

“Fortunately, it is not important where someone starts the race, be it a community college or an ivy league university. Rather, it is what the person makes of himself or herself as a result of the experience.”

-Cheryl L. Shavers (*Journal of Chemical Education*, v76, April, 1999, p458)

“I am among those who think science has great beauty... A scientist in his laboratory is not only a technician: he is also a child placed before natural phenomena which impress him like a fairy tale. We should not allow it to be believed that all scientific progress can be reduced to mechanisms, machines, gearings, even though such machinery also has its own beauty.”

-Marie Curie (Madame Curie: A Biography, Curie, Eve, De Capo, 2001, p341)

“Teachers or textbooks best serve as catalysts, accelerating efforts of students to take ownership of a subject.”

-Dudley R. Herschbach (University Chemistry, Siska, Peter, Benjamin Cummings, 2005, foreword)

Course Goals

To build on the knowledge from General Chemistry I and learn advanced topics like properties of solutions, speed of reactions, chemical equilibria, acid-base chemistry, and electrochemistry. To continue your preparation both in lecture and in lab for a career in the sciences.

Materials

Chemistry, McMurray and Fay, 5th Edition
CHEM 1100 Lecture Notes, Earhart
spiral-bound notebook (this is a separate one for homework)
CHEM 1100 lab manual, Dr. Hennings
composition notebook (sewn-bound, this one is for lab)
Scientific Calculator
Chemical splash goggles

Calculator

A scientific calculator (one in which you can enter numbers in scientific notation) must be brought to all class periods (lecture and lab). Any of the TI-30 series of calculators (and similar) is sufficient. You may not borrow a calculator from me either for lecture or for any exams.

Prerequisite

CHEM 1090 or equivalent, or instructor's permission.

Contact Info

See the contact handout for my office phone and email addresses. If it's a critical message and I don't reply then I didn't get it and you need to resend it/call me again. This is your responsibility. If you don't include a proper subject in your email, you risk having it filtered as spam. Please do not leave homework questions on my voicemail. If you can't reach me by phone then use email.

Attendance

I will take it each day and keep track of any hours you miss. If you have less than three hours of absences during the quarter, I will add 1% to your total when I determine your final grade. For this purpose, I do not distinguish between an excused and an unexcused absence. If you are not in class when I take attendance, you will be marked as absent for the day.

Web Page

I keep a web page that has course handouts, chapter objectives, homework solutions, tutorials with random quizzes for a number of subjects, and more. All of the course handouts can be found on the web page.

Dimensional Analysis

Showing your work while solving a problem is a very important skill. I will discuss in class how you will be required to show your work. Certain methods will not be allowed. This is done to help you learn to organize your thoughts and approach both conceptual and mathematical problems logically and consistently.

Lab

You must complete all of the labs and turn in all of the reports or you will be given a failing grade for the overall course. More information about lab policies will be discussed during your first lab meeting.

If you are repeating the course, it has been no more than two years since you took it from SCC, and you earned at least a "C" in the lab while completing all of the assigned experiments, you may not have to repeat the lab portion of the course. Check with me for verification.

Homework

Each assignment is worth 5 points and is due by the beginning of the period on the scheduled exam day. **I will not take late homework for any reason.** The assignment is in each exam's objective page(s). If you fail to follow instructions given on the first day then you will earn a 0 for the assignment. I will drop your lowest homework grade. If you are given permission to take an exam early, then you must turn in your notebook when you take the exam.

You must work the assigned problems in either a spiral or similar notebook (one in which pages can not be added but **not a Mead Wireless™, a pad of paper, etc.**) with your name in large letters on the front, a table of contents on the first page, numbered pages, and this notebook must be dedicated **only** to homework problems. You must show all of your work including units for each problem where appropriate. **I will not accept homework that is taped, stapled, loose, etc. in your homework notebook.**

Quizzes

Each quiz will be at most 10 true/false questions, worth 10 points, and will be given during class. Any quizzes you miss (arrive late, leave early, absent, etc.) will result in a 0 for that quiz. I will drop your lowest quiz grade and **there are no makeup quizzes.** Use the exam objectives as a guide and do a simple reading of the chapter(s) in order to pick up key words and concepts.

I will inform you of your quiz scores (included on the returned exams) but I will not return them to you. You may see any of your quizzes during my office hours.

Lecture Exams

The exams have variable points and I do not drop any exam scores. Each exam will be given in two parts. The first part will be multiple choice, matching, definitions, and short answer. You will not be allowed to use a calculator on this part. **The first part will be returned for you to look at briefly but I will recollect it. You may see it during my office hours.** The second part will have calculations and other similar problems and once I return it, you may keep it. Once you start an exam, you must finish it and once you turn in the first part, you will not be allowed to return to it.

With the exception of any exam given on the last day of class and the comprehensive makeup exam, they will be returned to you within one week. I will not answer specific questions about an exam until 24 hours after it has been returned because this will give you time to try it yourself.

Exam Makeup Policy

There are no makeup exams. If you miss one exam (other than the book exam), you may take a comprehensive exam at the end of the quarter and this grade will be substituted for the missing exam. Any additional exams you miss will count as a zero.

Exams given during the last week must be taken at the scheduled time and location. I will not reschedule any exam during the last week because of vacation plans, spring break, etc.

Course Material

You are responsible for all the material in each exam objective regardless of how much I cover in lecture. The provided exam objectives clearly state your responsibilities. If you miss a lecture, it is your responsibility to get another student's notes.

Bonus Work

I don't give bonus work and I don't make exceptions to this rule. Please don't ask me to make an exception because the answer will *always* be "no".

Lecture Recording

I do not allow people to record my lectures unless they have documentation stating the need for it from the student services office.

Grading

Weighted as follows:

Lecture Exams	67%
Quizzes	4%
Homework	4%
Labs	25%
Total	100%

Letter grades will be assigned using the SCC scale: 95% A+, 90% A, 85% B+, 80% B, 75% C+, 70% C, 65% D+, 60% D. I do not curve the course.

I will not answer any questions about grades either over the phone or in email and I will not post grades. I will only discuss grades with you in-person. Make sure you know how to log in to WebAdvisor by the end of the quarter so you can retrieve your course grade online (my.southeast.edu).

Student Conduct

It is your responsibility to act professionally both in lecture and in lab. Repeated rudeness will result in your removal from lecture and lab and referred to either the Dean of Student Services or the Dean of Academic Transfer. You will not be allowed back into either lecture or lab until the Dean allows you to return.

Equal Opportunity/Nondiscrimination

The policy of Southeast Community College is to provide equal opportunity and nondiscrimination in all admission, attendance, and employment matters to all persons without regard to race, color, religion, sex, age, marital status, national origin, ancestry, veteran status, sexual orientation, disability, or other factors prohibited by law or College policy. Inquiries concerning the application of Southeast Community College's policies on equal opportunity and nondiscrimination should be directed to the Vice President of Access, Equity and Diversity, SCC Area Office, 301 S. 68th St. Place, Lincoln, NE 68510; Phone (402) 323-3412; FAX (402) 323-3420 or e-mail; jsoto@southeast.edu

Americans with Disabilities Act-Reasonable Accommodations

If you have a disabling condition that may substantially limit your ability to participate in this class, it is your responsibility to contact the Dean of Student Services at the SCC Campus, Beatrice - 402-228-8220, Lincoln – 402-437-2619, Milford – 761-8270 for additional information and assistance.

Academic Integrity

Academic Integrity is one of the basic principles of a college community. SCC encourages and expects the highest standards of academic honesty from all students. Please note that cheating, plagiarism, or other forms of academic dishonesty are monitored and subject to disciplinary action.

Electronic Devices

In the classroom **the use of cell phones** and personal electronic devices (e.g., laptop computers, Palm Pilots/organizers, Game Boys/ portable video games, iPods, MP3 players, etc.) that are not pre-authorized by the instructor for instructional purposes **is prohibited**. Violation of the expectation may lead to formal disciplinary action.

Firearms/Weapons Strictly Prohibited

SCC policy prohibits the possession of firearms, weapons, or fireworks on College property or at any College-sponsored event. Effective January 1, 2007, Nebraska State Statute 28-1202 makes it unlawful to carry a concealed handgun into a meeting of the governing body of a political subdivision, or collegiate athletic event; school, school grounds, school-owned vehicle, or school-sponsored activity or athletic event. These prohibitions apply to EVERYONE (employees, students, invitees, and visitors) and are enforceable EVERYWHERE (all college property and all college-related events.) Violations of these prohibitions will result in disciplinary and/or law enforcement action.

Grading Worksheet

Lecture Exams (8 total, 67% of total points)

Exam #	Max Points	Your Points	Letter Grade
1 (Ch 11)			
2 (Ch 12)			
3 (Ch 13)			
4 (Ch 14)			
5 (Ch 15)			
6 (Ch 16)			
7 (Ch 10)			
8 (Ch 4 & 17)			

Total Max Points:

Your Total Points:

Lecture Quizzes (8 total, 10 points each, drop the lowest, 4% of total course points)

Quiz #	Score		Quiz #	Score		Quiz #	Score
1			4			7	
2			5			8	
3			6				

Total Points Possible: 70

Your Total Points:

Homework (8 total, 5 points each, drop the lowest, 4% of total course points)

Homework #	Score		Homework #	Score		Homework #	Score
1			4			7	
2			5			8	
3			6				

Total Points Possible: 35

Your Total Points:

Labs (25% of total course points)

Your Lab Percent:

Grade Determination:

$0.67(\text{lecture exam \%}) + 0.04(\text{lecture quiz \%}) + 0.04(\text{homework \%}) + 0.25(\text{lab \%})$

or

$0.75(\text{total lecture \%}) + 0.25(\text{lab \%})$