

**University of Windsor – Department of Chemistry & Biochemistry
59-410 Research Project – Course Outline – version 2.1 – September 14, 2012**

Instructor: Rob Schurko, 389 Essex Hall, rschurko@uwindsor.ca

Course Description

Original laboratory research under the direction of a faculty member. Student must present three seminars discussing their research project. (1 lecture, 12 laboratory hours per week over two terms; 6 credit hours.) (Only open to students in Chemistry Honours, Chemistry and Physics Honours, Biochemistry Honours or Biochemistry & Biotechnology Honours programs; please consult the "Program Requirements" section of the calendar.)

Course Objectives

Students will:

1. gain experience in undertaking an original research project under the mentorship of a faculty member
2. have three opportunities over the Fall and Winter terms to present their research projects in seminar format.
3. write a final formal thesis summarizing their research results
4. attend weekly research seminars in the department, as well as the seminars of the other students in the 59-410 course.

Research project and supervisor

At their earliest convenience, students should:

1. contact a potential research supervisor directly or contact Dr. Schurko for assistance with research project placement (please note, there are a limited number of research positions; supervisors have the right and authority to accept or refuse students into their laboratories without explanation).
2. fill out the online form indicating supervisor, research project, etc.

Presentations

All students will present:

1. a research proposal - background/context of research; proposed project (7 minutes in length, 5 minutes for questions - November 2012).
 2. a progress report - update on progress in research project (5 minutes in length, unlimited question period - February 2013).
 3. a thesis defence - a formal seminar open to the public (15 minutes, 5-10 minutes for questions - April/May 2013).
- All presentations must be done in Powerpoint or equivalent digital format.
 - Only the final defence is open to the public; 59-410 proposal and progress seminars are closed sessions.
 - Students must complete all three presentations and the final thesis to pass this course.
 - Students must attend all 59-410 and weekly department seminars.

Thesis

A formal thesis must be submitted to supervisor and project reader no later than one week prior to making the final defence. The thesis must be written as per University of Windsor standards (for more information on these standards, check out the links on the web page).

Marking Scheme

Research proposal presentation	5%
Progress presentation	5%
Supervisor assessment of research skill/effort	25%
Undergraduate thesis *	30%
Thesis defence **	30%
Department seminars***	5%

*Undergrad thesis: supervisor 15%; reader 15%

**Thesis defence: coordinator 5%; supervisor 10%; reader 15%

***Includes three seminars and weekly departmental seminars. Students attend seminars to watch different presentation styles and learn about cutting edge science from internationally renowned researchers.

Important Dates

Dates will be finalized in the first two weeks of September. If you have any conflicts, please make your instructor aware of this prior to **September 21, 2012**.

Date	Event	Comment
Sep. 14, 2012	First meeting of the 59-410 project class	4 pm, 186 EH
Nov. 26-28, 2012	Research proposal presentation *	7 pm, loc. TBA
Mar. 4-6, 2013	Progress presentation *	7 pm, loc. TBA
TBA	41st Southern Ontario Undergraduate Student Chemistry Conference (SOUSCC)	TBA
Apr. 25, 2013	Hand in thesis **	5 pm deadline
Apr. 29-30, 2013	Undergraduate research project defences *	186 Essex Hall

* Powerpoint presentation (or other equivalent) must be submitted to Dr. Schurko no later than one day prior to the presentation date.

** Thesis must be handed in by 5 p.m. on the deadline day: 1 for supervisor, 1 for reader.