

**Effective Date:**    Fall 2009-2010

**Course Description**

Prerequisite: CHEM 1202 and CHEM 1302 with a “C” or better and approval of the instructor. Introduction to the scientific method whereby a student will perform an individual chemistry project with supervision by the instructor. Projects will be research appropriate to the knowledge level of a student having completed the first year of chemistry for majors.

**Course Objectives**

Students will:

1. Learn how the scientific method is applied to real world problems
2. Perform data acquisition and analysis
3. Learn to use statistics to analyze and validate results

**Procedures to Evaluate these Objectives**

1. Oral presentation
2. Observation of research performance

**Use of Results of Evaluation to Improve the Course**

1. The supervision of student and feedback from student while research is occurring
2. Oral presentation will be evaluated by instructor
3. All evaluation methods will be used to determine the efficacy of the material presentation.

**Detailed Topical Outline**

1. Research project will be presented to student
2. Laboratory procedure will be presented
3. Practice laboratory procedure will be performed
4. Analysis of data and results determined
5. How to make an oral presentation