

GENERAL INFORMATION SHEET

Instrumental Analysis - Spring 2008 (Section 1061)

Instructor

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Required Material: Fundamentals of Analytical Chemistry (8th ed.) by Skoog, West, Holler and Crouch and Chemistry Experiments for Instrumental Methods by Sawyer, Heineman and Beebe; you will also be required to have a 'scientific' hand-held calculator. You will be required to provide your own calculator for all quizzes and tests. For the laboratory, you will also be required to provide a bound laboratory notebook (with carbons) and safety glasses.

Class Meetings: January 14th - April 30th; 8:00 - 8:50 am MW in SC 201. (We may also have make-up lectures on some Fridays)

Homework: Homework emphasizing important concepts from the lecture will be assigned periodically. These homework assignments will not be collected, but in most cases will serve as the basis for the material in the quizzes.

Quizzes: Six quizzes will be given during the semester. The lowest quiz score will be dropped.

Tests: Three examinations (NOT including the final(s)) will be given during the semester.

Make-up Policy: Quizzes and tests may not be made up. In the event you have a conflict with a scheduled quiz or exam, it may be possible to take the quiz/exam early. This privilege is entirely up to the discretion of the instructor.

Final(s): *Two finals will be given in this class - only one of which will be used for the calculation of your final grade!*

- 1) *Tuesday, May 6th, 8:00 am.* (ACS Final) The grade assigned after this test will be a guaranteed **minimum** for the course. You may choose to attempt to improve your grade by taking the second final.
- 2) *Wednesday, May, May 7th, 8 am.* This final will **replace** the ACS Final if it improves your letter grade. This test will be divided into sections that correspond to the hour exams. Your score for the hour exam will be the greater of your hour exam percentage or 90% of your percentage on the corresponding section on the final.

Attendance: Attendance is required; however, detailed attendance records will not be kept during lecture. Since tests cover the material discussed during the lecture, it is to your advantage to attend all class meetings. If you miss a lecture, you are still responsible for the material covered during that period.

Grading: Your final grade will be based on total percentage, with quizzes accounting for 5%, hour exams for 30%, and the final for 15% of your final grade. [Your laboratory grade will make up the other 50% of your course grade] The grading scale will be 100-85% (A); 85-70% (B); 70-60% (C); 60-50% (D). A grade of F will be assigned to anyone who has below a 50% OR to anyone caught cheating in this course. I reserve the right to assign a letter grade that is **higher** than the above values.

Teaching Philosophy: My belief is that you are an adult, and therefore are ultimately responsible to do what is necessary to succeed in this class; therefore I do not take attendance nor do I collect homework assignments - you are expected to do both of these to help you understand the presented material. I further believe the best learning environment is a relaxed, interactive environment. I rely on feedback from you to help me guide you through areas with which you are having difficulty. From my perspective, a lack of questions over a section of lecture or homework implies understanding, so I encourage questions over areas that you are struggling. I also believe that the class needs to set it's own pace for covering the material - this is why there are no 'fixed' test dates. However, there is a certain amount of material that has to be covered, so there is not unlimited flexibility in the pace at which the material is presented.

Office Hours: See schedule on the bulletin board across from my office. Hours indicated as 'on campus' I may or may not be available in my office - you are welcome to stop by and check. I will also make appointments for office hours outside the posted hours if necessary.

It is the policy of Cameron University to accommodate students with disabilities, pursuant to federal and state law. Students with disabilities who need classroom accommodations must make their requests by contacting the Office of Student Development at (580) 581-2209, North Shepler Room 314.

Tentative Schedule of Events (Lecture)

Block I Exam is scheduled to cover:

- Chapter 24 - An Introduction to Spectrometric Methods
- Chapter 25 - Instruments for Optical Spectroscopy
- Chapter 26 - Molecular Absorption Spectroscopy
- Chapter 27 - Molecular Fluorescence Spectroscopy
- Chapter 28 - Atomic Spectroscopy

Block II Exam is scheduled to cover:

- Chapter 30 - An Introduction to Analytical Separations
- Chapter 31 - Gas Chromatography
- Chapter 32 - High Performance Liquid Chromatography
- (If time allows, we may also discuss parts of Chapter 33)

Block III Exam is scheduled to cover:

- Chapter 18 - An Introduction to Electroanalytical Chemistry (brief review)
- Chapter 21 - Potentiometry
- Chapter 23 - Voltammetry
- Chapter 22 - Bulk Electrolysis: Electrogravimetry and Coulometry

This schedule is subject to be changed at any time by the instructor!