

College Chemistry I

CHEM 1450, CRN 30173, 27559, 28254

Course Syllabus, Spring 2016

Instructor:	Dr. Kristin Dooley
Office:	Laney 201C
Phone:	(501) 450-5940
Email:	kdooley@uca.edu
Website:	http://faculty.uca.edu/kdooley
Office Hours:	M and F 8:00-10:00 AM T 10:50 AM -12:00 PM, 2:30-3:30 PM <i>other times by appointment</i>
Lecture:	TR 9:25 AM -10:40 AM (Laney-Manion 104)
Lab:	M 11:00 AM -1:50 PM (30173) (Laney-Manion 206) W 11:00 AM -1:50 PM (27559) (Laney 202) W 2:00 -4:50 AM (28254) (Laney 202)
Required Text:	<i>Chemistry: A Molecular Approach</i> (3 rd Ed.) by Nivaldo Tro
Required Materials:	calculator, goggles.
Lab Manual:	<i>No purchased lab manual is required for this course. You will be expected to download and print lab exercises prior to each lab.</i>

Course Description This course is required for chemistry, biology, and chemical physics majors, and for medical pre-professional tracks. This course will consist of lecture discussions as well as laboratory activities.

Prerequisite A C grade or better in high school chemistry (a full year course) with 2 units of high school algebra, or a C grade or better in CHEM 1301. Prerequisite of Math ACT of at least 21 or corequisite/prerequisite of MATH 1390.

Course Objectives The main objective in this course is to acquire a solid foundation in general chemistry by mastering skills in numerous topics that can be applied in further coursework. These topics include: chemical nomenclature, general reaction classifications, stoichiometric relationships in reactions, the interaction of energy and matter, periodic chemical and physical properties, as well as others.

Grading

- This course will be graded out of a total of 1000 points possible. The specific breakdown of points is given in the following table.
- Four **Exams** will be given throughout this course. The dates of these exams can be found on the Lecture Schedule. Date changes for exams will be announced at least 1 lecture meeting in advance of the test date. **No exam scores will be dropped.** *Exams that are missed will be made-up or replaced by your final exam grade only in cases of emergency or prior arrangement.* I am the final decision-maker as to whether an absence excuse is deserving of consideration. In most cases, this means an email or phone call as soon as possible after the conflict/emergency is discovered.
- **Quizzes** will be given on Tuesdays covering material from the previous week. Exceptions to this will be on Tuesdays directly following exams. Expect the quiz to include problems similar to the assigned homework. The quiz will be given during the first 10-15 minutes of lecture. One quiz grade will be dropped. There will be no make-up quizzes given.
- The **lab** for this course is meant to introduce you to experimental design and techniques and complement material covered in the course. You will receive a grade out of a possible 20 Points based on your performance at each lab meeting. This grade may consist of various combinations of points from participation, lab quiz, and lab sheets. Your lowest lab experiment grade will be dropped. More information about these assignments is explained later in the syllabus.
- **Assignments** of Chapter Problems will be given on a regular basis. Although I do not take up or grade these assignments, your quizzes will often contain a problem from the current assignment.
- The course's **final exam** will be comprehensive, and no portion of the final exam grade will be dropped.
- Grade disputes concerning scores on specific assignments or exams should be addressed promptly. After the assignment has been returned, the student has one week to bring the question to my attention. After that time, the grade on the assignment or exam will not be changed.

Point Distribution	Category:		Total Points:
	Hourly Exams	4 @ 100 Points Each	400
Quizzes	10 @ 20 Points Each	200	
Lab	10 @ 20 Points Each	200	
Final Exam	200 Points	200	
		TOTAL: 1000 Points	

Grading Scale **A: 895-1000 Points** **B: 795-894** **C: 695-794** **D: 595-694** **F: <594**

Grade Calculation

YOUR GRADE IN THIS COURSE SHOULD NOT BE A MYSTERY! I will return most of your graded work for you to keep. Your course grade can be easily calculated by hand at any point in the semester, and there are even a number of smart phone apps available that students in the past have used to keep up with their current grade. Periodically, I will print a list of your grades and current course average to make sure that we are both current.

Please see me if you have ANY questions about your grade or how to calculate it!!!

**Required
Materials**

This course requires a textbook, a calculator, and goggles. I do not require you to bring your text to class, and I do not mind if you choose to share textbooks or use an online copy. A calculator should be brought to every lecture and lab period as it will be needed for participation, quizzes, lab calculations, and especially exams. Cell phone calculators will not be allowed on quizzes or exams. Calculator sharing during exams or quizzes will not be permitted. Goggles must meet the ANSI Z.87 standard for laboratory eye safety.

Office Hours

To use my office hours most effectively, try to identify the specific point in lecture where you got confused, the homework problem you can't solve, or the exam/quiz question you missed before you come. This will make the best use of this time. If you cannot make my office hours, set up a time when you can come.

Course Schedule

*This is a tentative schedule. Exam dates and content are subject to adjustment.

Jan	7	R	Syllabus, Chapter 1.1-1.1.5
	12	T	Chapter 1.6-1.8
	14	R	Finish Ch 1, Chapter 2
	19	T	Chapter 2
	21	R	Chapter 3
	26	T	
	28	R	
Feb	2	T	Exam 1: Ch 1, Ch 2, Ch 3
	4	R	Chapter 4
	9	T	
	11	R	
	16	T	
	18	R	Chapter 5
	23	T	
	25	R	Exam 2: Ch 4, Ch 5
Mar	1	T	Chapter 7
	3	R	
	8	T	
	10	R	Chapter 8
	15	T	NO CLASS: ACS MEETING
	17	R	Chapter 8
	22	T	NO CLASS: SPRING BREAK
	24	R	NO CLASS: SPRING BREAK
	29	T	Chapter 6
	31	R	Exam 3: Ch 7, Ch8
Apr	5	T	Chapter 6
	7	R	Chapter 9
	12	T	Chapter 9/10
	14	R	
	19	T	Exam 4: Ch 6, Ch 9, Ch 10
	21	R	
Tuesday, April 26, 8:00-10:00 AM COMPREHENSIVE FINAL EXAM			

Lab Schedule

*This is a tentative schedule. Dates and content are subject to change.

Date			Topic/Lab Title
	M	W	
Jan	11	13	Safety/Measurements
	18	20	NO LAB: MLK Holiday
	25	27	Density
Feb	1	3	Separation Techniques
	8	10	Hydrates
	15	17	Stoichiometry Practice Problems
	22	24	Types of Chemical Reactions and Equations
Feb/Mar	29	2	Acid/Base Titrations
	7	9	Gas Laws
	14	16	Atomic Emission and Molecular Absorption Spectra
	21	23	No Lab! Spring Break
	28	30	Trends (Dry Lab)
April	4	6	Thermodynamics
	11	13	Molecular Geometry and Bonding
	18	20	Molecular Geometry and Bonding

Lab Participation You will work with at least 1 partner in lab, but it is required that each group member actively participate in each activity. Passive participation will not be tolerated.

It is each student's responsibility to read the lab material **before** coming to lab that day. The student should have a working understanding of the hazards and the procedure. Most of the lab packets will include a Pre-Lab assignment. It is in the student's best interest to complete this assignment prior to lab as it will aid in enhancing the overall lab experience.

Lab Material You will not need to purchase a lab manual for this course. All of the documentation you will need for each experiment can be found online in the lab materials tab of my website. You are expected to print each document in its entirety and bring the packet with you to the lab period. Lab forms should be printed one page per sheet, in Portrait orientation. Lab forms not printed correctly will not be accepted or graded.

Lab Grades Each lab experiment will be graded out of a total of 15 points. The distribution of these points will be explained in lab, and may change on an experiment by experiment basis.

Pre-Lab Assignments Pre-lab Assignments are due **before** the lab experiment begins. In some cases, portions of the pre-lab will be completed once the lab period starts. Late or incomplete pre-labs will result in a loss of the points allotted to them. Unless otherwise stated, assume that the pre-lab assignment includes all of the problems given in that section of the lab activity.

The point of a pre-lab assignment is to ensure that each student who enters the lab is prepared for the day's procedure. An unprepared student is a poor lab partner as well as a safety hazard. If I feel that this assignment is proving to be ineffective at preparing the class for the lab, I will replace this assignment with an alternate assignment such as a pre-lab quiz.

Lab Safety The Chemistry Department's Safety Agreement must be completed **BEFORE** you will be allowed to work in the lab.

I take lab safety very seriously. For each instance of improper lab safety, 5 points will be deducted from your score on the current experiment. The most common example of this is removing goggles from your eyes onto your forehead. More about lab safety will be covered at the first lab meeting.

Classroom Policies

- Attendance:** Students who regularly miss class are rarely successful. It is the student's responsibility to obtain the information/assignments/handouts covered during an absence. An outline of the course schedule is attached to this syllabus. You should obtain specific notes of from missed lectures from a classmate.
- Academic Honesty:** Cheating and plagiarism are not tolerated! The penalties for cheating will be severe. (See University Policies, below.)
- Makeup Policy:** There will be no makeup labs or quizzes given, barring an extreme circumstance. Exams will only be made up at my discretion if prior arrangements with me through email or in person as soon as you know you will miss an exam. In some cases, rather than a make-up exam, your grade on your final exam may replace the missed exam score.
- Disruptions:** Electronic devices should be silenced during class. Texting and other social interactions during class are disrespectful to your classmates and will not be tolerated. Students engaged in these activities will removed from the lecture, and will not be given credit for a quiz/exam given during that lecture period. After three warnings, a student will be assigned a WF in the course.

University Policies

- Americans with Disabilities Act** The University of Central Arkansas adheres to the requirements of the Americans with Disabilities Act. If you need an accommodation under this Act due to a disability, please contact the UCA Office of Disability Services, 450-3613.
- Academic Integrity** The University of Central Arkansas affirms its commitment to academic integrity and expects all members of the university community to accept shared responsibility for maintaining academic integrity. Students in this course are subject to the provisions of the university's Academic Integrity Policy, approved by the Board of Trustees as Board Policy No. 709 on February 10, 2010, and published in the Student Handbook. Penalties for academic misconduct in this course may include a failing grade on an assignment, a failing grade in the course, or any other course-related sanction the instructor determines to be appropriate. Continued enrollment in this course affirms a student's acceptance of this university policy.
- Course Evaluations** Student evaluations of a course and its professor are a crucial element in helping faculty achieve excellence in the classroom and the institution in demonstrating that students are gaining knowledge. Students may evaluate courses they are taking starting on the Monday of the twelfth week of instruction through the end of finals week by logging in to myUCA and clicking on the Evals button on the top right.
- Emergency Procedures** An Emergency Procedures Summary (EPS) for the building in which this class is held will be discussed during the first week of this course. EPS documents for most campus buildings are available at <http://uca.edu/mysafety/bep/>. Every student should be familiar with emergency procedures for any campus building in which he/she spends time for classes or other purposes.
- Other Policies** Students are encouraged to familiarize themselves with all policies included in the Student Handbook, particularly the Sexual Harassment Policy, and all Academic Policies.
-
-

