

CHM 327
Instrumental Analysis
Spring 2018
M/W/F 10:45-11:35 PSH 552
Updated January 2 2018

Instructor:

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Office hours: Mon 10-10:40 and by appointment (just drop me an email!)
Any changes in schedule will be posted on myASU BLACKBOARD! **You are expected to check your email and myASU BLACKBOARD regularly.**

Course Description

This is a lecture based course that explains modern chemical analysis methods. The class focusses on the underlying physical principles of the methods, the roles and operation of the major components of instruments, the application of the various techniques and their respective advantages and disadvantages.

The topics include most common instrumental analysis methods including atomic and molecular spectroscopy as well as basic separation techniques like chromatography.

Upon successful completion of this course:

- Students will understand the physical processes underlying common chemical measurements.
- Students will develop a more critical approach to thinking of what techniques can be used for what applications

Recommended but not required text: "Principles of Instrumental Analysis"
by D.A. Skoog, S.R. Crouch and F. J. Holler
6th Edition, Brooks/Cole (published December 06)

I will post lecture slides on Blackboard. I will try to do this before class however this might not always be possible.

Grading and tests:

Homework: No graded homework. I might distribute problems and provide solutions.

Tests: Five tests will be administered during the regularly scheduled class times. Make-up tests will not be given unless arranged at least one scheduled class prior to the test. Consider yourself responsible for all material covered in the text and in lecture.

Final: The final will be cumulative.

Grading: 100 points per tests
200 points for the final

Scale: Grades will be assigned on the standard 90% = A, 80% = B, 70% = C, 60% = D, <60% = E scale. We reserve the right to curve the scale to increase grades. We will not curve the scale to decrease grades.

Cheating: Academic honesty is expected of all students in all examinations, papers, laboratory work, academic transactions and records. The possible sanctions include, but are not limited to, appropriate grade penalties, course failure (indicated on the transcript as a grade of E), course failure due to academic dishonesty (indicated on the transcript as a grade of XE), loss of registration privileges, disqualification and dismissal. For more information, see <http://provost.asu.edu/academicintegrity>.

Disability Accommodations: Qualified students with disabilities who will require disability accommodations in this class are encouraged to make their requests to me at the beginning of the semester either during office hours or by appointment. Note: Prior to receiving disability accommodations, verification of eligibility from the Disability Resource Center (DRC) is required. Disability information is confidential.

Establishing Eligibility for Disability Accommodations:

Students who feel they will need disability accommodations in this class but have not registered with the Disability Resource Center (DRC) should contact DRC immediately. Their office is located on the first floor of the Matthews Center Building. DRC staff can also be reached at: 480-965-1234 (V), 480-965-9000

(TTY). For additional information, visit:

www.asu.edu/studentaffairs/ed/drc.

Their hours are 8:00 AM to 5:00 PM, Monday through Friday.

Disruptions: Students are entitled to receive instruction free from interference by other members of the class. An instructor may withdraw a student from the course when the student's behavior disrupts the educational process per Instructor Withdrawal of a Student for Disruptive Classroom Behavior. The Office of Student Rights and Responsibilities accepts incident reports from students, faculty, staff, or other persons who believe that a student or a student organization may have violated the Student Code of Conduct.

Missing tests:

It is imperative that you be present for every exam. Plan travel and other events accordingly. An alternate exam may be administered prior to the scheduled time only in cases where travel for a university-sanctioned business or function, which cannot be rescheduled, interferes with an exam date. If such plans do interfere with an exam date, then it is your responsibility to schedule an alternate exam date prior to the scheduled date. This alternate date must be finalized at least two weeks prior to the scheduled exam date. You must show documentation from an appropriate university official for an early exam to be administered. An alternate exam will not be administered after the original exam date. In cases of sudden illness or unanticipated emergency that prevents you from attending a scheduled exam, the final exam percentage will be substituted if credible documentation is provided to the instructor of illness or emergency. This option can only be exercised once. Because all exam dates are scheduled at the beginning of the semester, personal travel, work schedules, traffic, etc. do not constitute grounds for a make-up exam.

I will require documentation for ANY emergencies, accidents, events....

Schedule: See Attached

IF YOU HAVE QUESTIONS, ASK THEM.

Some general rules:

- Arrive to class on time.
- Avoid disruptive behavior in class like talking, snoring, etc.
- Turn off beepers, phones, radios and other electronic devices.
- No eating, smoking, or drinking in the classrooms.
- Students are not allowed to post any class materials on the internet or social media, under any circumstances.
- If you are experiencing difficulties, contact the instructors ASAP, do NOT wait until the last week of class, that is too late!
- No audio or video recording of the class without consent of the instructor
- Any accommodation requests (DRC) need to be done at the beginning of the semester
- We do not accept any SMS language in tests. Answers need to be written in plain English, not shorts and excessive typos or spelling mistakes will be penalized.

Email/Communication:

Email is a preferred for communication outside of office hours, however, please consider the following:

- Make sure your ASU email address of record is valid. Last minute announcements will be made by email.
- Make sure your account is not "clogged"; only one additional attempt will be made should an email bounce.
- Please only use your ASU email account to communicate with the instructors.
- Please allow a reasonable amount of time for the instructors to answer your email; we will usually answer your email the same day as far as possible.
- Rude emails will be ignored.

Unforeseen circumstances could require us to modify the schedule or any policy outlined in the syllabus. Consequently, given due notice to students, the instructors reserve the right to change any information on this syllabus.

DRAFT

Chemistry 327
Instrumental Analysis
Spring 2018: Proposed Schedule

	Monday	Wednesday	Friday
Jan 8 - Jan 12	Section 1	Section 1	Section 2
Jan 15 - Jan 19	MLK no class	Section 2	Section 2
Jan 22 - Jan 26	Section 2	Section 2	Section 2
Jan 29 - Feb 2	Section 2	Test 1	Section 2
Feb 5 - Feb 9	Section 3	Section 3	Section 3
Feb 12 - Feb 16	Section 3	Section 3	Section 3
Feb 19 - Feb 23	Test 2	Section 4	Section 4
Feb 26 - Mar 2	Section 4	Section 4	Section 4
Mar 5 - Mar 9	SPRING BREAK		
Mar 12 - Mar 16	Section 4	Test 3	Section 5
Mar 19 - Mar 23	Section 5	Section 5	Section 5
Mar 26 - Mar 30	Section 5	Section 5	Section 5
Apr 2 - Apr 6	Section 5	Section 5	Test 4
Apr 9 - Apr 13	Section 6	Section 6	Section 6
Apr 16 - Apr 20	Section 6	Section 6	Section 6
Apr 23 - Apr 27	Test 5	Section 6	Revision

First day of class: Jan 8

Last Day of Classes: Apr 27

Spring Break: Mar 5-9

Final Wed. May 2nd 9:50-11:40

