

Undergraduate Research Courses (BISC 290/490) FAQ

1. What are Directed Research and Introduction to Biological Research?

These are courses that give undergraduate students the opportunity to work in the laboratory of a USC faculty member as a research assistant. BISC 290 (Introduction to Biological Research) does not count toward any upper division elective units for Biological Sciences majors. BISC 490 (Directed Research), however, can count towards up to 4 units of upper division elective credit for Biological Sciences majors. **ALL PROJECTS MUST BE COMPLETED EACH SEMESTER AND A NEW APPLICATION SUBMITTED EACH ADDITIONAL SEMESTER YOU ARE REQUESTING A 290 or 490. YOU CAN NOT CARRY A PROJECT FORWARD FROM SEMESTER TO SEMESTER, EACH GRADE IS FOR THE INDIVIDUAL SEMESTER PROJECT (including summer semesters).**

2. Who is Directed Research for?

Students with sophomore standing can participate in BISC 290 (assuming completion of CHEM 105b and BISC 120 or 220); students with junior or higher standing (64 or more units) can participate in BISC 490.

3. What will I be doing throughout the course of my research experience?

This is entirely based upon the plan that you and your faculty sponsor will lay out during the application process. Your duties in lab will depend on your prior research experience, interests, and the necessities of the lab. You will likely employ some of the techniques that you have learned throughout your laboratory course work.

4. How do I sign up? Am I eligible?

In order to participate in either BISC 290 or 490, you will need to submit an application: <https://dornsife.usc.edu/bisc/undergraduate/forms-applications/>

The minimum overall and science GPA to apply for either course is 3.0. Courses taken outside of USC are not included in calculating GPAs. Your sponsor must be a USC faculty member. For the application, you will need to develop a proposal for your research with your faculty sponsor, include an abstract or cover page from a research article related to the work you will be doing, a copy of your STARS report, and your faculty sponsor's CV if they are not in the Biological Sciences department.

5. What are my chances of being accepted? Is the process competitive?

The application process is not competitive. Any student who is eligible for the course and their proposal meets criteria will be accepted.

6. How will my work be evaluated?

Your faculty sponsor will assign your grade based on the criteria mutually agreed upon at the beginning of the semester. The student is responsible for initiating this conversation with their sponsor. Typically, sponsors evaluate their students on lab attendance, performance and the final project (discussed below). Your sponsor will need to submit your final grade via email to the department at the conclusion of the semester.

7. What are the criteria for a research proposal? Who will review my application?

Proposals where the research techniques are biological in nature are likely to be accepted, especially if the faculty sponsor is in the Biology Department. Projects that use human subjects (psychological, sociological, etc.) and clinical research trials may not qualify. Faculty in the department review all applications for BISC 290/490.

8. What are the course requirements?

For every one unit of BISC 290/490, you are expected to work in the lab for 3-4 hours per week. For example, if you are taking 4 units of BISC 490, you are expected to work in the lab for 12-16 hours per week. Also, you will be expected to turn in a final written research report, due on the last day of classes for that semester. You should discuss the details of your final project with your faculty sponsor, and you will need to submit a copy of your report to the Biology Department in addition to your faculty sponsor.

9. I'm interested but I have no idea on how to find a sponsor.

- Talk to your current instructors. Initial correspondence via email is appropriate but we recommend discussing research opportunities with professors in person when possible.
- Visit the [Biological Sciences website](#) to locate faculty based on their research topics. You can peruse faculty in [Marine and Environmental Biology](#), [Molecular and Computational Biology](#), [Human and Evolutionary Biology](#), and [Neurobiology](#) to find prospective sponsors that match your interests.
- Visit the PIBBS Faculty Research Topics website. The Programs in Biomedical & Biological Sciences site has a similar page where students can locate faculty who are predominantly working in biomedical research on the USC Health Sciences Campus. Many pre-health/pre-med students have participated in exciting research experiences in labs on the Health Sciences Campus with their faculty. To view the PIBBS Faculty Research Topics, go to the PIBBS home page at <http://pibbs.usc.edu/>. In the search bar, type "research topics". Select the link called "Research Topics" and navigate through the various options.
- If you are still having difficulty locating a faculty sponsor or you would like additional tips, please speak with your academic advisor.