

QUANTITATIVE CHEMICAL ANALYSIS

Syllabus for Analytical Chemistry 3310

Fall 2024 CRN-10502

Teacher: Dr. Saupe

Office: PSCI 203-D Lab: PSCI 104 + 102 Email: gsaupe@utep.edu

Class Meeting Times: TR 10:30 AM to 11:50 AM in LART 106

Co requisite: Laboratory class CHEM 3110 - Different instructor

Office hours: Wed 10 AM to noon, PSCI 203-D or PSCI 104 see notes posted on door

Textbook: Quantitative Chemical Analysis, by Daniel Harris, 10th Edition

Welcome to the class: This course will teach you about the tools and skills commonly used in chemical analysis.

Required: E-book and included Achieve homework system for Quantitative Chemical Analysis, 10th Edition, by Harris and Lucy. Macmillan, publisher. They come as a unit.

What you need to purchase is:

Achieve for Quantitative Chemical Analysis, ISBN:9781319384807

<https://store.macmillanlearning.com/us>

<https://store.macmillanlearning.com/us/digital/intro/achieve>

If you are a fan of paper books and want that also, an older hardcover edition (9th, 8th, 7th, etc) of this book is cheap to buy and will serve you well. Please note that you will still need the electronic Achieve-tenth edition, for your homework. I hope you will keep the textbook after the end of this course and that you will continue to use it as reference. **The topics that are covered in this course are listed in the textbook's table of contents.**

<https://www.macmillanlearning.com/college/us/Explore-Achieve-1>

You can access the table of contents at the publisher's website. We will only cover the first half of the book, as the second half is for the Instrumental Analysis course that follows this course.

As you may know, no single source of teaching can be complete. To overcome natural limitations, you will need to seek and use knowledge from many sources, including learning from other people, other instructors, and other books, including the web. I encourage you to use what really interests you in life as a motivator for you to learn in school. If there is a way to connect chemistry to your interests, I would be happy to help you in any way that I can.

The course grades will be determined on the following basis.

The lowest exam grade will be dropped to accommodate any problems that might prevent you from taking an exam.

Homework	10 %
Exam 1	30 %
Exam 2	30 %
Exam 3	30 %
<u>Exam 4 (final)</u>	<u>30 %</u>
Drop lowest exam grade.	

Note: A set of quizzes may be given in lieu of each exam. This will be discussed in class.

Update: Exams 3 and 4 will be replaced by quizzes given during each class period.

The Grading is changed to as follows:

Homework	10 %
Exam 1	30 %
Exam 2	30 %
Quiz set 1	30 %
<u>Quiz set 2</u>	<u>30 %</u>

Except for HW, we will drop the (one) lowest grade.

Make-up exams will **not** be given. **Please consider carefully the repercussions of making other commitments that coincide with exam days.** Ask your parents now about future doctor appointments that may conflict, so you can reschedule them.

Final grades will be calculated with your three best exam grades. Exam 4 will be given on the day of the final, but will be similar in extent to the other three exams and it will not be comprehensive.

Checklist for a good grade in this course:

1. Read the assigned textbook topic before each class.
2. Come to class and take your own good notes and study them and rewrite them after each class.
3. Make frequent use of office hours, long before exam times.
4. Work all of the homework problems and seek clarification if you do not understand.
5. Work out all mistakes on exams right after the exam.

You are responsible for finding class notes from a classmate and any material and announcements missed, due to your absence from class or lab.

You must bring your own calculator to every class. Please turn off all communication electronics while the class is in session.

The exam dates schedule will be discussed in class and adjusted to fit the class progress. Changes and corrections to this syllabus and to the course content are possible at any time and will be discussed in class.

Statement regarding disabilities:

If you need assistance because of a disability, you must disclose this to the instructor **within the first two weeks** of class. You must also register within this time at the CASS Office (Center for Accommodations and Student Services) for any special arrangements. Timely notice is a requirement. I am happy to work with you and to make accommodations.

Graduate Students:

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 advisor 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. In general, these problem sets will be more advanced or more extensive than those found

in the undergraduate homework assignments. (3) In certain cases, graduate students with knowledge or experience on topics relevant to the class may be asked to share that information with the class in an oral report.

Final grades will be adjusted so that these additional assignments are worth a total of 20% of the final grade in the course. Therefore, the grades earned on the undergraduate work listed on this syllabus (exams, homework, in-class work, and quizzes) will be weighted by a factor of 0.8, or 80 %, and the additional work for obtaining graduate credit will be weighted by a factor of 0.2, or 20 %. All other undergraduate grading criteria explained above will still apply. It is your responsibility to inform the instructor that you are taking this course for graduate credit and the beginning of the semester.