbiology are of most interest to them. It is the responsibility of the student to search out current research papers on the topic, read them carefully and organize the findings into an orderly sequence in the writing of the report.

Evaluation: Credit/no credit. The faculty sponsor reads and evaluates the paper to determine if credit is to be awarded.

Psychology

PSYCH 450 Honors Research Seminar

Required? Required quarterly for all senior honors and distinction candidates

Enrollment: 8

Description: Design, execution, and writing of honors thesis, supervised by faculty sponsor and departmental honors advisor.

Romance Languages and Literature

ROM 490 Senior Essay

Required? All Romance Linguistics majors

Enrollment: 3-4 per year

Description: Essay on linguistic problem of student's choice written with faculty consultant.

Scandinavian Languages and Literature

SCAN 498 Senior Essay

Required? All majors

Enrollment: 10-20 per year

Description: Undergraduate research and the writing of a senior essay in Scandinavian area studies.

Sociology

SOC 495 Honors Senior Thesis

Required? No

Enrollment: 0-1

Description: Preparation of senior honors thesis.

Spanish

SPAN 490 Honors Seminar

Required? Candidates for honors and distinction

Enrollment: 0-1 student per year

Description: Special studies in Spanish literature.

V. Research

Essentially all departments with undergraduate programs offer course credit (usually course number 499) for students to do independent research under the supervision of a faculty member. In all, 151 programs offer such credit.

Internships and Practica

I. Required Programs

Education, College of

EDUC 402 **Practicum in Classroom Teaching and Management: Early Childhood, Kindergarten, Primary**

EDUC 403 **Practicum in Classroom Teaching and Management: Intermediate Grades, Middle School**

EDUC 404 **Practicum in Classroom Teaching and Management: Secondary School**

Enrollment: Approximately 120 students per year in the elementary program, and approximately 120 students per year in the secondary program.

Description: Starting nearly 20 years ago, the College was one of the first in the nation to require students to be engaged in some practical observation and field work during every quarter of their programs. This arrangement continues today, with students spending a gradually increasing number of hours in field settings. Many students also enroll in a preliminary observation experience (EDUC 301) before admission to the program, a self-screening mechanism that has proven useful. Typical credit hour progressions over successive terms are 3, 8, 8, 18 for the elementary program and 3, 9, 18 for the secondary program.

Evaluation: Students are evaluated each quarter using the UW Teacher Assessment System procedures. Evaluations are done by the cooperating (host) teacher and by UW supervisors (who are part-time instructors), all of whom are offered regular annual training in the use of the instrument.

Forest Products Engineering

FPE 497, 498 **Pulp and Paper Internship**

Enrollment: Approximately 15 students per year

Description: This course is required of all seniors in the Pulp and Paper Science Program. The course focuses on technical and economic analysis of commercial pulp and paper installations and includes structured visits to industrial operations to observe technical aspects of pulp and paper curriculum in practice.

Evaluation: Preparation of visitation reports and analysis in a seminar setting.

Medical Technology

LAB M 423 **Clinical Chemistry**

Enrollment: Approximately 12-15 students per year

Description: Seven weeks are spent in a clinical chemistry rotation with training periods in several specialized areas of hospital chemistry laboratories. These areas include the enzyme, endocrinology, toxicology, and general chemistry sections, as well as the "stat" laboratory. Experience using various automated instruments and the computer are included in the rotation. There is a major emphasis on quality control.

LAB M 424 **Clinical Microbiology**

Enrollment: Approximately 12-15 students per year

Description: Five-and-one-half weeks are spent in a clinical microbiology lab learning the routine handling of specimens which are submitted for culture identification of antibiotic susceptibility testing, etc. In addition, quality control procedures, direct gram stain evaluation, and microbacteriology are included.

LAB M 425 Clinical Hematology

Enrollment: Approximately 12-15 students per year

Description: Five-and-one-half weeks are spent in a clinical hematology laboratory where emphasis is placed on routine hematology procedures, quality control, automation in hematology, and the morphology of both normal and abnormal blood cells. Additionally, exposure to special hematology procedures and coagulation is included.

LAB M 427 Selected Studies in Laboratory Medicine

Enrollment: Approximately 12-15 students per year

Description: Eleven weeks of clinical laboratory experience are offered in one of three elective pathways: the "generalist" pathway, which provides general laboratory study in the University and University-affiliated hospitals in Seattle or in selected hospitals and clinic sites in rural Washington and Alaska; the "specialist" pathway, which offers advanced study in the clinical laboratory in one of the major disciplines such as chemistry, hematology, or microbiology; and the "research" pathway.

Music Education

MUSIC 465 Music Education Observation

Enrollment: Approximately 31 students per year

Description: Required for all Music Education K-12 Choral or Instrumental Certification majors. Students sign up for 60 hours of public school classroom observation and meet once per week to discuss their observations. The class provides experiences in observation and analysis of teaching skills and management of music classes. Observations are to be evenly balanced between elementary and secondary, and between choral, instrumental and general music.

Nursing, School of

A one quarter senior practicum is required of all undergraduate majors. Students select the department and the location of the clinical component of the course.

CHCS 423 Senior Practicum in Community Health

Description: Senior undergraduate nursing students engage in a wide variety of community health nursing endeavors in the field, from working in an Indian Health Service clinic in Alaska to assisting in the evaluation of a well-baby clinic. A weekly seminar on campus allows students to share their experiences and hear about current issues in health care including epidemiology and health finance.

Evaluation: Students evaluate their own experiences, based on a contract they write and sign at the beginning of the quarter. Faculty and clinical preceptors also evaluate students.

PN 426 Senior Practicum in Physiological Nursing

Description: Students who have strong theory and experiential backgrounds in general care of ill adults may select this practicum. Students arrange for a preceptor usually in a clinical setting

where the student has 1) worked as an employee, and 2) wants to work upon graduation. Administrators and staff of institutions are willing to provide preceptors as a means of attracting students as employees. The experience consists of three eight-hour experiences each week for seven consecutive weeks. Students provide patient care and participate in the entire role and function of their preceptor. Each week of the term faculty plan and direct a two-hour seminar with all students in the session attending. Content is taught using a case method approach and students are required to conduct a 30-minute presentation of the major paper required in the course.

Evaluation: Weekly evaluation of the clinical field portion of the course is done by the student and the preceptor. At mid-quarter and the end of the term the preceptor does the final evaluation. This evaluation constitutes 50% of the course grade.

PCN 425 Senior Practicum in Parent-Child Nursing

Description: Students have eighteen hours per week of clinical experience paired with a clinical preceptor in an inpatient, or occasionally outpatient, clinical site relevant to the nursing care of women, childbearing families, or children. Supervised directly by the clinical preceptor and indirectly by the faculty member, the students works with increasing independence toward assuming the full work load of a new staff nurse.

Evaluation: The students are evaluated jointly by the preceptor and the faculty member(s) responsible for PCN 425. The grade is based on clinical and seminar performance (50%), on the clinical log (20%), and on a clinical project focused on teaching clients and nurses (30%).

PSN 424 Senior Practicum in Psychosocial Nursing

Description: Synthesis and application of psychosocial nursing theories in the care of psychosocially disabled persons. Analysis of factors supporting or impeding quality care within the mental-health delivery system. Use of research findings and application of theories of leadership and psychosocial nursing.

Pharmacy, School of

PHARM 470 Externship in Community Practice

PHARM 471 Externship in Institutional Practice

PHARM 487 Clinical Pharmacy Clerkship

Enrollment: Approximately 65 students per year

Description: 400 hours (16 credit hours) of practicum are required for graduation. The current required practicum is divided between 200 hours of ambulatory externship/clerkship (PHARM 470), 100 hours of institutional externship (PHARM 471), and 100 hours of clinical clerkship (PHARM 487). In simplest terms, externships emphasize the technical and administrative aspects of pharmacy practice, and clerkships emphasize patient care activities such as attending ward rounds with physicians in the hospital or nursing home, interviewing and consulting patients, assessing patients' drug therapy, and consulting with physicians and other health care providers. Approximately 50-60% of the students choose to take an additional 100-200 hours of practicum in excess of the minimum required.

Evaluation: Extensive course syllabi which include learning objectives, performance expectations, general format for the experience, and evaluation materials are available for all three courses.

Rehabilitation Medicine, Division of Occupational Therapy

REHAB 494 Clinical Fieldwork

Enrollment: Approximately 25 students per year

Description: Two full time internships, one quarter each, are required of all Occupational Therapy majors. Each course consists of twelve weeks of full-time work at one of over 150 clinical training sites in the U.S.

Evaluation: Students are evaluated by their immediate supervisor on site using a form developed and standardized by The American Occupational Therapy Association. Grades are Credit/no credit.

Rehabilitation Medicine, Division of Physical Therapy

REHAB 490, 495 Physical Therapy Clinical Clerkship and Internship

Enrollment: 24 students per year

Description: Students are placed in community-based physical therapy services to study with practicing physical therapists who provide the immediate supervision of the students.

Evaluation: The students' immediate supervisor completes performance assessment forms.

Rehabilitation Medicine, Division of Prosthetics and Orthotics

REHAB 428 Advanced Prosthetics and Orthotics

Enrollment: 12 students per year

Description: This course is a twelve-week, 40 hour per week clinical internship in private, prosthetics clinics through out the United states. Students are trained, supervised, and evaluated by an ABC certified practitioner selected by University faculty.

Evaluation: Evaluation forms and learning objectives are provided to each clinical preceptor.

Social Work, School of

SOC W 415 Beginning Field Instruction

Enrollment: Approximately 50 students per year

Description: The field practicum is an integral part of professional education for social workers. It serves as the component of social work education through which students are enabled to incorporate into their professional behavior the content learned in all areas of the curriculum. In doing so, it provides students with the opportunity to apply values, knowledge and skills of generalist practice. The field practicum (SOC W 415) is designed as a concurrent placement, to be taken in conjunction with the SOC W 405 practicum seminar, totalling 400 hours over three quarters. More than 50 practica sites are available to the B.A.S.W. Program. The majority of the students are placed in agencies serving families.

Evaluation: Students are evaluated by practicum instructors, who are agency-based clinical or affiliate faculty.

Society and Justice

SO JU 320 Field Experience in Society and Justice

Enrollment: Approximately 25 students per year

Description: Students provide at least 100 hours of work in one of approximately fifteen criminal justice agencies in the King County area with which the program maintains an active relationship. Students enroll in SO JU 320 simultaneously; the course seeks to integrate their agency/classroom experiences. It is taught by the faculty member who supervises the internship program on campus, and the students are supervised by a responsible agency official while in the field.

Evaluation: Students are evaluated both by the agency supervisor and by the faculty supervisor.

II. Formal, Non-Required Programs

Accounting

ACCT 371 Auditing or Industrial Internship

Enrollment: Approximately 10-20 students per year

Description: The program is designed to encourage undergraduate students to gain practical experience while completing the requirements for an accounting degree. The students must complete a minimum of one-quarter full-time employment in the field of accounting. The student locates employment, although available internship programs may be listed in the Business Career Center.

Evaluation: The student must complete a five- to ten-page paper describing the work experience and how it complemented his/her accounting education. The student is also required to submit a letter from the employer stating the period worked and an overall evaluation of the student's work.

Anthropology

ANTH/LING 468 Field Course in Language and Culture (under development)

Description: This course may be taught for the first time Summer 1991. If so, it will involve up to 12 students in the field in Toppenish, WA, working for three weeks with plateau Indian culture and the Sahaptin language. It is designed flexibly to allow various faculty to offer summer field courses in diverse language/culture areas.

ANTH 489 Anthropology Practicum

Enrollment: Approximately 2-3 students per year

Description: This course is required for all graduate students in the Museumology program, but undergraduates also can complete an internship in a museum. The student must set up the program directly with the museum in which he/she wants to work and must have an individual at that museum as supervisor.

Evaluation: The grade is based on a written evaluation from the student's supervisor describing both what the student did and how he/she performed.

ARCHY 601 Internship

Description: In recent years, the most common internship for Anthropology students has been with the Bureau of Land Management, Salt Lake City District. The program provides transportation, room and board, and a small stipend for expenses. The students work in the Cultural Resource Management Office along with permanent personnel. Care is taken to arrange the time so that each student does all of the basic tasks of the office, from field reconnaissance to filing site forms and preparing nominations for the National Registry of Historic Places. Note: Undergraduates must enroll in ARCHY 499 (and the field course ARCHY 270 as well, if they participate in both six-week sessions). A fair number of students have enrolled for credit over the past five years, but possibly three times that number actually participate, but do not enroll for credit simply to save tuition.

Evaluation: The district archaeologist supervises students in the field and reports his evaluations to Prof. Dunnell at the conclusion of the season. Dunnell's evaluations are based on how well the student has performed the several tasks under realistic work conditions.

Biology

BIOL 499A Peer Tutors

Enrollment: Approximately 7 students each quarter

Description: Undergraduates act as TA's for a Biology 100 laboratory. This course uses no graduate TA's but depends on the peer TA's to run the labs just as graduate students do. Each undergraduate is in charge of one lab section. They are carefully screened and chosen for these positions. They are supervised closely by a teaching associate and the course instructor. Each peer TA is required to attend all lectures plus a three-hour TA meeting each week in which the lab is reviewed. The associate is available during the lab if the TA needs help, but leaves the running of the lab to the T.A. Peer TA's grade the exams after going over the answers with faculty.

Evaluation: The course is graded Credit/no credit. Credit is awarded based on satisfactory performance of TA duties.

Business Administration

BA 371 Cooperative Education in Business

Enrollment: Approximately 50 students per year

Description: The Business Center coordinates the posting and application procedures for approximately 550 part-time or summer internships per year for undergraduate business students. These pre-professional work experiences encompass all aspects of business employment, in such functional areas as accounting, finance, human resource management, operations, information systems, and marketing. Students have the option of enrolling in BA 371 for two credits per quarter.

Evaluation: They are evaluated by their work supervisors on the basis of how well they meet stipulated learning objectives, and more generally, how well they performed on the job. (Credit/no credit.)

Communications

CMU 347 Advertising Internship

CMU 367 Broadcast Internship

Enrollment: Approximately 150-200 students per year

Description: Internship experiences vary. They are intended as a means of offering students practical training in a professional setting most appropriate to their stated career goals. Advertising students intern at large and small advertising agencies; broadcast students spend time at local broadcast stations researching and reporting news; public relations students work at PR agencies or small, non-profit agencies learning how to conduct PR campaigns for corporations or organize events for agencies requiring these services; editorial journalism interns work for local daily and weekly newspapers.

Advisors coordinate the internships. They maintain internship files, establish contacts with sponsoring organizations, interview and screen students, give students lists of contacts, and manage the paperwork. At least one faculty member supervises each student.

Students in the field are supervised by a sponsor in the organization in which the student is doing the internship. At the end of the internship, the student must submit an assignment, discussing and analyzing the internship experience. The sponsor must complete an evaluation of the intern.

Evaluation: At the end of the term, the advising office provides the faculty sponsor with a complete packet of original registration forms, papers, and evaluations, which the faculty sponsor evaluates and grades.

English

ENGL 496 Internship

Enrollment: Approximately 100-120 students per year

Description: Internships are offered with the cooperation of diverse organizations to provide a supplementary educational experience for junior and senior English majors. Placements are designed to give students the opportunity to acquire significant work experience related to the English major and to apply their university education to real world settings for course credit. Given the nature of the English major, most placements involve writing, research, or teaching. But internships are offered in a wide variety of fields, including education, publishing, law, advertising, public relations, communications, the arts, technical writing, politics, and social services. Sponsors are encouraged to provide a clearly delineated position description, duties and responsibilities that are not haphazardly determined or purely clerical, opportunities for mentoring, and opportunities for feedback and discussion.

Evaluation: Students are supervised and evaluated by sponsoring agencies. Toward the end of the quarter an evaluation form is sent to the supervisor, which must be returned by the end of the quarter for the student to receive credit. Supervisors are encouraged to give feedback through the quarter and to share the evaluation with the student. Students are also evaluated by the Director of Undergraduate Programs: students must write a three- to five-page paper describing, analyzing, and evaluating the experience in order to receive credit.

Fisheries, School of

FISH 498 Internship

FISH 501 Experiential Learning

Enrollment: Approximately 5 students per year

Description: Internships arise via two mechanisms: 1) an employer fills out an Internship Announcement Form and the availability of the internship is advertised in our weekly JOBSlist, and 2) a student requests that an internship program be developed to meet his or her particular needs and fills out an Internship Application form. Once an internship

has been initiated, the student, the employer, and the faculty advisor agree on the content of the Learning Agreement. The contract describes the position, the educational objectives to be met, and the learning activities in which the student will be engaged. It also specifies the means by which the student will be evaluated.

Evaluation: During the course of the internship, the faculty advisor visits the work site to see what the student is doing and to meet the supervisor. At the completion of the internship, the student, the employer, and the faculty advisor individually complete an Internship Evaluation form. Based upon the criteria set forth in the learning contract and upon consultation with the employer and the student, the faculty advisor evaluates the student's work and assigns the grade.

Forest Resource Management

FRM 300 Professional Forestry Internship

Enrollment: Approximately 5 students per year

Description: 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 internship in forest management in broad aspects. Weekly reports and final paper required.

Evaluation: Final evaluation by agency supervisor and college internship director.

FRM 387 Wildland Recreation Internship

Enrollment: Approximately 3 students per year

Description: Comprehensive field examination of a recreation agency policy, procedure and operation. Preparation of professional assessment report and oral presentation based on internship experience in park management, planning, and interpretation.

FRM 487 Advanced Wildlife Recreation Internship

Enrollment: Approximately 3 students per year

Description: Advanced field-related course given in conjunction with a park/recreation agency. Develop proficiency in one of three subject areas: park interpretation, park planning, and park management. Presentation of professional assessment report and oral presentation based on field experience.

General Studies

G ST 350 Independent Fieldwork

Enrollment: Approximately 140 students per year

Description: Students receive elective credit for internship/volunteer experiences. The course is primarily for students who have not yet declared a major or are majors in departments that do not have a course number that allows credit for internships. Since the students who register for G ST 350 come from many different areas, their experiences vary widely -- from volunteer positions in public service agencies to professional internships with local businesses. Students select a willing faculty member to serve as a sponsor (General Studies has no faculty). Students meet periodically with their faculty sponsor and produce a paper at the end of the quarter under the direction of the faculty sponsor.

Evaluation: This is a Credit/no credit course. Credit is awarded if the faculty sponsor indicates that the paper is satisfactory and that the student met with him/her the agreed upon number of times. They must also receive a satisfactory evaluation from their supervisor who is an employee of the agency or business where the student is interning.

Geography

GEOG 496 Internship in Geography

Enrollment: Approximately 12 students per year

Description: Students serve as interns in a wide variety of public and private sector agencies and companies, doing everything from computerized cartography to surveys of downtown businesses. Generally, these internships have allowed students to use their skills in cartography (map design, cartographic software applications, gathering data and translating it onto a map), survey design, data collection and analysis, transportation planning, urban land use pattern analysis and market analysis. Supervision includes UW faculty and division, project, or unit directors in agencies or companies.

History

HST 499 Undergraduate Research

Enrollment: Approximately 5 students per year

Description: Internships are usually held for one quarter, with credit assigned under the HST 499 rubric (5 credit hours for 20 hours of work per week). The faculty coordinator visits interns "on site" at least once during the term. Students have been placed in a wide variety of positions. A number have worked in the public defender's office, employing oral history techniques in interviewing victims, arresting officers, and alleged perpetrators. Several interns have worked in the Museum of History and Technology and local history societies.

Evaluation: The faculty coordinator has the responsibility to assess the written work produced and assign a final grade to the project.

Landscape Architecture

L ARC 476 Professional Operations

Enrollment: 13 students per year

Description: Students may earn up to six credits for 20 hours of work per week in a professional office or government agency. Supervision of the program rotates among department faculty. The participating faculty member coordinates student contact with offices, assists with any problems experienced in the internship, and determines specific job duties. Students assume responsibility for arranging interviews and keeping a personal log detailing their experiences. Every two weeks, the participating faculty and students meet to discuss issues related to working in the field.

Evaluation: The department provides evaluation forms for the offices at the end of each internship.

Microbiology

MICRO 499 Undergraduate Research

Enrollment: Approximately 1 student per year

Description: Students have the opportunity to work with researchers on a project at the Seattle Biomedical Research Institute. A faculty member supervises the program.

Political Science

The Department of Political Science has three separate internship programs: local, state, and the Washington Center.

POL S 496 Undergraduate Internship

Enrollment: The department enrolls approximately 60 students per year, though the number may be higher in election years.

Description: Local offices, agencies or firms contact the department to request assistance from students in return for experience and future references (and possibly even positions). Information about these listings is posted and a file is maintained regarding these opportunities. Students are expected to contact the Intern Supervisor of the firm/office to arrange their hiring and work schedule. The supervisor must provide a letter describing the nature of the work to be done, the duration of employment and the number of hours per week that the student will be employed. The student returns to the department with this information and then is directed to a faculty member with similar research/teaching interests to negotiate a contract for a research project. Students work with both faculty and the workplace to complete their paper. Students have been employed in these and other firms: State Attorney General's Office, Seattle City Law Department, ACLU, NARAL, various legislative offices, environmental agencies, KIRO, KING, KCOQ, Seattle Police Department Victims Assistance Office, Public Defender's Office, King County Stadium, US Department of HUD, World Affairs Council, and the Washington State Department of Trade and Economic Development.

Evaluation: An evaluation form is sent to the supervisor by the department advising office, and is forwarded to the faculty member when it has been returned. Faculty use this evaluation for grading purposes at the close of the quarter. The course is graded by decimal grades and Credit/no credit.

POL S 497 Political Internship in State Government

Enrollment: Approximately 15 students per year

Description: The UW is one of twelve to fourteen state institutions participating in the Washington State Legislative Internship Program. This program sends juniors and seniors (all majors) to Olympia to serve as legislative assistants during the yearly Session. Students are selected and interviewed by the Political Science Department and qualified applicants' materials are forwarded to the Legislative Coordinators for placement. Students are supervised by department faculty (Vice-Provost Herman Lujan has been the supervising faculty for two years). Students are supervised in legislative offices by the senator/representative and their office manager and the intern supervisors. Students may be placed in the Governor's Office, or in one of several lobbying organizations as well as legislative offices.

Evaluation: Evaluations are forwarded to the faculty member for inclusion in the grading process, which is done using the decimal system.

POL S 498 Washington Center for Learning Alternatives Internship

Enrollment: Approximately 40 students per year

Description: The UW has had a formal arrangement with The Washington Center (TWC) in Washington D. C. since 1979 for students to work and study in the nation's capital. Students from all majors, junior- and senior-level are eligible for this elective credit program. Students submit applications for screening and forwarding through the Political Science Department. Placement and supervision of students is accomplished by

permanent intern supervisors at TWC. Students are placed with congressional offices, "think tanks," lobbying organizations, not-for-profit firms, business headquarters, and many federal offices and agencies. They are supervised at the agency/firm by their immediate superior and evaluated three times during the course of their internship. Each of these evaluations are forwarded to the UW Political Science Department, which submits grades for their work. They are also enrolled in a course taught by regular teaching faculty from Washington, D.C. institutions, hired by TWC.

Evaluation: Students must attend and complete the required academic assignments as part of the evaluation of their performance. Faculty forward copies of all students' submitted work to the UW for review, as well as their recommended grade for each student. Final grades are submitted by the UW on a Credit/no credit basis.

Speech Communication

SPCH 499 Undergraduate Research

Enrollment: Approximately 80 students per year

Description: For one and sometimes two quarters, an intern works five to fifteen hours per week in a position in the private, public, or nonprofit sector while receiving academic credit. In the past, students have completed such internships as making real estate appraisals, planning special events at a hospital or medical center, conducting sales at a television or radio station, providing promotional services for a consumer action agency, and giving public relations assistance to a charity organization. Majors qualify for just about any internship which involves skill in oral communication.

Evaluation: The students are given a grade by their faculty sponsor based on conferences, a journal, a term paper, and, very importantly, feedback from the on-the-job supervisor.

III. Informal, Non-Required Programs

Aeronautics and Astronautics

Description: Many students gain practical experience working in the UW Aeronautical Laboratory's developmental wind tunnel, for which they receive compensation but not university credit.

Art

Description: Art has no organized internships. Voluntary internships are encouraged and sometimes coordinated through the advising office or design division.

Dance

Description: The Dance Program has an active, informal relationship with the Seattle dance community. Dance students frequently perform with or choreograph for community events. Although they generally do not receive credit for such activities, the Dance Program encourages students to participate.

Engineering, College of

Description: Students are provided opportunities for industrial cooperation experiences that include participation in the Engineering Cooperative Education and Minority Intern Program (Co-op). They typically work full-time for six months and receive full-time pay for their work. Undergraduates are encouraged to take advantage of this program. Also, students can

pursue summer internship programs through the Placement Center. This program is available for students within all engineering departments.

Oceanography, School of

Enrollment: Approximately 20 students at any given time

Description: Although the Research Experience for Undergraduates program is not referred to as an "internship", nor offered as a course, the program provides an opportunity for our students to engage in the "real world" of oceanographic research. Faculty supervise the students; the program is coordinated by our Student Services Coordinator. Off-campus affiliate faculty or other Ph.D. Oceanographers supervise the students in the field.

Zoology

Description: Zoology majors have a number of opportunities to do practica and internships. Students find out about such activities through individual faculty members or the Biology Advising Office. The counselors have compiled readily accessible files of practica at the UW and at other schools and national laboratories across the country. A number of students seek part-time employment during college in their chosen field and gain practical experience in this setting. Categories of opportunities are below:

Employment opportunities: the zoo, the aquarium, hospitals and clinics, and genetic engineering firms (20 - 50 students per year).

Peer TA's to teach Biology 100 (15-20 students per year).

UW Internships (e.g., Howard Hughes interns) (2 or 3 per year).

Research Institutions in Washington (5-10 students per year).

Friday Harbor Laboratories (10-30 per year).

Field assistants for faculty of graduate students on campus or at Friday Harbor (10 - 20 students per year).

Employer Feedback

I. Formalized Systems

Chemical Engineering

Employer feedback is obtained through personal interviews with interviewers from companies, through contacts with company representatives that contribute money to the Department, through consulting contacts, and through alumni who have become managers. In addition, the accreditation agency, ABET, provides feedback from the entire industry employing chemical engineers.

Education, College of

The College gathers feedback about its graduates in several ways. A state-mandated questionnaire is sent to each graduate during the first year after they have completed the Teacher Education Program. Data are collated and analyzed by the UW Placement Center (see copy of recent report attached). However, this information comes from the student and only tells us whether the certification recipient has a teaching or other job.

Further information on the success of graduates comes through the College's Professional Education Advisory Board (PEAB). The PEAB (required for all teacher education programs by the WAC) consists of 22 teachers and eleven administrators from the eleven districts where the UW places student teachers. The PEAB meets four or five times per year to review the Teacher Education Program and assess various aspects of its functioning; information on the success of graduates is frequently exchanged informally during these meetings.

On several occasions in recent years the College has gathered additional information about the quality of its teacher preparation program. In 1985, for example, a Teacher Education Task Force chaired by professor Dale Bolton surveyed former students and former supervisors. Analysis of the resulting data showed some problem areas in the curriculum that were addressed in following years. We anticipate collecting similar data during this year as a newly formed Task Force on Professional Education undertakes a thorough reevaluation of our Teacher Education Program.

Electrical Engineering

The Department of Electrical Engineering is in regular contact with employers of its graduates. Indeed, this is considered a major strength of the program. Formal programs with industrial representatives include the Electrical Engineering Industrial Consortium, the Industrial Affiliates Program, the Advisory Committee to the Department Chair and numerous one-on-one contacts between faculty and industrial representatives, particularly through consultantships and sponsored research programs. Industrial representatives regularly visit the Department to meet with faculty and students and are contacted by the Department for input on curriculum development and program assessment. The formal programs identified above usually include interactions with industry representatives twice per year.

Rehabilitation Medicine, Division of Occupational Therapy

Each graduating class is surveyed six months after graduation regarding their satisfaction with the program. In addition, an "Employer Survey" is sent to each graduate to be given to their supervisor at their first place of employment. These forms are sent directly back to the curriculum. The curriculum has conducted student and employer surveys at regular intervals over the past seven years.

In addition to the surveys sent to first employers, information about our program is routinely obtained directly from clinical training sites through direct contact with our faculty. Each year we invite all clinical training site supervisors to an Annual Clinical/Faculty Meeting and ask for feedback about our curriculum. Community therapists are also asked to serve on advisory or review panels when we revise portions of our curriculum.

Rehabilitation Medicine, Division of Prosthetics and Orthotics

The division sends six-month and one-year post graduation forms to employees and former students. In addition to the above information, prospective employee evaluations are received from clinical internship preceptors.

Speech and Hearing Sciences

We have developed and used both an employer questionnaire and an alumni questionnaire. We are currently in the process of revising these forms. We send them out each year.

II. Feedback from Internship Programs

English

The internship program is the only organized means by which we obtain evaluative information from employers. We have no formal procedures in place to track students after graduation.

General Studies

General Studies has not had the time or resources necessary to survey its graduates or the employers of its graduates. We do however receive evaluations at the end of each quarter from employers who are supervising students registered for G ST 350. Many of these students are seniors and, according to the evaluations, most employers feel these students do very good to superior work.

Geography

Evaluation forms are provided to the employer of each intern, although not all are returned.

Landscape Architecture

The department provides evaluation forms for the offices at the end of each internship (see attached evaluation form).

Society and Justice

As the internship is frequently an avenue to employment for our students, there is a continual feedback from employers to the Program. In addition, Dr. Pendleton makes a practice of meeting with a designated official of each agency with whom we have internship arrangements at least annually.

III. Informal Methods

Aeronautics and Astronautics

While department faculty are alert to feedback from employers and from former students, no formal mechanism exists. This is because the response is likely to be dependent on individual supervisors, and thus difficult to obtain and sort out. The department does keep track of the success of new graduates in the marketplace, and the chair and/or faculty representatives meet with campus recruiters and company officials in charge of engineering hiring as often as possible.

Business

Twice in the last three years I have conducted employer surveys on their perception of recruitment of our students, but these were focused more on the procedures and services that constitute a good placement operation than on the quality of our programs in preparing students for the workplace. The Central Placement Office regularly receives evaluations from recruiters. We receive a summary of those evaluations. Among the items mentioned by recruiters are the overall preparation of students for interviews, but again, the focus is less on academic competence than on such broad areas as communication skills, knowledge of the company, enthusiasm, goal directedness, and willingness (or unwillingness) of the student to relocate outside the Seattle area.

Dance

Our graduates are frequently engaged as dancers or choreographers. By the nature of the art form, each employment setting is an evaluation of the graduate's work. Each new job requires another competitive audition. Due to the irregularity of employment, feedback from employers is very difficult to obtain in a systematic fashion.

Dental Public Health Sciences

Except for informal and casual reports from employers, the program does not have a regular mechanism for acquiring feedback from employers of graduates of this program.

Forest Resources, College of

The College of Forest Resources houses an Office of Professional Opportunities which assists students with summer (temporary) and permanent employment. The director of this Office establishes and maintains contact with employers in both the private (i.e., ITT Rayonier, Weyerhaeuser, Campbell Group) and public agencies (USDA Forest Service, Department of Natural Resources, Bureau of Land Management) to determine what positions are available for prospective graduates of the College. Since these agencies tend to employ a specific type of graduate (i.e., forestry or forest products), the supervisors and managers are familiar with the educational background of graduates of the UW's College of Forest Resources. They have employed our graduates in the past and continue to contact the Office of Professional Opportunities directly when there is a job vacancy within their agency. Our students do not typically use the University Placement Center because of the excellent network of job referrals which faculty, staff and administration have established over the years.

The Office of Professional Opportunities (a service of the CFR Student Services Office) also directs the College's internship program. As such, there is direct contact with those agencies which currently employ CFR graduates and who seek to recruit interns into their summer programs. These agencies serve as a sounding board to ascertain that the College's long-range educational objectives are in keeping with the employment outlook within the field of forest resources. The director of this Office reports suggestions on course content and/or course offerings from employers and agency supervisors directly to the College administration and divisional faculty. In this manner, employer needs and educational offerings can be kept in balance.

The College also has a very active Alumni Association (Washington Foresters Alumni Association). Active members of the association (those attending regularly-scheduled meetings) typically are employed by those agencies which hire CFR graduates. Curricular offerings are discussed at alumni meetings and alumni serve on College curriculum boards.

Faculty in the Pulp and Paper Science program play a very active part in employer feedback. Each quarter at least one faculty member of the Pulp and Paper Foundation, a grouping of industries which contribute monies for undergraduate scholarships, is housed on campus. The membership of this foundation meets annually in a symposium setting to discuss events and new developments in education and in research and design. Undergraduate students are included in these proceedings, attend these meetings, and often present reports on program offerings.

Mechanical Engineering

The department has no regular program to obtain evaluative information from employers. However, we are in extensive informal contact with many of the dominant employers of our graduates and receive continuous qualitative feedback from these sources.

Medical Technology

A large percentage of graduates from Medical Technology are initially employed in the Department of Laboratory Medicine, or in medical centers in the Seattle area. Valuable information pertaining to employee performance can be obtained on an informal basis by telephone and personal contact with clinical directors and staff technologists. These people are usually involved, to some extent, with the curriculum and are helpful in providing feedback that may serve to strengthen the undergraduate program. This information is available on a continuing basis.

Nursing, School of

Although we are very interested in employer evaluation of our students we do not yet have a system in place to gather that information. Our BSN curriculum committee has been asked to develop an exit/follow-up questionnaire for students and employers (directors of nursing) and our Dean meets with employers and includes discussions about the performance and expectations of our graduates. We will continue to work at refining these activities during the next year. The associated problems have been discussed briefly and we think that by next year we may be able to gather a limited amount of information. Some of the difficulties for us include the high mobility of our recent graduates and also the name changes that frequently occur after graduation. If you have any suggestions on best methods to track graduates we would be delighted to hear them.

Ocean and Fishery Sciences, College of

The School has no formal mechanism for evaluating employers' estimation of our students. We currently informally receive excellent reports from our graduates' major employers, they retain our students, and when new openings occur contact our Student Services Office directly for referrals. Eighty-six percent of our graduates for the last four years are working in oceanography or a related field. Given this we do not anticipate instituting a formal program of employer feedback.

Rehabilitation Medicine, Division of Physical Therapy

The physical therapy curriculum does not have a "regular program" by which it obtains information about recent graduates from their employers. The curriculum has conducted employer surveys at irregular intervals in the past, the most recent being 1986, and plans another survey during the 1991-92 academic year as part of the curriculum review process.

Due to the nature of the clinical education component of the curriculum, information from "potential" employers is routinely obtained as the assessment of student performance is completed by the staff of the clinic to which the student is assigned. This is a requirement of the special program accreditation of the curriculum, allowing its graduates to sit for professional licensing examinations. Performance on the professional licensing exam is another outcome measure the curriculum has and uses to assess its effectiveness. A chart of the graduates' performance during the last nine years is enclosed.

School of Social Work

Currently, we do not obtain systematic evaluative information from employers. We do receive feedback on a sporadic basis. For example, employers will often contact the school by letter or phone after graduation to indicate their satisfaction with student performance.

IV. Departments Indicating No Feedback, With Reasons

Anthropology

We have little or no contact with the employers of our graduates. The vast majority of our graduates do not work in anthropology per se, or even in areas related to anthropology. Therefore, it may not be worth-while to install a regular feed-back evaluative process. Yet I may be wrong here, possibly departmental contact with present employers might be enormously beneficial to future graduates, and provide some means of evaluation how well we are "educating" (as opposed to training) our students. I would like to hear opinions on this issue from departments which do have some formal system of feedback.

Computer Science and Engineering

We don't have any formal employer feedback. However, our undergraduates in both programs have a relatively easy time in finding employment and I have only received praise, and no complaints, about the quality of our undergraduates.

History

That a university exists to preserve, disseminate, and extend human knowledge is a commonplace. That commonplace rests, however, on a notion which is perhaps not so common: that the preservation, dissemination, and extension of knowledge are processes uniquely valuable in enriching the lives of the students who participate in them. Some branches of human knowledge have vocational applications; but vocational training is not the university's ultimate *raison d'être*, nor the highest expression of its purpose. Graduates of our department should have learned how to think critically, how to manipulate large bodies of information, how to arrange that information into patterns, and how to describe those patterns persuasively in prose. These are skills essential to a very broad range of jobs; and we note with some satisfaction that studies consistently show that the heads of Fortune 500 companies are far more likely to have been undergraduate liberal arts majors than they are to have majored in any other field, including business and engineering. That said, however, we would not regard it as "a waste" if a student never used any of the skills he or she had learned with us in his or her employment. As citizens and as human beings, their lives should be fuller and richer for the understanding they have gained through the study of history regardless of the vocational relevance or irrelevance of their history training. Employer feedback therefore will not tell us anything very useful about how well we are doing our job in educating students; and for that reason, we have designed no mechanisms for soliciting it.

Physics

As for employer feedback, we make no organized attempt to solicit such feedback and would find it difficult to do so in view of the poor information we have on our students' employment or study choices. We do know that nationally over 50% of physics BS students go on to some form of graduate study and the informal checking we've done here suggests the UW figure may be closer to 75%. Thus employer feedback will be delayed for most and probably not very closely related to their undergraduate training. It's unfortunate we don't have more information about our BS graduates. I would welcome the assistance of the Office of Educational Assessment in this.

Political Science

The Political Science Department does not have any formal mechanism or program by which we receive evaluative information about our graduates. We have only recently begun to track these students who are employed in a wide variety of work areas. As we communicate with our alumni, we are better able to identify common areas of work so we might gather this information, but we are at a very early stage in this project. Faculty and advisers receive unsolicited information about individuals, but nothing on an ongoing basis.

Psychology

Feedback from employers is inappropriate. We have approximately 400 graduates per year who obtain jobs in many diverse areas. An advanced degree is required to be employed as a psychologist.

Scandinavian Languages and Literature

A major in Scandinavian language and literature or area studies is not designed to direct a student toward any specific type of career, making problematic the establishment of an internship program or any attempts to track employer feedback.

Slavic Language and Literature

Most of our students go on to graduate school

Zoology

We have no formal employer feedback on any of the above opportunities, nor do we survey employers after students have graduated. We are sending out a more extensive post-graduate survey to try to gain more information on the success of our graduates in their post-baccalaureate endeavors. Many students go on for further schooling. Should we find a few employers who hire a significant number of our graduates, we intend to contact them for some feedback. In general, I believe that this faculty does not view their role in undergraduate education as one of training students for jobs. Rather, we are trying to educate students for life -- that is, teaching them to read and think critically, to develop their logic and reasoning skills so they will be prepared to meet and succeed in whatever work or study situations they seek or find themselves following graduation and in years to come.

V. Departments Indicating No Feedback, Without Comment

Asian Languages and Literature
Architecture and Urban Planning, College of
Art
Atmospheric Sciences
Astronomy
Biology
Civil Engineering
Communications
Comparative History of Ideas
Comparative Literature
Drama
Economics
Fisheries, School of
Geological Sciences
Germanics
International Studies
Linguistics
Materials Science and Engineering
Mathematics
Microbiology
Music
Philosophy
Romance Languages
Sociology
Speech Communication
Statistics