

### College of Arts and Sciences Department of Biology

Lake Shore Campus
1050 W. Sheridan Road | Chicago, Illinois 60660
Phone 773.508.3620 | Fax 773.508.3646
www.luc.edu/depts./biology | biologydept@luc.edu

## BIOLOGY 398: INTERSHIP IN BIOLOGY Policies & Procedures

## **Defining an Internship**

An appropriate internship in Biology should be intellectually challenging for the student, grounded in basic science and involve the active collection, analysis, and evaluation of data. Internship activities should be of a caliber expected in an upper-level (300) Biology course. Ideally, the internship should provide experiences not normally available at Loyola University. The internship is pursued in conjunction with some off-campus educational or research facility or program. Examples of suitable internship sites include but are not limited to: university or corporate research laboratories, field stations, public health laboratories, zoos, aquariums, and museums.

Note: Non research-based clinical experiences, (for example, volunteering in hospitals, clinics, veterinary offices, dental offices) while valuable and expected for pre-health students, are <u>not</u> suitable for Biology Internship credit.

## **Credits & Basic Requirements**

Enrollment in Biology 398 is by <u>permission</u> only. Completion of all registration materials must be submitted to the Biology Department Office before permission to enroll will be granted.

Students may earn a maximum of 3 credits in Biology 398 toward their Major.

In any semester students may register for 1-3 credits. Students registered for 1 or 2 credits are required to write and submit a paper to their Advisors. Students registered for 3 credits must also submit a paper and participate in the Undergraduate Research Poster Session at the end of the semester. (Details for the Poster Session will be supplied by the Loyola advisor.)

Students must identify two advisors - an off-campus, external supervisor, and an on-campus, internal (Biology) faculty advisor - who will direct, supervise and grade the internship experience. Students are expected to meet regularly with their advisors.

#### Reflection Requirement for Engaged Learning Credit

"We are Chicago's Jesuit Catholic university - a diverse community seeking God in all things and working to expand knowledge in the service of humanity through learning, justice, and faith."

Referencing Loyola's mission statement above, all students enrolled in an Engaged Learning course must complete the following reflection seeks to connect the in-class and out-of-class experience by responding to the following:

How did your Engaged Learning experience help you to connect to the mission?

How did the Engaged Learning experience in this course impact your personal, intellectual, civic, and/or professional development?

Please direct Engaged Learning questions to: <a href="https://www.luc.edu/engagedlearning/">https://www.luc.edu/engagedlearning/</a>

## PERMISSION TO REGISTER Biology 398 - Internship in Biology

## **Student Instructions**

- 1. Complete these application materials with the necessary signatures.
- 2. Attach a printed copy of your unofficial transcript to the application.
- 3. Submit your application to the Biology Office (LSB 317) for approval by the Chair.

Student Information	
Student: First and Last Names (Please Print):	
Student ID#:	_
Class Status:	
Email Address:	Contact Phone Number:
Academic Advisor:	Biology Faculty Advisor:
Course Information	
Semester of Study:	
Number of Credits:	
Registration Appointment Date/Time:	
Name(s) of faculty member(s) who will direct, super	ervise and grade Internship:
Title of Internship study:	

## **Biology 398 (Internship) Course Objectives/Goals**

1. Duration of the study: Amount of time per week devoted to the work.
2. Detailed description of the specific aims of the proposed internship. (Attach additional pages as needed). a. What is the scientific question or issue that your work will address?
b. How will you learn about the science underlying your work (e.g., reading the primary literature with your mentor or co-workers, seminars, previous course work, etc.)?
c. What specific lab, field or general biological skills do you expect/intend/hope to learn?
d. What are your learning goals/objectives for this internship?
e. Describe what you will gain from the internship that cannot be obtained from a classroom/course experience.
f. Describe how the internship will help you obtain your career goals.

# **Evaluation Criteria for the Internship Experience** (To be completed by the Off-campus Advisor)

Did the student acquire an understanding of the science underlying the work? How was this understanding acquired?

Did the student acquire the requisite lab/field/general research skills to contribute to your research effort?
Did the student report to work as expected?
Was the quality of student's work satisfactory?
In what ways did the student excel beyond the normal expectations of the internship position?
In what ways did the student fall short of normal expectations of the internship position?
Recommended Grade:
Advisor Name: Advisor Signature:
Date:

#### **Guidelines for Formal Paper for Internship Credits**

## **Format of Paper**

For a one-credit Internship the paper should be five to seven (5-7) pages, double spaced and excluding references. For 2- and 3-credit Internships the length of the paper should be discussed with your advisors and adjusted according.

Begin with a review of the literature that provides the context for your research project. Be sure to cite all references in the text of your paper and list them at the end. All sources used in your paper must be cited using a standard scientific format (e.g., Author, year) and all citations must be listed in a "Literature Cited" section at the end of the paper.

Provide a concise summary of your internship project. This should include any questions your research is designed to answer, the methods you use to evaluate your question, the results you obtained and the interpretation of those results.

Provide a critique of the strengths and weaknesses of your work. What might you do next if you were in charge of the research? Are there ways in which you could change the research to generate data more suitable for answering your question? Did your results suggest new research questions?

Be sure to proofread and spell check for errors.

## **Academic Integrity**

Plagiarism is a serious violation of the standards of academic dishonesty. Plagiarism is the appropriation of ideas, language, work, or intellectual property of another, either by intent or by negligence, without sufficient public acknowledgement and appropriate citation that the material is not one's own.

Plagiarism or any other act of academic dishonesty will result minimally in the instructor's assigning the grade of "F" for the assignment or examination. The instructor may impose a more severe sanction, including a grade of "F" in the course. All instances of academic dishonesty must be reported by the instructor to the chairperson of the department involved, and to the Dean of the College of Arts and Sciences.

See the College of Arts & Sciences statement on Academic Integrity for more information. <a href="https://www.luc.edu/cas/advising/academicintegritystatement/">https://www.luc.edu/cas/advising/academicintegritystatement/</a>.

## AGREED TO AND SIGNED BY:

1. Student (Print Name):	Date:
Signature:	
2. Name of Faculty Advisors for Internship	
Off-campus Advisor:	
Institution:	_
Position:	-
Email: Phone:	
Signature:	Date:
Loyola (Biology) Faculty Advisor:	
Email: Phone	
Signature:	Date:
Approved By:	
Chair, Biology Department:	
	Date:
Signature	