

ANALYTICAL CHEMISTRY 4211
INSTRUMENTAL METHODS
SYLLABUS , SPRING 2016

SCHEDULE: Section CRN **21435** meets Tues 10:30 to 11:50 AM
MEETING PLACE: Psychology Building, Room 308

INSTRUCTOR: Dr. G. Saupe, Office CCSB 2.0116, Email: gsaupe@utep.edu

OFFICE HOURS:

TEACHING ASSISTANT: Tahmina Akter, Humberto Rojo

REQUIRED MATERIALS AND PREREQUISITES: Bring calculator, pencil/pen, and notebook to every class. Your textbook is Principles of Instrumental Analysis by Skoog, Holler, and Crouch; 6th ed.

This course has a co-requisite which is the laboratory course CHEM 4212. **CHEM 3310 and CHEM 3110 are prerequisites to this course.** If you have received special permission, from the *Chemistry Undergraduate Adviser*, to take this course without having the prerequisites, then you are responsible for the materials and the knowledge (from CHEM 3310 and 3110) that is assumed from the prerequisites, when taking this course. By taking this course you accept this responsibility. Stipulations in this syllabus are subject to change. All changes will be discussed during class.

OBJECTIVES AND COURSE CONTENT

This course covers the theory and implementation of analytical instrumentation for the purpose of chemical analysis. This course also covers the theoretical bases and design for those instruments. The course is aimed at students majoring in chemistry, biochemistry, or biology, given that the prerequisites are met. The course content can be found listed in the table of contents of the course textbook. We will cover chapters 1 through 21, and possibly others, if time permits. Not all topics in all the chapters will be covered in depth, and omitted topics will be identified in class.

REQUIREMENTS AND GRADING

Homework will be assigned and must be turned on the due date for full credit. Late reports will not receive full credit. Assignments turned in late will receive a reduction in grade. Assignments will receive no credit if turned in more than two weeks late. Some assignments will have a customized due date, where timing is critical, such as related to exams, and will not be allowed to be turned in late. **Quizzes will be given in class, and student are expected to be prepared for quizzes by attending class and doing homework assignments.**

The course grade given to each student will be determined on the following basis.

The lowest exam grade will be dropped. No make-up exams will be given.

Homework	20 %
In-class work and quizzes	20 %
Exam 1	20 %
Exam 2	20 %
Exam 3	20 %
<u>Exam 4 (final)</u>	<u>20 %</u>
Drop lowest exam grade	
Total minus one exam	100 %

Grading Continued

- Make-up exams will **not** be given. Please consider carefully the repercussions of making other commitments that coincide with exam days.
- Final grades will be calculated with your three best exam grades plus the quiz and homework grades.

DISABILITIES: If you have a disability that should be a factor, you must register with the University's CASS 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, or by the rules set by the CASS office. Once registered about this course, please remember to notify the CASS office at least 3 days before each and every affected exam.

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 adviser 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 or experiments. In general, the problem sets will be more advanced or more extensive than those found in the undergraduate homework assignments. Graduate students with knowledge or experience on topics relevant to the class may be asked to share that information with the class.

IMPORTANT DATES

The course drop date for the spring 2016 semester is April 1, 2016. Up to this date, you can drop this course with a grade of "W". After this date, the only way to drop the course with a "W" grade is to completely withdraw from the university.

The dates of all the examinations will be announced in class. If you have a university sponsored event that will interfere with one or more exams, you must arrange to take that exam early. **You must notify and show proof to the professor that you have an exam conflict, at least 10 days before the affected exam.** Otherwise you will just use your option to drop an exam grade to cover the affected exam that will be missed. Any other assignments that are due on such conflict days must be turned in early (before the day of the conflict) or by proxy on the due date for full credit. University sponsored conflicts do not excuse you from turning in assignments on time.