



CHEM 093: Adventures in Chemistry: Careers, Research, Ethics and More.

Instructor: TBD Email: TBD

Course Description

An introduction to the Chemistry major and the avenues available to students who attain a Chemistry degree. Specific topics include chemical research, research ethics, career pathways, optimal study habits and the application of chemistry in other fields such as the environment, materials science and more.

Learning outcomes for the course:

- 1) Become familiar with careers and career pathways available with a degree in the chemical sciences.
- 2) Learn how to be successful in the Chemistry Major at UCR.
- 3) Develop connections to fellow Chemistry students and faculty.
- 4) Learn about chemical research and research opportunities at UCR.
- 5) Learn about ethics in research and scholarship, with an emphasis on the chemical sciences.

Grading Basis

Students will earn an S grade based on homework, participation, presentation and attendance.

Class Schedule

Week	Topics
1	First Meeting: introduction, meeting classmates in person, forming small class groups, discussing project assignments and the class schedule
2	Study Habits, how to be successful in chemistry classes (Speaker: TBD) <i>Decide a presentation topic for each group</i>
3	How to thrive in college and in the chemistry major (Speaker: TBD)
4	Chemical Research – undergraduate research, research possibilities in post-graduate programs.
5	Careers in Chemistry: Industry (Speaker: TBD).
6	Careers in Chemistry: Teaching and Academia (Speaker: TBD).
7	Research Ethics (Speaker: TBD).
8	Reading the Scientific Literature, with an emphasis on Chemistry (Speaker: TBD).
9	Student presentations
10	Student presentations

Class Assignments

Homework 1:

Each group will send one email to the Instructor with two presentation topics your group would like to suggest. The topic can be anything you are interested in learning from a 15 min presentation and Q&A (10 min presentation and 5 min Q&A) in weeks 9 and 10

For example, here are two possible topics:

- What are the effects of the proliferation of AI learning programs, and how does that affect your degree and college career? What are the positives, negatives and possible unexpected outcomes?
- If my friend or myself is treated unfairly (micro aggressions, bullying, harassment; etc), what shall I do?

Homework 2, Due before week 7: Write a letter to your future self, sealed in an envelope. This letter is strictly confidential. It will be mailed to you at the start of your sophomore year. This is to remind you of what was on your mind during your first quarter and give you time to act upon ideas you may have lost over the summer.

Homework 3, Due before week 8: Send me an email with a selfie of a group of you (exceeding 3 people) attending a campus event that lasts at least an hour outside formal class affairs. This can be a party, a volunteer event, a movie, etc. The aim is to get you all to know each other a little better.

In the email, 1) briefly describe the event you attended; 2) Any questions and/or issues that you may want to discuss or hear suggestions/answers from us during our last lecture time.

Classroom Conduct: The goals of this course can only be accomplished in a setting of mutual respect. All students are welcomed and encouraged to actively participate in the learning of chemistry, regardless of race, gender, social class, religious beliefs, previous academic experience, etc. I will strive to always treat every student with respect, and I expect you to do the same. Please let me know if there is anything I can do to ensure that everyone is encouraged to succeed in this class, and speak to me immediately if you feel you are experiencing a hostile environment. Laptops, tablets, cell phones, and other devices are not to be used during lectures, unless you speak with me about a specific need.

Improper Behavior: Any form of improper behavior during lecture or on examinations will not be tolerated. Improper behavior includes (but is not limited to) cheating (including bringing unauthorized materials into an exam), class disruption, submitting another person's work as your own, sabotaging or otherwise interfering with another student's work. A student engaged in improper behavior is subject to immediate dismissal from the course with a failing grade.

Outside the Classroom: College comes with many challenges, and while some can be taken in stride, others are best faced with the support of others. If you experience anything that compromises your safety and/or well-being on this campus, we urge you to seek support. The campus has many resources available for help on a variety of issues, such as: medical emergencies, counseling and psychological needs, harassment, discrimination, hate crimes, stalking, hazing, sexual misconduct, and civil rights violations. If you have been a victim of or were a witness to something that could be categorized as one of the things listed above, we encourage you to seek help as soon as you feel able to do so, *EVEN IF YOU ARE NOT SURE IT QUALIFIES*. You can come to one of us or you can go directly to one of the other resources available on campus — whatever makes you feel comfortable and safe. Faculty members are mandated reporters on some topics (such as sexual assault) and not others, but we will maintain confidence insofar as we are able. A few important resources are listed below:

Campus Safety Escort Service: (951) 827-3722

UCR Police Department: (951) 827-5222

Title IX Coordinators: (951) 827-7070 <https://titleix.ucr.edu/>

Campus CARE Advocate: (951) 827-6225 <https://care.ucr.edu/>

Counseling & Psychological Services: (951) 827-5531 <https://counseling.ucr.edu/>

