

# CHE 103, Concepts in Chemistry Lecture, Fall 2008

## COURSE OBJECTIVES

1. To study and discuss atomic and molecular structures it applies to the allied health field.
2. To expand the student's understanding of organic chemistry and biochemistry, as they apply to the allied health field.
3. To make the connection between material learned and real-life applications.

## COURSE OUTCOMES

1. The students will demonstrate critical thinking and scientific reasoning skills related to chemistry.
2. The students will master the classification of organic molecules.
3. The students will strengthen their understanding of acid-base theory and the theory of gases.
4. The students will be able to relate the concepts they have learned to applications in the allied health field.

## REQUIRED MATERIALS FOR THE COURSE

The following is available in the campus bookstore.

Text: Catherine J. Denniston and Joseph J. Topping, *Foundations of General, Organic and Biochemistry*, 1<sup>st</sup> Edition, McGraw- Hill Companies, Inc.

## MEETING TIMES

Lecture: Tuesday and Thursday at 5:00 – 7:00 P.M., Oberkotter 1.

Instructor's office: Miller 2

Office Hours: Monday, Wednesday, and Friday 10:00 AM – 11:00 AM, and by appointment

Email: [ltsein@cedarcrest.edu](mailto:ltsein@cedarcrest.edu)

Website: <http://www.dr-sein.com>

## GRADING SYSTEM

The grade for this course is based on two hour-long exams (65%), and a comprehensive final exam (25%). The remaining 10% of the grade constitutes class participation.

The final letter grade will be awarded according to the following scale:

93 – 100%	A	80 – 82.9%	B-	67 – 69.9%	D+
90 – 92.9%	A-	77 – 79.9%	C+	60 – 66.9%	D
87 – 89.9%	B+	73 – 76.9%	C	Below 60%	F
83 – 86.9%	B	70 – 72.9%	C-		

## POLICIES

### Classroom Attendance

Classroom attendance is **mandatory** in order to perform well in this class.

### Attendance on Quiz and Examination Days

Attendance on exam days is mandatory. There are **NO** make-up exams. Don't even ask. No reason will be accepted, **up to and including death**. If one examination is missed, the score on the final exam will be entered as the score also on the missing examination. A second missed examination will result in the grade of zero for the second examination. There is no extra credit. If I allowed one student the opportunity for extra credit, a wave of indignation and accusations of favoritism would result. Therefore, no extra credit is available, so don't ask.

### Obtaining Assistance

Do not hesitate to seek assistance concerning class lectures, homework assignments, or grading. If the student can not make it to the instructor's scheduled office hours, she should make arrangements to meet with the instructor at an alternative time at both the student's and the instructor's convenience.

### Honor Philosophy

"The Cedar Crest College Honor Philosophy states that students should uphold community standards for academic and social behavior in order to preserve a learning environment dedicated to personal and academic excellence. Upholding community standards is a matter of personal integrity and honor. Individuals who accept the honor of membership in the Cedar Crest College community of scholars pledge to accept responsibility for their actions in all academic and social situations and for the effect their actions may have on other members of the College community."

The instructor expects each student to abide by the college's honor code. This honor code applies to all activities associated with this course. The student should realize that the honor code is an important aspect of the educational process at Cedar Crest College.

The following statement concerning Classroom Protocol is supported by Cedar Crest College Faculty and Administration:

"Appropriate classroom behavior is implicit in the Cedar Crest College Honor Code. Such behavior is defined and guided by complete protection for the rights of all students and faculty to a courteous, respectful classroom environment. That environment is free from distractions such as late arrivals, early departures,

inappropriate conversations, and any other behaviors that might disrupt instruction and/or compromise students' access to their Cedar Crest College education.”

Please be sure to turn off all cell phones and pagers during class times.

#### Community Standards for Academic Conduct:

“Academic integrity and ethics remain steadfast, withstanding technological change. Cedar Crest College academic standards therefore apply to all academic work, including but not limited to, handwritten or computer-generated documents, video or audio recordings, and telecommunications.

As a student at Cedar Crest College, each student shall:

- Only submit work which is his/her own.
- Adhere to the rules of acknowledging outside sources, as defined by the instructor, never plagiarizing or misrepresenting intellectual property.
- Neither seek nor receive aid from another student, converse with one another when inappropriate, nor use materials not authorized by the instructor.
- Follow the instructions of the professor in any academic situation or environment, including taking of examinations, laboratory procedures, the preparation of papers, properly and respectfully using College facilities and resources, including library and computing resources to ensure that these resources may be effectively shared by all members of the College community.
- Abide by the Cedar Crest Computer Use Policy.
- If a student perceives a violation of the Academic Standards, he/she will go to their instructor.
- If you are unable to resolve the problem with the instructor, you should go to the chair of the department. If you need further assistance after the consultation with the instructor and the chair, you should see the Provost.”

It is the instructor's policy to deal with violations of these Standards for Academic Conduct by awarding a grade of **F** for the course for *any* instance of cheating - no ifs, ands, or buts. No other warnings will be given other than this.

#### Students with Learning Disabilities

The instructor supports the Cedar Crest College policy regarding learning disabilities as follows:

“Students with documented disabilities who may need academic accommodations should discuss these needs with their professors during the first two weeks of class. Students with disabilities who wish to request accommodations should contact the Advising Center.”

#### CHRONOLOGICAL PLAN FOR THE COURSE

The schedule on the following page lists the dates and topics which constitute the lectures pertaining to this course. A summary of the testing schedule and content is provided. The schedule **may be** modified throughout the course, as needed.

#### Lecture Topics Schedule

<u>Date:</u>	<u>Topic</u>
8/26 and 8/28	Methods and Measurements, Ch. 1

9/2 and 9/4	Structure of the Atom and the Periodic Table, Ch. 2 Structure and Properties of Ionic and Covalent Compounds, Ch. 3
9/09 and 9/11	Chapter 3 continued.
9/16 and 9/18	Calculations and the Chemical Equation, Ch. 4
9/23 and 9/25	Energy, Rate, and Equilibrium, Ch. 5
	States of Matter: Gases, Liquids, and Solids, Ch. 6
9/30 and 10/02	Solutions, Ch. 7
	Exam #1
10/07 and 10/09	Acids and Bases, Ch. 8.
10/13	<i>Fall Break</i>
10/16	Introduction to Organic Chemistry, Ch. 10
10/21 and 10/23	Chapter 10 continued.
	The Unsaturated Hydrocarbons, Ch. 11
10/28 and 10/30	Oxygen- and Sulfur- containing Compounds, Ch. 12
11/04 and 11/06	Carbohydrates, Ch. 14
	Exam #2
11/11 and 11/13	Carboxylic Acids, Esters, Amines, and Amides, Ch. 13
11/18 and 11/20	Lipids and Their Functions, Ch. 15
11/25	Protein Structure and Enzymes, Ch. 16
12/02 and 12/04	Chapter 16 continued.
	Final Exam Review

#### Testing Schedule Summary

<u>2008 Date</u>	<u>Test</u>	<u>Material Included</u>
10/02	Exam #1	Chapters 1 – 6
11/04	Exam #2	Chapters 7 – 11
TBA	Final Exam	Comprehensive