

CHEM 4562

Advanced Laboratory

OBJECTIVES-OUTLINE

The objective of this class is for a student to gain insight towards chemistry by conducting advanced laboratory procedures. This objective will be approached by the student first performing a literature search of an assigned procedure. From the literature search, an experimental plan will then be developed with the over-seeing professor(s). The laboratory experiments will explore advanced physical and spectroscopic measurements on chemistry systems. A report of the findings of the laboratory experiment must be submitted to the professor at the conclusion of each assignment. A completed laboratory notebook shall be submitted during the last week of the semester.

TIMETABLE

A background literature search will be performed by the student following the assignment by the professor.

An experimental plan shall be developed by the class with the professor.

All experiments must be pre-approved.

The student must seek permission to use any equipment or supplies so that they do not interfere with any regularly scheduled courses.

The student is required to perform a minimum of 4 hours of literature searches or laboratory experiments (including class meeting times) per week.

The experiment report must be submitted by within one week immediately following each experiment.

GRADING

A letter grade will be assigned to each student.

The letter shall be assigned based on (1) the student's performance in the experimental projects, (2) the difficulty of the projects, (3) organization and completeness of the experimental notebook, and (4) the written experimental reports.