

PROFESSIONAL WORK EXPERIENCE IN BIOLOGY BIOLOGY 496

PROGRAM DESCRIPTION

OBJECTIVES

This program is designed to give biology majors on-the-job experiences in fields related to their career goals. We hope that cooperating agencies and supervisors will profit from the help received, and may find this a useful means for previewing potential employees, and for bringing new people into the professional fields which they represent. Liaison between university and the cooperating agencies may produce insights leading to curricular adjustments and other mutual benefits.

PREREQUISITES

1. The student must be a declared Biology major in Phase II.
2. The student must have completed the following:
 - Basic Requirements: supporting courses: one year of General Chemistry; at least one quarter of Organic Chemistry
 - Basic Requirements: Biology: Biology 204 – Evol, Ecol, & Biodiversity; Biol 205 – Cellular & Molecular Biology; Biol 206 Organismal Biology.
 - Breadth Requirements (any which are relevant to the internship): Biol 321 - Genetics; Biol 323 - Cellular and Molecular Biology; Biol 325 - Ecology; and Biol 340 - Biometrics
3. Student must have the approval of her or his assigned faculty advisor, and permission from the department.

CREDITS/EVALUATION

Students may earn 1-5 credits, repeatable up to 8 credits total, through this program. Some of these credits may be applied to the “Completion Requirements” for the major; some may be applied as “Electives” credits. (Refer to the current University Catalog for details.) The number of credits which can be earned in a particular work experience is to be determined by the student’s assigned biology faculty advisor.

Grading will be S/U. The supervisor in the cooperating agency will give a written evaluation of the student, together with a recommended grade at the end of the work period.

OPPORTUNITIES

Numerous local agencies and companies have participated in this program (or its predecessor, Biol 411). Virtually every city, county, state, and federal governmental department that may hire people with science backgrounds can be considered as

potential cooperators. Hospitals, physicians, dentists, veterinarians, private research organizations, and private businesses are some of the other possibilities that can be considered. While most work experiences are local, special circumstances may afford opportunities almost anywhere in the world.

PROCEDURE

1. In anticipation of a Professional Work Experience, the student will have identified a particular agency, company, or person with whom they might like to work, and may have discussed possibilities with an agency representative. Normally, this will have taken place at least several months prior to registration for the work arrangement.
2. When prerequisites are completed, the student will meet with her or his assigned faculty advisor to discuss the potential for earning credit through a work experience.
3. When general agreement is reached, those involved will work out specifics and write up a "Contract" between the cooperating agency/firm and the biology instructor who will be coordinating the particular work experience. The "biology instructor" may be the student's advisor, or may be another biology faculty member.
4. Signed copies of the "Contract" will be by the student, the cooperating agency/firm supervisor, and the biology instructor.

REQUIREMENTS

Great value will accrue from a work experience which demands intellectual focus, and which requires full attention to a diversity of hands-on tasks. Involvement in a profession is the principal requirement for those enrolled in Biology 496

The exact nature of these or other requirements must be agreed upon at the beginning of the work experience. It is required that a minimum of two hours per week for ten weeks be spent on the job for each credit earned. Time involved in routine tasks, and travel time to and from work, thought not necessarily inappropriate parts of the work experience, can not count in figuring total credit.

EXPECTATIONS

The internship is expected to provide students the opportunities to integrate their academic experience with off-campus work in basic or applied biology. The interns must reveal the importance of this integration in a written final report of their experiences, to which a daily journal is appended. Other products of the internship under advisement, could be (1) a report of an interview of supervisor and co-workers, and (2) a short oral presentation about the internship experience.

The written report should describe the science involved in the internship; literature citations should be included. Writing the report should enable students to see the internship comprehensively. Students also may want to reflect on their early expectations versus on-the-job realizations about their internship jobs, about the array

of jobs within the profession that the internship is investigating, and the profession, in general.

Interns should also write a daily journal that includes contemplation of how their education at Western was applied to specific tasks and to the internship position, in general. The daily journal should be written with enough detail to recount each day's principal activities. Over the weeks, as the internship progresses, the interns should be able to recount in their journals how their responsibilities increased and whether their efficiency and productivity of independent work assignments also improved. Near the end of the internship a student may be required to perform a lengthy interview with supervisors and employees about the nature of the profession, including avenues of recommended training for that profession.

We invite internship students to share their positive experiences via either an oral report delivered to other students in a classroom setting, or in a seminar setting, wherein they may participate in a panel discussion of the internship experience.

Interns must understand that, paid or not, their internships are jobs that must be treated conscientiously. We expect that interns will maintain effective communication with Internship Supervisors in a professional demeanor by (1) day-to-day contact with supervisors, (2) being clear about and adhering to work schedules, and (3) by providing timely notification of supervisors if one is to be delayed or is unable to work.

The Biology Department asks each employer/supervisor to write an evaluation letter and fill in an evaluation form describing and evaluating the interns' experiences. Students should retain a copy of the evaluation letter as evidence of the participation and performance caliber. The evaluation letter may be useful later as reminder to the Internship supervisor about the level of performance of the intern, should the intern ask that person for a letter of reference.

Students who intend to use summer jobs in the biological field as their internships must make all arrangements with their Biology Faculty Advisor and the Internship Supervisor prior to the end of spring quarter. The Biology Department will not allow *post facto* credit for internships not previously arranged.

CONTRACT

**Professional Work Experience in Biology
Biology 496
WESTERN WASHINGTON UNIVERSITY**

*** This is an agreement between the Western Washington University
Biology Department, the student named, and the cooperating agency.**

1. Student:

Name _____ **Student Number** _____
Address _____ **Phone Number** _____

2. Cooperating Agency or Firm:

Name _____
Address _____ **Phone Number** _____

Cooperating Agency/Firm Supervisor _____
(Person who will be directing the student's work)

3. Learning experiences and goals of the professional work experience.

4. Briefly describe the duties and activities involved, and the specific instructional modes (lectures; lab work; field work; hands-on; reading assignments.)

5. Will the student receive salary or wages during the work experience hours?
 yes no If yes, please state rate or basis: _____

6. Weekly schedule of contract hours:

_____ **M** _____ **T** _____ **W** _____ **R** _____ **F** _____ **S** _____ **S** _____

7. Number of college credits to be earned _____
(Minimum of 2 instructional hours per week, per credit)

8. Biology Department instructor coordinating the work program

Name _____ **Phone Number(s)** _____

Student _____

Cooperating Agency/Firm Supervisor _____

Biology Instructor

Signatures

Date

CONTRACT

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Biology 496
WESTERN WASHINGTON UNIVERSITY**

*** This is an agreement between the Western Washington University
Biology Department, the student named, and the cooperating agency.**

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Name _____ **Student Number** _____
Address _____ **Phone Number** _____

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[] yes [] no If yes, please state rate or basis: _____**

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M T W R F S S

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(Minimum of 2 instructional hours per week, per credit)**

8. Biology Department instructor coordinating the work program

Name _____ **Phone Number(s)** _____

Student _____

Cooperating Agency/Firm Supervisor _____

Biology Instructor

Signatures

Date

EVALUATION

Professional Work Experience in Biology
Biology 496

Student Name

Student Number

Biology 496

Credits

Quarter

Year

Biology Department Instructor coordinating Work Experience

Supervisor: Please give your candid comments, recommendations, and evaluations of the student in response to each of the questions below. Use the space provided, or a separate sheet if you wish.

1. Did the student demonstrate responsibility, promptness, flexibility, regularity and other qualities you expect from an employee?
2. Describe the student's working relationships with co-workers on the job.
3. Describe the student's working relationships with yourself (supervisor) on the job.
4. Describe the personal growth, knowledge acquired, and skills gained by the student.
5. Please provide suggestions or recommendations which would enhance this student's potential for employment.
6. Other comments.

COOPERATING AGENCY OR FIRM

NAME _____

ADDRESS _____

SUPERVISOR _____

RECOMMENDED GRADE

S (Satisfactory)

U (Unsatisfactory)

K (Incomplete)

SUPERVISOR SIGNATURE _____ DATE _____

Mail this form to: "The Biology Department Instructor",
Biology Dept., WWU, Bellingham 98225-9160

Biol 496 ~ Biology Professional Work Experience (1-5 credits)

- ***Print the entire packet. It will include the instructions, Contract Copy for the Student, Contract Copy for the Work Supervisor, Contract Copy for the Biology Instructor, Contract Copy for the Biology Department records, and the Evaluation form.***
- ***The Student needs to have agreement between the work supervisor, student, and Biology Instructor on Learning experiences and goals, description of duties and activities, work schedule, etc.***
- ***The Student needs to have the contract completed, signed, and four copies distributed to 1) The Work Supervisor, 2) The Biology Instructor, 3) Biology Office, and 4) one copy for themselves.***
- ***Ask the Biology Instructor when the override will be issued. Register appropriately.***
- ***When the work is completed, ask the Work Supervisor to complete the evaluation and sent it to the Biology Instructor before the grade is issued.***
- ***Students need to submit their journals to the Biology Instructor before the grade is issued.***