

**Biology Internship Program
Student Information Sheet
2019-2020
Bio 380 – 1-2 Hours of Credit**

Description and Objectives of Biology Internships

Both January term and regular semester internships provide an opportunity for students to learn about potential career choices. All internships involve a direct association with an institution or professional individual and are distinct from independent study. Internships are academic experiences that are career development-oriented. The extent of active participation in activities versus engaged observation will vary depending on the requirements of the host institution and the nature of the internship.

One major goal of this experience is to allow students a first-hand look at a profession they are considering for their future. Internships allow students the opportunity to observe and/or experience both the attributes and drawbacks of a particular profession. Experiences that foster greater immersion are more desirable in this regard, e.g., an internship consisting of a 3-week, full-time experience has significant advantages over one consisting of 3-hour/week blocks over a longer time period (though both are possible under this program). The internship experience often solidifies the interest in the respective profession, and many students who intern are motivated to work more intentionally to prepare themselves for that particular career route. However, sometimes students discover that the reality is different than what they had imagined, and that the profession is not a good fit. This outcome is just as important (if not more) than the first, and will motivate the student to consider other career directions.

A second goal in this program is educational. Valuable learning derives from the activities, exposures, observational experiences, and reflection opportunities made possible through this program. In this regard, during the internship, we ask the students to i) keep a logbook of their observational experiences, ii) write several reflective essays, and iii) write a short-referenced paper using professional journals appropriate to the type of internship in which they are participating. We also request that the student's Off-Campus Supervisor fill out a short evaluation of the student at the end of the program. These materials provide the means by which we evaluate the educational merits of the internship.

Requirements for Bio 380 Internships

Nature of Internship: Specific internship activities and environments will vary considerably depending on the internship, but *in order to qualify as a professional experience, all Bio380 internships must connect to concepts and questions that are investigated in biology.* Qualifying experiences would include active research experiences, environmental field experiences, biology-connected industry, business, or government experiences, and health care observational experiences. Although most internships are voluntary educational experiences, they can also be paid experiences provided that they meet the qualifications above. While developing an internship, students should work closely with the Bio 380 internship coordinator to ensure that the internship plan meets Bio 380 requirements. For students that entered Luther prior to Fall 2018, Bio 380 credits do NOT apply towards the biology major, however, they will fulfill the JII all-college requirement if completed during the January term. For students entering Luther Fall 2018 or after (or for students who choose to switch to the new Biology major), up to four credits of internship, (together with directed research, directed readings and/or independent study) can be applied toward the major. Special options exist for summer internship credit (see below). One to four credits are awarded for Bio 380 unless otherwise indicated; evaluation is Credit/No Credit.

Academic Internship Options:

January Term Internships (2 credits): Expected to be full time involvement (40 hrs./week) for a minimum of 3 weeks during January. The January Internship experience will fulfill the JII (Study Away) general education requirement.

On-Campus Fall or Spring Internships during the regular semester (normally 1-2 credits): At least 40 interning hours are required for one credit, in a minimum of one 3-hour block of time per week during the semester (3 hrs/week of actual observation, travel time to and from site is not included).

Rochester Semester (4-8 credits): Luther's 'Rochester Semester' is a new, internship-focused study away program launching in Spring 2020 and available each semester thereafter. The program includes the following elements:

- Immersion Internship (10-20+ hrs./week) (4-8 credits)
- Two Luther-sponsored place-based courses offered in Rochester (6-8 credits), including a Paideia 450 (Paideia II).
- Luther-secured housing in Rochester.

If the internship focuses on biology, it may be taken as a Bio 380. More information is available at <https://www.luther.edu/global-learning/apply/luther/semester/rochester/>.

Summer Internships (1-4 credits): At least 40 interning hours are required for one credit. These internships will be negotiated individually, but in general, full-time experience (e.g. 2-8 weeks) is recommended over observational "blocks", e.g. 3 hrs./week. *Summer internships are assessed a \$175 flat fee regardless of the number of credit hours taken per summer session. (If you take hours in both summer sessions, you will be charged two \$175 fees.) In addition to the normal paperwork for internships, you must also fill out the Registrar's summer school application.*

Expectations of Students: Students are expected to abide by all the codes and ethics of the particular profession they are observing and to conduct themselves as mature, responsible, and respectful individuals. Particularly in regards to health care environments, students should keep in mind that they are student observers, not trained professionals. Thus, students should not be engaging in direct, hands-on activities that would be inappropriate given an undergraduate student's educational background and training. Any hands-on work by interns e.g. lab work in a research laboratory setting, should only be performed under close supervision, mentoring, and training by the on-site internship supervisor. Supervisors have discretion to implement policies appropriate to their place of employment and profession, including appropriate dress, communication, facility access, and interactions/engagement with other employees and/or patients.

Bio 380 Prerequisites:

In general, 12 credit hours in biology (including Bio 151 & 152) and approval of the Biology Department. With departmental consent, applicants may be able to substitute other science coursework for portions of the 12-credit biology requirement.

Specific academic requirements that must be completed for this course include:

1. writing a **daily log** of observational activities
2. a weekly (or monthly if semester-long internship) **reflective essay** on the most/least attractive aspects of the profession you are in and what **strengths/weaknesses you would bring to this profession**. Specific guidelines will be provided.
3. a **short paper** (4-6 pages) appropriate to the type of internship in which you are participating, **which involves some research in the profession's literature and/or journals**. Specific guidelines will be provided.
4. an **evaluation** of your participation by your immediate Off-Campus Supervisor(s) during the internship experience.

General Application Procedure for Bio 380 Internships:

To apply, students must complete the indicated forms below.

All forms are available from Michelle in SHL 231. Due dates for internship applications through the Biology Department are as follows:

Fall Semester Internships	Friday first week of fall semester
Departmental or Mayo Clinic J-term Research Internships	October 15
Non-departmental J-term <i>Health Care</i> Internships	Monday before Thanksgiving Break
Non-departmental J-term <i>non-health care</i> Internships	December 1
Spring Semester Internships	Friday first week of spring semester
Summer Internships	May 1
Rochester Semester Internships	

Follow deadline and application on CGL website:

<https://www.luther.edu/global-learning/apply/luther/semester/rochester/>

All completed forms should be returned to:
Michelle Einck (SHL 231) in the Biology Department
by the due date listed above

Departmental Internships complete the following:

- A. Internship Registration Form
 - a. **Do Not** complete the specific location for the internship or the internship description.
 - b. Indicate what year you are at Luther (1st-4th), regardless of your credit-based status.
- B. Biology - *Departmental* Internship form (includes learning plan-consult Career Center Learning Plan Guide for assistance).
- C. Student Internship Agreement form.
- D. A copy of your resume. (Read Career Center “Writing Your Resume” Guide, including sample resumes, to help you develop yours.)
- E. If you are an international student, you must meet with Amy Webber or Wintlett Taylor-Browne in the Center for Intercultural Engagement and Student Success, and fill out the OPT/CPT form.

Departmental Internships - attempts are made to match individuals with available internship positions. The Biology Internship Coordinator (Enos-Berlage) will notify students on the status of their application, usually within 2-3 weeks of submission. Students who do not receive a departmental internship may still apply for a student-designed internship and are encouraged to be developing this option as a backup plan.

Student-Designed Internships complete the following:

- A. Internship Registration Form
 - a. Include the complete site location details and contact information for your supervisor.
 - b. Indicate what year you are at Luther (1st-4th), regardless of your credit-based status.
 - c. Include one paragraph description of internship, including anticipated work environment, activities, daily hours, etc.
- B. Biology – *Student-Designed* Internship form (includes learning plan-consult Career Center Learning Plan Guide for assistance).
 - a. Fax or email your site supervisor a copy of the completed form for their signature.
 - b. After they have it signed they can email the form to Michelle Einck at einckmic@luther.edu or fax it to 563-387-1080.
 - c. Turn the original form in with your paperwork to Michelle and she will attach the signed copy when it arrives.
- C. Student Internship Agreement Form
- D. A copy of your resume. (Read Career Center “Writing Your Resume” Guide, including sample resumes, to help you develop yours.)
- E. If you are an international student, you must meet with Amy Webber or Wintlett Taylor-Browne in the Center for Intercultural Engagement and Student Success, and fill out the OPT/CPT form.

The Biology Department will evaluate the submitted applications.

All Approved internship applications will then be forwarded to the Career Center for approval, which will then forward them to the Registrar, who will register students directly.

For further information or questions, contact:

Dan Marlow,
Assistant Director of Experiential Learning
Career Center
Phone: (563) 387-1472
Email: marlowda@luther.edu

Jodi Enos-Berlage
Biology Internship Coordinator
Assoc. Dean for Integrated & Academic Career Development
Phone: (563) 387-1554
Email: enosbejo@luther.edu

Bio 380 Internship Categories

I. Departmental Internships (coordinated and selected through Biology department)

Note: Applications for all of these internships must be received by **October 15th**

A. **Health Care Internships:** The department selects students to participate in the following programs that allow students to shadow medical doctors and other health care personnel. Regular offerings include:

- **Gundersen Health La Crosse Clinic (4 students)**
 - Immersion in medical residency program, rotations through variety of specialties based on student interests, weekly group educational programming with Chief resident.
 - Housing proximal to clinic is included, need transportation to La Crosse.
- **Gundersen Health Decorah Clinic (1-2 students)**
 - Broad Rotation through multiple health care providers with focus on primary care: physician, surgery, nurse practitioner/physician's assistant, midwifery, podiatry, nutrition, radiology, clinical lab, etc.
 - Housing: Luther on campus, need daily transportation to clinic in Decorah (10 min from campus)
- **Winneshiek Medical Center, Decorah (1-2 students)**
 - Broad Rotation through multiple health care providers with focus on primary care: physician, surgery, nurse practitioner/physician's assistant, midwifery, podiatry, nutrition, radiology, clinical lab, etc.
 - Housing: Luther on campus, need daily transportation to clinic in Decorah (10 min from campus)
- **Unity Point Health, Iowa Methodist Hospital and/or Methodist West Hospital, Des Moines, IA (1 student)**
 - Rotation through variety of mostly procedural-based physician specialties, including multiple Luther alumni, e.g., , vascular surgery, academic family physician, pediatric surgery, interventional radiology, Ear, Nose and Throat, gastroenterology, pulmonology, critical care, etc.
 - Housing: Ideal if have an existing housing option in Des Moines, but if not, other alternatives will be explored. Need own transportation between housing and clinic/hospital.
- **Regional Health Services, Cresco (1 student)**
 - One on one immersive shadow with primary care physician (alum) that has broad expertise and significant interest in mentoring Luther students
 - Housing: Luther on campus, need daily transportation to clinic in Cresco (25 min from campus)

** Please note that some of these internship programs require background checks, health screenings, and CPR certification (2-man C), sometimes at the students' cost. (If a health care internship, assume this.) See Dr. Enos or Michelle Einck (SHL 231) for details on health screenings, background checks, and CPR certification.*

II. Student-Designed Internships (developed by student in consultation with the Biology Internship Coordinator Jodi Enos-Berlage)

A. Finding an Internship:

- This is the most common type of internship, in which the student takes the initiative for making direct arrangements with off-campus professionals and/or institutions. One important consideration that often strongly influences an internship location is housing. Often, students will seek available opportunities where they have available housing (with parent, relative, friend, etc.). Within this restriction, students should consider several options to develop an internship, listed below:
- January term alumni internships: Each year we tend to get 2-4 biology related internships sponsored by alumni. Watch for J-term alumni internship announcements from the Career Center starting in October. Look through the listings to see if any would fit with your goals. Make sure to communicate with both Dan Marlow and Jodi Enos-Berlage if you wish to apply for a biology-oriented internship thru this program.
- Contacts through established professional or health care relationships involving family/friends or home health care providers.
- Alumni contacts identified through Luther's Linked-In filter, the Luther alumni database, and the Luther Career Center 'Career Connections'.
- Luther College Career Center has a general internship website that may be helpful: <https://www.luther.edu/career/internships/finding/sites/>
- Contacts to area health care centers/clinics/companies/etc. In this case, the initial first contact is often the Human Resources Director at such an institution. Many bigger hospitals and clinics have spots on their websites devoted to shadowing experiences.
- Contacts made via previous internship experiences of Luther students: The Career Center and Biology Department Internship Coordinator maintain records of all previous internships performed by Luther students. These records may offer contact opportunities for future internships.

B. Recommendations for making an initial contact:

- Initial contact with the internship site is best accomplished by an initial phone call or email that confirms you are talking to the appropriate person for your inquiry. It is recommended to follow this initial contact with something in writing, (so that communication is clear and it can be shared easily with other appropriate personnel). This description should include a brief introduction stating who you are and how you learned about the internship site, and why you are specifically interested in the experience as well as your professional updated resume. The description should also answer several key questions for the internship site. The following points are recommended to include:
 - That the internship is an **academic experience**, and is awarded Luther College academic course credit. All academic assignments completed by the student are evaluated by Luther College; however, a minimum number of hours are required in order to meet the academic requirements (at least three weeks of full-time experience during January term, and at least 40 hours/credit during semester and summer terms). The time requirements are established in part to validate the credit.
 - (In most cases) that you inquiring about a volunteer (not paid) experience

- That the structure of the experience is to create a situation that is as ‘easy’ for the provider as possible:
 - Luther handles all of the academic evaluation and documentation, there is no paperwork required of the supervisor except for a simple one-page evaluation
 - The specific structure of the internship is very flexible, i.e., an internship could involve one or multiple supervisors or departments (this is important, as it is much easier for a site to rotate an intern through multiple providers/departments, especially if the internship is over a three-week period.
- Confirmation of your understanding that the internship activities are likely to be mostly, if not entirely, observational (particularly if the site is a health care setting), and that you understand the importance of patient confidentiality and possible requirements for health care screenings, etc.
- Finally, do not expect or ask for an answer in the initial contact. Rather, offer to contact the site within a week's time to see if an internship experience might be possible. Detailed arrangements should emerge in follow-up contacts. Students should bear the brunt of contact work, make every attempt to minimize the professional's time in the process.

C. Established opportunities:

Finally, several external, but formal internship programs are in place that Luther students have applied to in the past, and/or that the biology department has more established contacts with. For each of these, see Dr. Enos if you would like more information. These include:

- Health Care Internships: CentraCare Clinic Premed Shadowing Program (St. Cloud, MN):** There is an **independent** selection process for this program. Application must be made **directly** to St. Cloud; students must have own housing. Have both 4-week winter and summers terms.
- Research Internships (Mayo Clinic):** Students interested in this option first need to identify and contact potential research mentors from Mayo Clinic’s website (www.mayo.edu/research). After mutual agreement with the mentor, the mentor needs to contact their Human Resource staffing specialist to complete the paperwork for the intern process. Housing is available through Mayo at the student’s cost.
- Other:** The biology department internship coordinator is familiar with other types of non-departmental affiliated health care internship experiences, e.g., dental, physical therapy, optometry, pharmacy, veterinary medicine, Heart Center, biotech, environmental, etc. and can offer some ideas and contacts in these areas.

**If you are seeking a local internship in any of these areas, please contact the biology department internships coordinator first as we have established relationships with many of these local providers.

III. Study Abroad Internship Experiences

A variety of study abroad health care internship experiences are externally available (usually for significant cost). Students interested in study abroad internship experiences that will involve health care environments should complete the **Global Ambassadors for Patient Safety Online Workshop**, a free online course designed by the University of Minnesota. The goal is to offer tools and advice for how to get the most of your experience abroad, without stepping beyond your qualifications and expertise. Go to: www.healthcareers.umn.edu/online-workshops/gaps/index.htm.

If you travel abroad on your own, you also need to inform the Center for Global Learning. They can also check to see if your location is considered safe. They also offer a pre-travel information session that they want all students who are traveling to take.

IV. Funding

Luther has a limited amount of funding that varies by year that supports students doing internships. The primary funding time is summer. The only January internships that are eligible for funding are the ones offered through the January term Alumni internship program. More information on summer funding including deadlines for applications, can be found at www.luther.edu/career/internships/funding/.