Biology 499R, Research for Credit

Student Information
Student: Please read all details carefully. You are responsible for making sure that all steps of the registration process are completed.

Due to the COVID pandemic, for Spring 2021, we will have a limited Biol 499R program.

WHO CAN SIGN UP?

- Any biology major planning to do remote-only research that does not require access to a lab can sign up for Biol 499R. Students must have identified a mentor who is willing to mentor them.
- In addition, any biology majors who have junior or senior standing (see below) by January 2021 can do in person research. Students must have identified a mentor who is willing to mentor them. The mentor will be required to verify that they can accommodate them under current density restrictions and other guidelines in the department or program before the student can register for Biol 499R. Students should discuss the possibility of accessing the lab prior to signing up. Labs can be at Emory or elsewhere. All students doing in person research in an Emory-affiliated lab (i.e., anywhere on campus, VA, CHOA, etc.) will need to go through the campus on boarding process. Students eligible for laboratory research in Emory-affiliated labs will have access to on campus housing.
- In addition to biology majors, we will also accept intended biology majors, students in the Cancer 4+1 program and students who cannot get credit for their research through their major (e.g., QTM).

You must:
1. have confirmed with your mentor that they can mentor you on a research project.
2. commit to working on your project 10-16 hours a week.
3. commit to the increased responsibility that comes from your need to structure the research interactions, set and meet deadlines, and follow all requirements.

WHAT IF I CANNOT TAKE BIOL 499R THIS SEMESTER?

- If you are a senior and have taken one semester of Biol 499R but cannot take a second semester because of pandemic-related reasons, your one semester can be counted to meet the upper level lab and elective requirement for the biology major. You can request that this credit appear on your record by contacting Dr. Nicole Gerardo.
- If you have already identified a lab to work with but cannot do research with them this semester, ask if they are having online lab meetings that you can join. This will give you a chance to learn more about them and their research.

HOW DO I SIGN UP?
1. Find a research mentor. Most mentors are affiliated with Emory, but some undergraduates have had mentors at the Marcus Autism Center, CDC, Georgia Tech and other locations in Atlanta. See advice provided in Getting Started in Undergraduate

(Revised 10/25/2020)
Research in Biology about finding a research mentor, http://www.biology.emory.edu/research-opportunities. You must find a research mentor who conducts research within the broad field of the biological sciences. Biophysics research conducted in a physics department, for example, is research related to the biological sciences. Projects can involve lab work, data analysis, bioinformatics or other approaches. Clinical shadowing, while valuable, is not a research experience.

2. Confirm with your mentor that they can supervise a remote research project or can accommodate you in their lab given current density restrictions. Remote research projects may include analyzing previously collected clinical or experimental data, bioinformatics or modeling.

3. Register for Biology 499R by completing the following EACH semester. Complete the Online Registration Form at least five days before the add/drop/swap deadline in the semester for which you are registering. If you need to be onboarded to be allowed back to campus, please do this as soon as possible! The form is at: https://docs.google.com/forms/d/e/1FAIpQLSfS_OmlmOVflj5CWXqEBGoFDec1GCha5SESdK3g/viewform?usp=sf_link

4. Upon completion of this form, where you will indicate contact information for your faculty mentor, the Biol 499R course director will contact your faculty mentor. Your faculty mentor will be required to agree to mentor you remotely or be able to accommodate you in their lab.

5. Once you have completed the registration form and your faculty mentor has agreed, via email, to mentor you, you will receive a permission number via email. This may take several weeks.

6. To enroll in the class, add the class to your shopping cart in OPUS. Then, in your shopping cart, click on the class name and it will take you to a screen where you can enter the permission number.

THEN WHAT DO I DO?
1. With your mentor, establish:
   - the scope of your project and other expectations. Science is collaborative, but you should have increasing ownership of your intellectual research question, experimental design, and data analysis as the semesters progress. By setting expectations in advance, you will avoid many problems.
   - your research schedule. It is expected that you work for 10-16 hours per week. This includes time meeting with your mentor, working on your project, reading and writing on the topic.
   - a schedule for regular meetings, likely over ZOOM, with your faculty mentor and, if applicable, your direct mentor. You should not be having in person meetings indoors unless absolutely necessary to learn a new technique.
2. Look over the materials provided on the Biol 499R Canvas site carefully.
3. Course meetings and assignments

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• There will be no required meetings this semester, but there will be assignments to help you progress on your writing.
• You will be expected to create a final presentation for a virtual symposium.
• Assignments will be submitted electronically on the Biol499 course site.

4. **Arrange for your faculty mentor to submit a grade by the last day of classes each semester.**
   • Your faculty mentor’s evaluation of the quality of your research and report/poster will be reviewed by the course director to determine your final grade.