Department of Biological Sciences Senior Learning Community
General Biology/ Microbiology & Immunology/ Molecular & Cellular Biochemistry/
Neuroscience/ Biopsychology (if done within the department)

The following information applies to General Biology, Microbiology & Immunology, Molecular & Cellular Biochemistry, and Neuroscience majors. Biopsychology majors may choose to take their entire senior learning community in psychology or biological sciences.

**BI/MI/MCB/NS 400E**
“Experiential Component of Senior Learning Community” is organized as follows:

Students must register for **BI/MI/MCB/NS 400E (zero units)** and declare their intention to complete a research or internship project in the spring semester of their junior year, the summer after junior year or fall of senior year. Permission to register for **BI/MI/MCB/NS 400E** is granted by the Department of Biological Sciences senior learning community (“SLC”) coordinator, after receiving the completed senior research registration form. The form (shown in this set of guidelines) requires signatures. Research/internship experiences must be undertaken and completed before the beginning of the last semester of the senior year.

At the time of track selection, students must identify a research (typically a faculty member of the Department of Biological Sciences) or internship advisor. The student and the research/internship advisor will select a topic for in-depth investigation and form a committee with one additional faculty member. (3rd member required when any member is from outside Biological Sciences.) Students in both tracks will conduct research offered by the research/internship advisor.
The advisor and the committee member will support the student during the investigation and thesis writing and will serve as the evaluation team for the student's thesis and its defense. Students electing the internship track must arrange the off-campus research-internship a year before their anticipated graduation (typically by May 1st of the spring semester of the junior year). The internship must be a research project with a principal investigator or on-site supervisor at the practicum site.

It is expected that the students spend at least 100 hours at the internship sites or performing the research outlined in the proposal. Students in the internship track must keep a log of hours, which must be confirmed by the on-site supervisor or principal investigator. An evaluation letter from their on-site supervisor or principal investigator is required. Students will work closely with their research/internship advisor and committee members during their experience and also in the semester after completion of the experience.

Students will receive a “P” for BI/MI/MCB/NS 400 E only after completing a draft of the INTRODUCTION (including Objectives); MATERIALS & METHODS; and preliminary list of REFERENCES (minimum of five). Students will complete their thesis research in 400E. Students are then permitted to register for one unit of Senior Thesis (BI400) in Biological Sciences. During this time, students will prepare their theses as an extension of the work begun in BI/MI/MCB/NS 400E. Deadlines will be set for completion of drafts. Both sets of students will formally defend their theses to their committees. Questions at the defense are not restricted to the topic covered, and can include questions on basic biological concepts.

**BI 400**

**Senior Thesis in Biological Sciences**

All General Biology, Microbiology & Immunology, Molecular & Cellular Biochemistry and Neuroscience majors, and those Biopsychology majors selecting this department, must take BI 400 Senior Thesis in Biological Sciences, a one unit, writing intensive course, which is offered in both the fall and spring semesters.

**Senior Capstone Courses:**

(*) Senior General Biology majors are required to take one of the three capstone courses:

MI 491, MCB 491 or NS491

(*) Senior Microbiology & Immunology majors should take MI491 “Advances in Microbiology & Immunology”

(*) Senior Molecular & Cellular Biochemistry majors should take MCB 491 “Advances in Molecular & Cellular Biochemistry”

(*) Senior Neuroscience majors should take NS491 “Advances in Neuroscience”