

ANALYTICAL CHEMISTRY 4211
INSTRUMENTAL METHODS
SYLLABUS , SPRING 2015

SCHEDULE: Section CRN **21512** meets Tues 9:00 to 10:20 AM
MEETING PLACE: Liberal Arts Building, Room 305

INSTRUCTOR: Dr. G. Saupe, Office CCSB 2.0116
OFFICE HOURS: TBA
TEACHING ASSISTANT: Ms. Tahmina Akter

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. The course is aimed at students majoring in chemistry or biochemistry. The course content can be found listed in the table of contents of the 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

Home work 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. Quizzes will be given, 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 to improve your average.

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 %

- 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 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.

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, these 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.