

University of Texas at El Paso: Department of Chemistry  
**SYLLABUS FOR INTRODUCTION TO RESEARCH**  
CHEM 4176 or CHEM 4376

**SCHEDULE:** See online course scheduling and consult with instructor: varies by project.

**ROOM:** See online course scheduling.

**INSTRUCTOR:** See online course scheduling.

**REQUIRED MATERIAL:** Consult with instructor, varies by project.

**PREREQUISITE:** Department approval. Fees required.

**DESCRIPTION AND OBJECTIVES:**

Enrollment in CHEM 4176 or CHEM 4376 requires Departmental Approval based on a prior arrangement between the student enrollee and a faculty member in the Department of Chemistry agreeing to mentor the project. Credit for the course shall be awarded to a student for fulfilling the requirements of the agreement between faculty member and student, normally for conducting an original independent research investigation in chemistry under the supervision of the faculty mentor. Each project will differ, but will routinely relate to the chemical literature such that reading of original research articles will be involved. The project so conducted will often involve experimental measurements subject to statistical analysis. A written summary of the project conducted is required at the conclusion of the project.

One semester credit hour in a laboratory course in chemistry is associated with three to four clock hours of laboratory investigation per week for a fifteen-week semester or a total of 45 to 60 clock hours for the semester. Using this ruler, the semester credit hour awarded for CHEM 4176 as a minimum should represent the cumulative total of 45 clock hours of independent experimental study conducted within the semester for which the credit is awarded. CHEM 4376 clock hour expectations can be calculated similarly.

**GRADING AND ATTENDANCE POLICY:**

Each research project is designed by the faculty in charge. Attendance and grading policy are discussed with each student for each project. In general, the time commitment described above is expected. Grades are assigned with respect to attendance, completion of work, and demonstration of a good working attitude and effort.

**SAFETY:**

Safety protocols are very important part of the course content and will be discussed with the student by the instructor. In general, you are required to wear proper attire in the laboratory. For each lab, you will need to wear safety eyewear, long pants, and full cover shoes (no sandals). Rubber gloves will be provided. Lab coats are recommended. Read, sign, and return the safety agreement page given to you at the beginning of the semester. Please observe all safety requirements that have been explained to you in your previous lab courses at UTEP. If you have any questions about determining correct safety protocols, please ask the instructors.

**DISABILITIES:** If you have a disability that may affect your performance of the assigned laboratory activities, you must register with the University's office and give proper notification to the instructor of this course within two weeks of the beginning of the semester. Special arrangements can only be made under these circumstances.

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This is a course designed for undergraduate students. Graduate students taking this course for graduate credit under a special arrangement with the Department of Chemistry graduate advisor will need to complete special assignments, which are in addition to the regular work assigned in this course. The additional assignments may include (1) the writing of a research report on the topic and length designated by the instructor, and (2) the completion of extra problem sets done as homework assignments, (3) some other arrangement. In general, these problem sets will be more advanced or more extensive than those found in the undergraduate homework assignments will.