



GUIDELINES AND AGREEMENT FOR UNDERGRADUATE RESEARCH IN THE DIVISION OF BIOLOGICAL SCIENCES

Division of Biological Sciences - Undergraduate Research

Objective

The core of the research experience is intensive theoretical, field, and/or laboratory research in any area of biology. You may seek your own faculty research mentor from within or outside the Division of Biological Sciences, or we can help you find a research mentor. You and your mentor will collaborate to design your own personalized research project.

Need assistance identifying a mentor: You can make an appointment to meet with the Division's Director of Undergraduate Research, Dr. Pamela Brown, by emailing biohonors@missouri.edu. You also can talk with one of our professional advisors in the Division's Undergraduate Advising Office in Tucker Hall Room 3. Additional information can be obtained from MU's Office of Undergraduate Research at undergradresearch.missouri.edu.

While we can help, in the end it is your responsibility to arrange the details of your research experience.

Hours and Credit

Variable credit: 1-3 hours. May be repeated up to a total of 12 hours. Upon completion of a total of 6 hours, 3 hours may be applied as elective credit toward the BA or BS in Biological Sciences. Any remaining hours may be applied as general elective hours toward graduation. As a general rule of thumb, your project should be of a scope that requires you to spend 4-5 hours per week per credit hour, but your time commitment to the project should always be determined by what the science requires, and may vary considerably depending on the specific project.

Prerequisites

Overall GPA of 2.7 or greater [the Honors sequence prerequisite is an overall GPA of 3.3 or greater]; completion of at least 20 total hours of Biology, Chemistry, and/or Physics; department and instructor's consent. Any exceptions will require departmental consent.

Course Requirements

To initiate and complete undergraduate research in Biological Sciences you must:

1. Identify a faculty member who will agree to be your research mentor and, in consultation with that faculty member, devise a project for which you will have primary intellectual as well as technical responsibility.
2. If you will be pursuing honors research credit (Bio 4950H/4952H), you must complete the Honors Research Application and email it to Dr. Pamela Brown at biohonors@missouri.edu.
3. Submit the signed **GUIDELINES AND AGREEMENT FOR UNDERGRADUATE RESEARCH IN BIOLOGICAL SCIENCES** to the Division's Undergraduate Advising Office in Tucker Hall, Room 3, for approval. This form is designed to help insure the best possible experience for both you and your mentor.
4. If you wish to use this research experience as a Capstone experience in Biological Sciences, you must complete at least 6 hours of undergraduate research with a grade of C- or greater and your research program must conclude with a poster presentation and/or a written report. The second course in the sequence must be completed within the last 45 hours of enrollment before graduation. The presentation can be part of an on-campus symposium (e.g., the Undergraduate Research and Creative Achievements Forum or Life Sciences Week) or a regional or national meeting of a scientific society. A written report should resemble journal articles in your field.
5. In order to graduate with departmental honors, you must also complete a poster or paper presentation of your research. This presentation can be the same one you use to obtain capstone credit.

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Student Name:		Student Number	
Email:		Phone:	
Overall GPA:			
Biological Sciences, Chemistry, and Physics courses completed or currently enrolled in: (Dept & Number: e.g., BIO_SC 1500, CHEM 2100)			
Faculty Mentor:		Email:	
Campus Address:		Phone:	
Project Title:			
Semester:	<input type="checkbox"/> Fall <input type="checkbox"/> Spring <input type="checkbox"/> Summer	Year:	
Credit Hours:		Capstone:	<input type="checkbox"/> Yes <input type="checkbox"/> No
Course #:	<input type="checkbox"/> 4950 <input type="checkbox"/> 4950H <input type="checkbox"/> 4952 <input type="checkbox"/> 4952H	Ref. #	

Expectations of Undergraduate Researchers

- Identify a faculty member who will serve as your research mentor
- Become familiar with the research literature in the field and be a partner with your faculty mentor in the design of your research project
- In most cases, work 12-15 hours per week on your research project for 3 hours credit
- Participate in laboratory research meetings
- Learn to read critically the primary research literature in the area of your research project

I understand these expectations and obligations.

Undergraduate Researcher Date

Expectations of Faculty Mentors

- Design a research project in which your undergraduate researcher can make reasonable progress in 1 or 2 semesters working 12-15 hours per week in the research laboratory
- Provide a real research experience (not simply media preparation or "extra hands" for graduate students or postdoctoral fellows)
- Incorporate your undergraduate researcher fully into the informal research laboratory community including laboratory research meetings and laboratory social activities
- Introduce your undergraduate researcher to the primary research literature through laboratory meetings or laboratory journal clubs
- Act as a role model
- Discuss research careers with your undergraduate researcher
- Provide a final grade on the progress of your undergraduate researcher to the Division of Biological Sciences at the end of each semester

I understand these expectations and obligations.

Faculty Mentor Date

Director of Undergraduate Research Date

Division of Biological Sciences Approval Date