

# CHEMISTRY 100 – CHALLENGE OF CHEMISTRY

Southern Connecticut State University

Dr. John Mitnick

Jennings 343 – (203) 392-6264

E-Mail: mitnickj1@southernct.edu

## Summer 2006

**Lectures:** M,T, W, R: 11:30 AM – 12:45 PM (MO 103)

**Laboratory:** M, W: 9:30 AM – 11:20 AM (JE 309)

T, R: 9:30 AM – 11:20 AM (JE 309)

**Office Hours:** T: 12:45 PM – 1:45 PM (JE 343)

**Text:** *The Extraordinary Chemistry of Ordinary Things, Fourth Edition*,  
C.H. Snyder, John Wiley and Sons, Inc (2003) ISBN 0-471-41575-8

**Course Overview:** Chemistry 100, Challenge of Chemistry, is a one-semester introduction to the general principles of chemistry. The course will include an introduction to chemistry and the following topics: atoms and elements, chemical bonding, energy, the mole, acids and bases, oxidation-reduction, gases, liquids, solids, nuclear chemistry, organic chemistry, and biochemistry. Our survey of chemistry takes place in the context of chemistry as an experimental science; in the context of ordinary things of our everyday lives, and a few that are not so ordinary; in the context of the larger realm of science, drawing on chemical principles to illustrate the workings of science; and in the context of the need for an understanding of science and its relationship to our society so that all of us, scientists and non-scientists alike, can make reasonable judgments on social issues that are affected by the processes and fruits of science in general, and chemistry in particular.

## Final Course Evaluation

Three Hour Examinations	50% (Best 2 of 3)
Laboratory Grade	25%
Final Examination (Cumulative)	25%
Total	100%

**Hour Examination:** A total of three hour examinations will be given. The dates are:

*Exam #1:* Tuesday  
July 11

*Exam #2:* Wednesday  
July 19

*Exam #3:* Monday  
July 31

**Final Examination:** Thursday, August 3 (11:30 AM – 1:00 PM)

DATE	TOPIC	CHAPTER
July 3	Introduction to Chemistry	Chapter 1
	Atoms and Elements	Chapter 2
July 5	Chemical Bonding	Chapter 3
	Working with Chemistry	Chapter 8
July 6	Working with Chemistry (cont)	Chapter 8
	Arithmetic of Chemistry	Chapter 9
July 10	Acids and Bases	Chapter 10
July 11	Exam #1	
July 12	Oxidation-Reduction	Chapter 11
	Solids, Liquids, Gases	Chapter 12
July 13	Discovering the Secrets of the Nucleus	Chapter 4
	Harnessing the Secrets of the Nucleus	Chapter 5
July 17	Petroleum	Chapter 7
	Chemicals, Pollution and the Environment	Chapter 14
July 18	Introduction to Organic Chemistry	Chapter 6

July 19	Exam #2	
July 20	Carbohydrates	Chapter 16
July 24	Fats and Oils	Chapter 15
	Surfactants	Chapter 13
July 25	Proteins	Chapter 17
July 26	The Chemistry of Heredity	Chapter 18
July 27	Vitamins, Minerals and Additives	Chapter 19
	Poisons, Toxins, Hazards and Risks	Chapter 20
July 31	Exam #3	
August 1	Polymers and Plastics	Chapter 21
	Cosmetics and Personal Care	Chapter 22
August 2	Cosmetics and Personal Care (cont)	
	Medicines and Drugs	Chapter 23
August 3	Final Exam	

**In-Class Problem Sets:** Assignments will include problem sets, aimed at strengthening individual understanding of the course material. The problems found at the end of each chapter in your textbook are representative of the material in that chapter which the professor feels are the most important for the student to understand. These problems should be attempted in addition to those found throughout the chapter and are representative of typical types of questions and problems that will appear on examinations. The study of chemistry in this course will examine both qualitative and quantitative aspects. Problem solving will help strengthen and develop these skills.

**Laboratory Grade:** It is the policy of the Chemistry Department at Southern Connecticut State University that, to receive a passing grade in CHE 100, you **MUST pass the laboratory portion** of the course. A passing grade for the

laboratory portion of the course is 60%. This actual laboratory grade will be determined from lab reports and a notebook grade. Detailed information will be provided in the laboratory syllabus that will be distributed at the first laboratory session.

**Final Examination:** A final cumulative examination will be held on Thursday, August 3, 2006 (11:30 AM – 1:00 PM). This is a closed book examination and no additional tools with the exception of a calculator and a periodic table will be allowed. The final grade will be determined by the percentage of points obtained as described above. The actual grade will be based on the Southern Connecticut State University grading scale with possible adjustment for class average at the end of the semester (at the professor's discretion).

**Late/Missed Work:** There will be no make-up examinations except in the case of substantial illness (a doctor's note is required). **Prior notification** of missed lab sessions/assignments/tests is required in cases of illness. (Please notify the instructor as soon as possible).

**Attendance:** Regular and prompt attendance of scheduled classes and laboratory sessions is necessary for the student to derive the intended benefit of the learning experience the college strives to provide, and for the optimization of student academic progress.

**Laboratory:** The first laboratory session will be held on Monday, July 3, 2006. The chemistry department requires that everyone wear Safety Glasses while in the laboratory, beginning with the first laboratory. The proper safety glasses must meet OSHA regulations and can be purchased at the Southern Connecticut State University Bookstore or from a representative of the Chemistry Club. If you show up for any laboratory period without the proper safety glasses and clothing, you will **NOT** be allowed to perform the experiment and will receive a zero grade for that experiment. Additional information regarding the laboratory portion will be provided in the laboratory syllabus.

**Accommodating Students with Disabilities:** As a student with disabilities, before you receive course accommodations, you will need to make an appointment with the Disability Resource Office located in EN 15 to arrange for approved accommodations. However, if you have other information you would like to speak with me about, if you have emergency medical information to share with me, or if you need special arrangements in case the building must be evacuated, please make an appointment with me as soon as possible. My office is located in Jennings Hall (JE 343) and my office hours are listed on the first page. Every effort will be made to accommodate students in this course.

**Inclement Weather:** When inclement weather threatens, call the university's WeatherChek voice mail message line (203-392-SNOW) to hear the latest official information on possible delayed openings, class cancellations, or the closing of the university. In the event that an examination is postponed due to weather, the examination will be scheduled for the next class meeting. Quizzes/assignments will also be due the following class meeting.

**Academic Honesty:** Unfortunately, the question of academic dishonesty occasionally becomes an issue between an instructor and a student. The best way to avoid this is to be sure that no suspicion arises. **Cheating on exams, laboratory reports, quizzes or any other portion of this course will not be tolerated. The student handbook outlines the various prerogatives of the instructor in cases of academic dishonesty.**

**Additional Thoughts:** The student is challenged to put forth a maximum effort while preparing for this class. The student should read the appropriate text sections prior to attending class. It is also the case that your grade will not be based upon any claimed "need" which you may have. If you "need" a B in this course in order to gain admission into some program, then it is incumbent upon you, the student, to perform at the level that will fulfill the specific "need". It is not the professor's role to alter his or her evaluations of your work so as to take your "needs" into account. I have scheduled office hours that are dedicated to the students to ensure these difficulties are addressed.

There is no provision in this course to do work for "extra credit". It stands to reason that if a person is not performing adequately in the assigned tasks of a course, there is no point in giving that person "extra work". Requests to do work for "extra credit" will not be honored.