

GENERAL INFORMATION

Instructor:

Office:

Phone: 562-860-2451, Extension:

Email Address:

Web Address:

TEXTS & MATERIALS:

Lecture: (Available at the Cerritos College bookstore)

- Chemistry 100 Lecture Outline, Spring 2014 Edition (You will need a three-ring binder for this)
- Chemistry, 8th, 9th, 10th, 11th, 12th Edition, Timberlake and Mastering Chemistry
- Periodic Table of the Elements, Sargent-Welch VWR Scientific Company
- Simple Calculator (non-graphing calculator) may be used on exams.

Laboratory: (Available at the Cerritos College bookstore)

- Chemistry 100 Laboratory Manual*, Third Edition, Romer
- Goggles: Safety goggles in compliance with ANSI Z87.1-1989 and which have splash protection, as required by California State Law, must be worn at all times in the lab.
- Plastic Lab Apron

Available online at <http://cms.cerritos.edu/chemistry/>

- Safety in the Chemistry Laboratory and Practice Safety Quiz

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ATTENDANCE: You are expected to attend class regularly and to arrive on time. Attendance will be taken by passing a roll sheet around. If you are late, you are expected to enter the classroom silently, and take the first available seat. If you are late, sign the roll sheet after class.

WITHDRAWAL: If you find it necessary to drop the course, do not just stop attending class. In order to drop the course and receive a "W" grade, you must check out of the laboratory at your regularly scheduled lab time or by appointment with your lab instructor. **If you fail to check out, your records will be placed on administrative hold.**

GRADING STRUCTURE:

Homework: (50 points) Homework will be collected as indicated by your instructor. At the end of the semester, the lowest homework score will be dropped and the total score scaled to 50 points.

Examinations: (400 points) Five exams, each worth 100 points, will be given. The tentative dates for the first four exams are given in the course outline on the back of this sheet. Exam 5 is also an hour exam and is not comprehensive. At the end of the semester the lowest of the first four exam scores will be dropped. Your score on Exam 5 will not be dropped, even if it is the lowest of your five exam scores.

Missed Exams: No make-up exams will be given. You must take each exam at the time and on the date it is scheduled for your class. NO EXCEPTIONS. Please note that only *tentative* exam dates are given in the course outline.

If you miss one of the first four exams, this will count as the exam that is dropped. *All students must take Exam 5.*

Grading Scale: 90 – 100% A 80 – 89% B 60 – 79% C 50 – 59% D

Course Grade: Your grade in the course will be computed as follows:

$$\text{Overall \%} = (0.75 \times \text{lect \%}) + (0.25 \times \text{lab \%})$$

If you fail (average less than 50%) in either the lab or the lecture, you will receive an F in the course.

Cheating: If you cheat in lecture or lab you will receive an F in the course.

LEARNING OUTCOMES:

- Analyze the fundamental features of inorganic chemistry as it applies to organic and biochemistry including measurement, mathematical interconversion of physical properties such as mass, volume, density, temperature, solutions, concentrations.
- Demonstrate knowledge features of inorganic chemistry as it applies to organic and biochemistry including physical and chemical properties, naming and writing chemical formulas of commonly occurring inorganic compounds and evaluating chemical reactions.
- Differentiate typical acid and base formulas, compare/contrast the behavior associated with acids, bases and buffers.
- Construct and name structures containing common mono-functional organic molecules and differentiate functional groups when they appear in an organic structure, relate the physical and chemical properties of compounds containing to the functional groups.
- Distinguish various roles of four major classes of biomolecules in living cells, distinguish and construct key structural features and common reactions of these classes of biomolecules.

Introductory Chemistry
COURSE OUTLINE

Chemistry 100

Fall 2017

Week	UNIT	LECTURE TOPIC	UNIT EXAM	READING (<i>Chemistry</i> , Timberlake, 12th Edition)	
				CHAPTER	SECTIONS
				1	1.1
				2	2.1, 2.4 - 2.7
				3	3.1-3.3,3.6
				4	4.1, 4.2
				7	7.4
				3	3.5-3.7
				8	all
		Atomic Structure		4	4.3 - 4.5
		Nuclear Chemistry		5	all
				4	4.6, 4.7
				6	6.1, 6.2
		Classes of compounds		6	6.3-6.9
		Nomenclature		7	7.1-7.3
7		Solutions	2	9	all
8		Acids & Bases		10	10.1, 10.2, 10.4-10.7
9		Chemical Reactions		7	7.3-7.5, 7.7,7.9
10		Organic Chemistry			
11		Hydrocarbons	3	11	all
12		Organic Functional Groups		12	all
13		Organic Reactions		14	all
14		Biochemistry: Lipids	4	15	all
15		Biochemistry: Carbohydrates		13	all
16		Biochemistry: Proteins		16	16.1-16.4
17		Biochemistry: Nucleic acids		17	17.1-17.5
18			5		

NOTE: Dates for Exams 1 – 4 are tentative