

Syllabus for CHEM 4681 and CHEM 4684, Spring 2012

Laboratory Coordinator: Dr. David Jenson: david.jenson@chemistry.gatech.edu

Office: Boggs 2-70

Office Hours: Friday 10-1 or by appointment

Mentors:

Dr. Mira Josowicz, mira.josowicz@chemistry.gatech.edu

Dr. Kyril Solntsev, kyril.solntsev@chemistry.gatech.edu

Dr. David Jenson, david.jenson@chemistry.gatech.edu

Laboratory: WF: 1:05-5:55 PM, or as determined with your mentor

Prerequisites: Chem 3211 and Chem 3380

Objectives:

The goal of this Advanced Chemistry Laboratory is to provide students with the opportunity to master advanced procedures, instrumentation and techniques first introduced in other undergraduate laboratory courses. In the laboratory, each student will be assigned one to two research mentors, each project will last 12 weeks (24 lab periods; ~120 hrs). The experiments are in various areas of chemistry and biochemistry, and are performed under the direction of a faculty mentor.

In addition to the experiments, each student is required to write a mid-term progress report, give an oral presentation at the conclusion of the semester and write a final report on the research topic.

General Information and Policies:

- Attendance in the laboratory is required of all students. Students must be on time for each lab meeting. If you are unable to attend lab on your assigned day, you must contact your mentor.
- You are required to abide by Georgia Tech's new Personal Protective Equipment policy. It has been added to the CHEM 4681/4 TSquare site.
- Each student is required to maintain a laboratory notebook. The notebook must be bound with the ability to make a carbon copy of each page.
- All work performed in this course will adhere to the GT Honor Code

- Collaboration on laboratory reports is permitted but submission of duplicate text is not.
- Plagiarism is not allowed. Cite your sources.

Required Training:

You are required to have (and pass) the following training modules before entering the laboratory. They are available as on-line tutorials.

Right to Know Basic Awareness Training

<http://www.usg.edu/ehs/training/rtkbasic/>

Right to Know Chemical Specific Training

<http://www.usg.edu/ehs/training/chemical/>

Hazardous Waste Awareness Training.

<http://www.usg.edu/ehs/training/hazwaste/>

Grading:

The course grade will be based on two progress reports, the final report and the oral presentation. The grade breakdown is as follows:

Final report (Due April 20th)70%

Mid-term Report (Due March 2nd).....20%

Oral Presentation (April 27th).....10%

The report format and content will be determined by your mentor.

The grading scale will be:

90 to 100; A

80 to 89; B

70 to 79; C

60 to 69; D

<60; F