Syllabus for BIOL 3999

Undergraduate Research in Biological Sciences Department of Biological Sciences Louisiana State University

<u>Course Description</u>: BIOL 3999 Undergraduate Research in Biological Sciences provides opportunities for undergraduate students to obtain individual research experience under the direction of department faculty. The Department's expectation is that the course will provide meaningful research experience that will enhance student learning and prepare students for advanced training in graduate school, M.D./Ph.D. programs or employment. Students enrolled in BIOL 3999 will perform actual scientific research and not simple day-to-day laboratory tasks (e.g., glassware washing, autoclaving, etc.), although these and other routine tasks may be a necessary part of their research efforts.

<u>Course Requirements</u>: This course requires permission of the Department (see Registration below). BIOL 3999 is restricted to advanced undergraduates who are classified as JUNIORS or SENIORS (at least 60 hours of credit). For a student to receive credit in BIOL 3999, the faculty advisor must be either full or adjunct members of the Department of Biological Sciences. As required by the College of Science, a student with fewer than 60 hours of credit may enroll in 3000 level courses only if they meet the following criteria:

-- Have an overall GPA of at least 2.0 for both LSU courses and overall average.

- -- Passed all MATH and SCI courses with a grade of C- or higher.
- -- Credit in MATH 1022, 1023, 1530, 1550 or 1551 with a grade of C- or higher.
- -- Credit in BIOL1202, CHEM1202 and MATH1550.

<u>Academic Credit:</u> As for other laboratory courses, 1 credit hour is earned for each 3 clock hours of research activity per week (on average) during a regular semester. This credit per hour expectation would be increased if taken in the shorter summer sessions. Students may earn a maximum of 6 credit hours of BIOL 3999 toward a degree. Three credit hours may be used as advanced BCH, BIOL or MBIO electives and up to a maximum of 3 credit hours can be used as approved free electives. BIOL 3999 <u>cannot</u> be used as a laboratory course requirement toward a degree. The number of credits to be earned in BIOL 3999 in a given semester (1-3) is determined by mutual agreement between the student and the advising faculty member. Hours to be present in the lab doing research are also agreed upon between the faculty advisor and the student.

Identifying a Mentor and Registration: If not already working in a lab, students interested in taking BIOL 3999 should look through the Biological Sciences Department faculty webpage (https://www.lsu.edu/science/biosci/ then click Faculty and Staff, then Faculty) to identify potential advisors whose research aligns with the student's interests. Students then directly contact faculty members to discuss the possibility of working in the lab. Prior to registering for the course, the student must obtain approval from the faculty member who will act as their research mentor. A student enrolls in BIOL 3999 by emailing a Course Permission/Plan of Study form (completed with the help of the faculty advisor) to Ms. Britanny Skuse (bskuse1@lsu.edu) or Ms. Abbigail Tindell (atinde2@lsu.edu) in the Undergraduate Office, or by dropping off a hard copy to Life Sciences Building room 101. The Course Permission form follows on this document. The form must indicate the desired number of credit hours (1-3, maximum 3 hours in a given semester) and must be signed by both the student and the faculty advisor. If taking 3999 across multiple semesters, a new form must be submitted each semester.

Note: The initial online Course Offerings will list the Associate Chair for Undergraduate Studies (currently Professor David Donze) as instructor, but this is only for temporary clerical placeholder reasons. Do not contact the Associate Chair regarding enrollment unless you have a specific interest in their research.

<u>Course Content</u>: The specific research activity that the student will perform is determined by the individual advising faculty member. Faculty expectations regarding time commitment, specific tasks or projects, lab notebooks, written reports and how grading will be assessed should be clearly communicated to the student before any research activity is initiated and documented on the course permission form with the proposal summary.

<u>Course Grading</u>: BIOL 3999 is letter graded (standard university A through F +/- system). Faculty expectations regarding grades and student performance should be clearly outlined at the beginning of the semester.

Department of Biological Sciences BIOL 3999 UNDERGRADUATE INDEPENDENT RESEARCH Course Permission/Student Plan of Study

BIOL 3999 is a course for advanced undergraduates who are classified as JUNIORS or SENIORS (at least 60 semester hours of credit).

STUDENT INFORMATION	REQUEST DATE:
NAME:	LSU ID NUMBER:
MAJOR:	CLASSIFICATION:
Request for Semester/yr:	
Local PHONE:	
CELL #:	
EMAIL:	

COURSE REQUEST

SEMESTER (FALL, SPRING, SUMMER):

YEAR:

Credit Hours:

NOTE: BIOL3999 may be taken for a max. of 6 hrs. credit; variable credit 1-3 hrs. per semester

BACKGROUND

COURSEWORK PERTINENT TO RESEARCH AREA:

PREVIOUS RESEARCH EXPERIENCE:

INTERNSHIPS:

OTHER:

RESEARCH PROPOSAL (Attach separate paper if needed) **PROPOSAL TITLE:**

PROPOSAL SUMMARY

DELIVERABLES: (graded reports, project TIMELINE COMPLETION **OBJECTIVES** presentations, lab DATE notebooks, etc.) CONTRACT **STUDENT NAME (PRINT): STUDENT SIGNATURE:** DATE: **PROFESSOR NAME (PRINT): PROFESSOR SIGNATURE:** DATE: Return completed and signed form to the Undergraduate Office in Life Sciences Building 101, or email to Ms. Britanny Skuse (<u>bskuse1@lsu.edu</u>) or Ms. Abbigail Tindell (<u>atinde2@lsu.edu</u>)