

Chemistry 695
Fall 2014
Introductory Course for Graduate Students

Instructor:

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Course Description:

This class is designed for new graduate students and will cover teaching strategies, lab safety, ethics in science, searching for chemical information, useful software, and tips for presenting and manuscript writing. It will also include presentations of SDSU Chemistry faculty on their research.

Office Hours: e-mail for an appointment

Grading:

Participation in discussions	100 Points
Assignments (7 total)	200 Points
Total	300 Points

Grading Scale:

280-300 = A
270-280 = A-
260-270 = B+
240-260 = B
230-240 = B-
220-230 = C+
200-220 = C
100-200 = D
0-100 = F

Students with Disabilities:

If you are a student with a disability and believe you will need accommodations for this class, it is your responsibility to contact Student Disability Services at (619) 594-6473. To avoid any delay in the receipt of your accommodations, you should contact Student Disability Services as soon as possible. Please note that accommodations are not retroactive, and that accommodations based upon disability cannot be provided until you have presented your instructor with an accommodation letter from Student Disability Services. Your cooperation is appreciated.

Lecture	Date/Time	Topic(s)	Location
1	8/19 9:00 - 17:00	Introduction; Group Selection; Teaching; Ethics; Lab Record Keeping	GMCS-245
2	8/20 9:00 - 17:00	Writing; Presentations; Safety	GMCS-245
3	8/21 14:00 - 16:00	Digital Resources - Library Resources with Wil Weston	LA-78
4	8/22 14:00 - 16:00	TA Lab Skills Refresher	GMCS-245 and 5 th Floor CSL
5	9/2 TBD	Computer Resources (Blackboard and Literature Management)	TBD
6	9/4 TBD	Student Presentations	TBD
7	9/5 13:00 – 15:00	Research presentations by faculty	TBD
8	9/9 TBD	Computer Resources (Excel and Statistical Software)	TBD
9	9/11 TBD	Student Presentations	TBD
10	9/12 13:00 – 15:00	Research presentations by faculty	TBD
11	9/16 TBD	Computer Resources (Molecular Modeling & Visualization)	TBD
12	9/18 TBD	Student Presentations	TBD
13	9/19 13:00 – 15:00	Research presentations by faculty	TBD
14	9/23 TBD	Computer Resources (Graphics & Publishing Tools)	TBD
15	9/25 TBD	Student Presentations	TBD
16	9/26 13:00 – 15:00	Research presentations by faculty	TBD

Student Outcomes

Upon completion of this course students will be able to:

- 1) Teach undergraduates successfully in laboratories.
- 2) Perform safely in a laboratory both as a student and as a researcher.
- 3) Evaluate ethical situations associated with research and know the appropriate steps to take in order to maintain high ethical standards.
- 4) Be knowledgeable of the diversity of research within the department in order to make an appropriate choice of research field for their graduate study.
- 5) Search efficiently for the chemical information they will need for their course and research work.
- 6) Use popular chemistry software.

In order to fulfill the course requirements you must turn in the Faculty Interview Sheet to the Chemistry office by October 7, 2014

Textbook (required):

On Being a Scientist: A guide to responsible conduct in research 3rd edition. Available free online at: http://www.nap.edu/catalog.php?record_id=12192

(Costs to purchase, free to read or download)

Other resources:

http://en.wikipedia.org/wiki/Scientific_misconduct

<http://en.wikipedia.org/wiki/MSDS> (and references therein)

<http://tlt.psu.edu/plagiarism/student-tutorial/>

<http://www.sciencegeek.net/Chemistry/chemware/chemware.shtml>

<http://www.exploratorium.edu/ifi/resources/research/inventingdensity1.html>

Assignments - all assignments must be completed by October 15, except for the proposal writing assignment, which is due on Dec. 5, and the presentations as scheduled.

- Safety - test & inspection
- Ethics - worksheet
- Excel - data manipulation
- Library & ChemDraw - literature search & molecule construction
- Proposal Writing
- Presentation - in class
- Seminar Summaries