

Syllabus

Faculty Coordinator:	Joseph P. Montoya 1244 EST Building tel: 404-385-0479 email: montoya@gatech.edu
Prerequisites:	A minimum GPA of 3.0, 6 credit hours of prior research experience (BIOL 2699 & 4699), and support of a Biology faculty member
Recommended Courses:	Students should enroll in LCC 4701 (Undergraduate Research Proposal Writing) the semester before taking BIOL 4910, and LCC 4702 (Undergraduate Research Thesis Writing) concurrently with BIOL 4910.
Other Related Courses:	BIOL 4910 is a pre- or co-requisite for BIOL 4450 Senior Seminar. In Senior Seminar, students will present their proposal and research findings from their BIOL 4910 thesis. Thus, it is preferable that students take BIOL 4450 during the same semester they take BIOL 4910, although students may opt to take BIOL 4450 in the semester immediately after they have completed BIOL 4910.
Description:	This course is one of three possible options for Biology majors to fulfill their Senior Research Experience: BIOL 4690 (Independent Research), or BIOL 4910 (this course), or BIOL 4590 (Research Project Lab). In BIOL 4910, students propose, design, execute, interpret, analyze, and report on an independent research project conducted over multiple semesters in any area of biological science. Each student must be supported and mentored by a faculty member in the School of Biology. If the primary mentor is a faculty member from another School, you must have a Biology faculty member as a sponsor and reader along with prior approval from the Undergraduate Coordinator.
Expectations and Deadlines:	<p>Students are expected to spend at least 9 hours per week on research activities throughout the semester. During the first two weeks of the semester, each student will prepare a brief (1 page) research proposal for grading by their mentor. At this time, the student and mentor should also jointly arrange for another faculty member to act as a second reviewer of the thesis. Most of the work of the semester will involve conducting the research project, analyzing data, and interpreting results. At the end of the semester, each student will submit a thesis of his/her research findings (due at 5pm on 26 April 2013), which will be graded by the mentor and by one additional faculty member who has agreed to serve as a reviewer. The thesis should be prepared in the format of a manuscript using the author guidelines of an appropriate journal. Theses vary in length, but most are 20-30 pages long, including tables, figures, and citations.</p> <p>After grading, a final copy of the thesis should be submitted electronically to the SoB Undergraduate Coordinator, Dr. Joseph Montoya for final evaluation. The mentor also should communicate a grade recommendation to Dr. Montoya before final grades are due to the Registrar. Dr. Montoya will submit the grade as the instructor of record.</p>
Grading Scheme:	Research Proposal: 20% Final Thesis: 40% Lab Participation: 40%