

**CHEM 30A: Introduction to General, Organic, and Biochemistry I****Syllabus**

Instructor: John Saunders, MS

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Office Hours: Tu/Th 2:30-3:30, 5-5:30

Office:

Labs:	Rm: SC 2208	Tu	7:30-10:20pm	32213
		Th	7:30-10:20pm	32214
Lectures:	Rm: S 55	Tu/Th	5:30-7:20pm	

Pre-requisites:

MATH 114 or equivalent. Recommended: Eligibility for ENGL 846 or ESOL 400, or equivalent. Transfer: UC; CSU.

Course Description

This is a two-part class to be taken in sequence by students entering allied health fields. The focus of the first part of this class is an introduction to general chemistry. This course begins with a discussion of various measurement tools. This will be followed with a discussion of energy and matter which will be followed by a discussion of the discovery of an atom. The next set of topics will cover an introduction to elements, compounds, and types of bonding in compounds followed by various types of chemical reactions and stoichiometric calculations based on chemical equations. Properties of gases and solutions will be discussed. The course concludes with a discussion of acid-base chemistry and nuclear chemistry.

Required Materials:

- Textbook: General, Organic, and Biological Chemistry, Janice G. Smith, 4<sup>th</sup> Ed. McGraw-Hill.
- Lab Manual: online @ <http://www.deanza.edu/chemistry/Chem30A.html>
- Lab Notebook: any bound notebook specific for labs should be fine. You will use this for each lab, and the lab exam at the end of the quarter.
- Calculator: scientific with log functions, not your cell phone
- Safety goggles: to be worn each lab period

Attendance:

**ALL LABS, EXAMS, AND QUIZZES ARE MANDATORY**, any anticipated or emergency absences must be discussed with the professor prior to the missed lab, exam, or quiz. In order to pass the course, you must be present for all of **LABS AND EXAMS** unless you are able to make arrangements with the professor for a make-up time beforehand. The first lab section is **MANDATORY** and you must show up on time to keep your spot in the course, meaning be in the classroom by 7:30pm. **QUIZ** keys will be posted shortly after they are given and **CANNOT BE MADE UP**. Arriving later than 15 minutes to lab will count as an absence without prior notification (email if there is an emergency).

Class Conduct

- Arrive to lab and lectures on time or early.
- Do not disrupt class by talking or texting others.
- During lab, **NO ELECTRONIC DEVICES** are allowed except a calculator. You may ask to take pictures of experiments, but if your phone is out, you will lose points from your Lab Conduct grade.
- No use of headphones in lab ever. It is a safety hazard.
- No eating or drinking in lab. Again, another safety hazard.
- Always wear lab goggles during wet chemistry labs. Wear them until the instructor says otherwise.

Quizzes	100
Lab Conduct	50

**CHEM 30A: Introduction to General, Organic, and Biochemistry I****Syllabus**Grades:

Your grade will be based on several parts and divided as shown to the right:

- Quizzes – short quizzes will be given during lecture or lab. You will be given 10 quizzes, and there are no make-ups available as we will review the quizzes shortly after taking them, however 1 will be dropped. The quizzes will be given the lecture after each chapter finishes, the dates below are subject to change.
- Lab Conduct – essentially easy points, this is a measure of how much you learn about the laboratory setting and safety related techniques. This will include observations of your punctuality, preparation, safety, cleanliness, and wearing PPE (gloves and googles) appropriately.
- Labs – this will include all work for any labs conducted from the lab manual online. Your grade will be based on pre-labs, in-lab notes, and lab reports. These will all be submitted online via canvas and the due dates will be clearly shown there as well. Please make sure to ask for any questions regarding due dates or what to turn in for each assignment.
- Lab Final – The final exam will be open notes using your lab notebook only. This will be given on the final lab period before finals. The exam will be based on calculations and concepts directly from the lab manual PDFs online.
- Exams – there will be 3 exams throughout the quarter. Each exam will be strictly based on the chapters covered, however you should continue to keep up on old material as it all compounds for the final. There will be in-class reviews for each exam, you should come prepared with questions regarding the exam.
- Final Exam – this will be a cumulative exam that will span the entire breadth of our course. Make sure to keep up with your previous chapters during the semester. Take time to review mistakes on old exams, and go back and review old notes.

Labs	200
Lab Final	100
Exams	350
Final Exam	200
<b>Total</b>	<b>1000</b>

Late Submission Policy

- Turned in within 24 hour deadline → 5% off
- Turned in 24 hours to 7 days later → 10% off per day late (up to 60% off total on day 7)
- Turned in passed 7 days after due date → no credit, but for lab assignments, you must submit all that you attended to receive a passing grade.

Students with Disabilities

Students who are seeking support from the Disability Support Programs and Services (DSPS) should contact them directly at their office in LCW 110 or at (408) 864-8839. De Anza College has the policy to accommodate all individuals regardless of disabilities, as such any students are welcome to come and speak with me privately regarding any accommodations necessary. They should email me directly and we can meet, please plan to bring your Accommodation Memo from the DSPS. Anything discussed will be kept in strict confidence and will not influence or affect your grade.

Academic Integrity

Academic integrity is a very serious thing. Cheating, copying, plagiarizing, or any form of using other person's work as your own is a serious offense. For more details about De Anza college's Academic Integrity policy go to <http://www.deanza.edu/studenthandbook/academic-integrity.html> to view. Any instance of academic dishonesty will not be tolerated and said students will receive an F in the course.

Academic Calendar Dates:

**CHEM 30A: Introduction to General, Organic, and Biochemistry I****Syllabus**

January 7 <sup>th</sup>	First day of classes
January 19 <sup>th</sup>	Last day to add classes for winter quarter
January 20 <sup>th</sup>	Last day to drop classes with no record of "W"
February 1 <sup>st</sup>	Last day to request "Pass/No Pass" for winter quarter
March 1 <sup>st</sup>	Last day to drop with a "W"
March 25-29	Final Exams

Schedule: (subject to change)

Tuesday (61)			Thursday (62)		
Date	Lecture	Lab	Date	Lecture	Lab
1/8	Intro Chapter 1	Check-in	1/10	Quiz Ch 1 Chapter 2	Check-in
1/15	Finish Chapter 2	1) Measurements	1/17	Quiz Ch 2 Chapter 3	1) Measurements
1/22	Finish Chapter 3 Chapter 4	2) Nomenclature	1/24	Quiz Ch 3 Finish Chapter 4	2) Nomenclature
1/29	Quiz Ch 4 Exam 1 Review	3) Models	1/31	Exam 1	3) Models
2/5	Chapter 5	4) Hydrates (pt 1)	2/7	Finish Chapter 5 Chapter 6	4) Hydrates (pt 1)
2/12	Quiz Ch 5 Finish Chapter 6 Chapter 7	4) Hydrates (pt 2)	2/14	Quiz Ch 6 Finish Chapter 7	4) Hydrates (pt 2)
2/19	Quiz Ch 7 Chapter 8	5) Molar Volume	2/21	Finish Chapter 8	5) Molar Volume
2/26	Quiz Ch 8 Exam 2 Review	6) Conductivity	2/28	Exam 2	6) Conductivity
3/5	Chapter 9	7) Acid-Base Titration (pt 1)	3/7	Finish Chapter 9	7) Acid-Base Titration (pt 1)
3/12	Quiz Ch 9 Chapter 10	7) Acid-Base Titration (pt 2)	3/14	Finish Chapter 10 Exam 3 Review	7) Acid-Base Titration (pt 2)
3/19	Exam 3	Lab Exam Check-out	3/21	Quiz Ch 10 Final Exam Review	Lab Exam Check-out
3/26	Final Exam (6:15-8:15pm)				

**Student Learning Outcome(s):**

\*Solve stoichiometric problems by applying appropriate molar relationships.

\*Identify the differences between elements and compounds and describe the chemical bonding in compounds- ionic vs. covalent.