Course Goals:

A course designed to develop a student's ability to apply fundamental concepts of mechanistic organic and organometallic chemistry, physical organic chemistry, bioorganic chemistry, synthetic organic reactions and techniques for structure elucidation. Students will propose solutions to practice problems mimicking challenges that arise in contemporary research in organic chemistry. The format includes interactive problem-solving discussions led by faculty and peers and monthly written examinations. May be repeated up to three times until the student has passed at least four of the written exams. Prerequisite: CHEM 740 or permission of instructor.

Required Activities:

(1) Active participation in the weekly problem solving sessions *(Fridays at noon in Malott 3005)*.

(2) Attendance and active participation in the presentations by students and invited speakers presented as the Organic Colloquium *(Thursdays at noon)*. Presenting a “short talk” in the 2nd semester of your study and a “long talk” in the 3rd semester of your studies and pre-dissertation talk on your research in your 4th year.

(3) Taking monthly written examinations that will require you to “propose solutions to problems mimicking challenges that arise in contemporary research in organic chemistry” and cover all areas of Organic Chemistry. The topics for each monthly examination may or may not be provided in advance, according to the choice of the faculty member responsible for writing the particular examination. In some cases, papers from current literature may be suggested as a study material, or a basis for the exam.

Examinations Schedule:

The exams will take place on Wednesdays, at 8-10 am *(3005 Malott)*.

| EXAM 1 | Feb. 3 |
| EXAM 2 | Mar. 2 |
| EXAM 3 | Apr. 6 |
| EXAM 4 | May 4 |

Marking/Grading:

Each examination will be marked as PASS (2 points) – FAIL (0 points).

Students in their 2nd semester of study are eligible to receive a HALF PASS (1 point).

To receive a grade “P = progress” students must actively and fully participate in the “Required Activities”. To receive a grade “S = satisfactory” students must accumulate a total of 8 points from all the monthly examinations that they have taken. The class can be repeated up to three times to fulfill the requirements for the “satisfactory” grade.