CH 1060 General Syllabus
Spring 2016
Chemistry Department
Clemson University

Look for news and information on the General Chemistry website. You can access our home page through the Chemistry Department site at www.clemson.edu/chemistry (go to “Academics,” then “Undergraduate Courses,” then “General Chemistry”) or directly via http://www.clemson.edu/ces/chemistry/genchem/Courses/CH1060.html. Course objectives, exam information including dates and lab information are posted on this site.


Homework: Access to Sapling Learning on-line homework system. Instructions for the registration process can be found on the blackboard webpage.
- You may purchase access for a single semester (if you plan to take only CH 1050) or for two semester(s) (if you are required to take both CH 1050 and CH 1060) directly from Sapling Learning. Alternatively you may buy an access code through the Clemson University bookstore.

Lab Manual: Will be posted on-line blackboard in the first week of school by Dr. Barbara Lewis.

Tiger Stripe Card: Needed for equipment checkout and breakage in lab (need carbon copy notebook, labcoat and goggles).

Course Objective: The objective of this course is to provide an understanding of how human activities influence both local and global environment. Graduates will demonstrate sufficient knowledge of natural laws and processes to understand environmental and health issues of common interest.

Recommended Prerequisite Courses: None.

While there are no prerequisites, this is an introduction to chemistry class, so you should be able to perform some of the following operations. Some of these will be reviewed briefly, but if you cannot do these, you should work especially hard now, or consider delaying Chemistry until you build your foundation. This background knowledge is expected on all exams.

- Use mathematical terms and equations including: algebra, exponential numbers, logarithms, ratio and proportion.
- Use significant numbers.
- Convert between English and metric (SI) units.
• Make and read graphs.
• Interpret word problems.

**Course Grade:** There will be no makeup exams or quizzes for any reason other than those sanctioned by the university.

**Grading:** The final score will be based on the laboratory grade (comment 1), three exams (final exam included), class quizzes, assignments (homework, in-class-activities, etc.), your paper and the class trip participation. Course grades will be apportioned as shown below:

- Laboratory (comment 1) 25%
- Exams 30% (Exam 1: 15%; Exam 2: 15%)
- Final Exam 20%
- Homework, quizzes 15% (lowest 2 score quizzes will be dropped)
- Paper 8% (Electronic submission) and Power Point group presentation
- Trip to the “World of Energy” 2% (at Oconee Nuclear Power Plant)

**Total** 100%

Comment 1: You must be registered for a laboratory section. If the lab is not completed (more than one unexcused absence or uncompleted lab), a grade of F will be assigned in the course.

**Grading Scale:** Final grades will be assigned on the following average score range:

- 90% through 100%   A
- 80% through 89%    B
- 70% through 79%    C
- 60% through 69%    D
- below 60%          F

An exam will be given after every two chapters. The final exam will consist of chapters 11 and 12 only with some questions from the paper presentation and class trip included. The topics to be covered are those stated below.

- Chapter 7 - The Fires of Nuclear Fission
- Chapter 8 - Energy from Electron Transfer
- Chapter 9 - The World of Polymers and Plastics
- Chapter 10 - Manipulating Molecules and Designing Drugs
- Chapter 11 - Nutrition: Food for Thought
- Chapter 12 - Genetic Engineering and the Molecules of Life
- Group work may be assigned in class throughout the semester. Groups should contain about 2-4 people that will discuss the assigned questions and pass in one answer for the whole group.

- After mid-term, a 2-3 page paper of a news event involving a topic in green science from chapters 7 through 12 will be due by groups of 2-4 students followed by group presentation and peer evaluation. The paper and Power Point presentation will count 8% of the final grade.

- Trip to the “World of Energy” at Oconee Nuclear Power Plant will count 2% of the final grade.

- The final grade will be determined using the rubric above.

**Course Assignments:** These assignments (quiz, homework, and other tasks) are designed for your benefit. Although only a relatively small portion of the class grade (15% total) comes from these activities, they are probably the most important aspects of the course. The assignments are designed to give both you and me feedback on how you are doing in the course. Work the problems; drill and practice will enhance your understanding of the material as well as your performance in the course.

**Quizzes:** There will be announced, graded quizzes given after every chapter. There will be at least six quizzes during the course of the semester. Previous experience shows that the more opportunities you have to practice, the better you do on the exams. You will be allowed to drop the lowest two of these quiz grades. There will be absolutely NO MAKE-UP QUIZZES!

**Studying and Responsibility:** If you do all the assigned work and keep up with the material you will find this course to be interesting and rewarding. If not, you will find that the course quickly becomes incomprehensible. You must try to keep up; it is very difficult to recover once you get behind with the material. The work in this course is university level: it is not enough to recall facts and definitions and solve simple problems. The goal of this course is for you to understand chemical processes on the molecular level so that you can understand and discuss the issues we face in our society today. Mastering the material means that you understand chemical concepts and can solve complex problems by transferring the knowledge you gained to solve unique problems that are related to those difficulties plaguing our world today.

**Laboratories:** Labs will begin the week of January 18, 2016. You must be scheduled for a laboratory section even if you are repeating the course.

- A schedule of laboratory experiments and laboratory exams will be issued by your lab instructor, and can be found on the Clemson Department of Chemistry Web site, URL: http://www.clemson.edu/ces/chemistry/genchem/Labs/CH1061.html
• Safety goggles must be worn at **ALL** times while in the laboratory. Safety goggles may be purchased during the first week of labs from the Chemistry Graduate Student Association. Notices will be posted as to places and times when goggles will be offered for sale. If you purchase goggles from other sources please note that they must be chemical splash goggles that meet ANSI Z87.1 standard safety code.

• If you are repeating the course, but completed lab with a grade of 75 or above, you may exempt lab and let your previous lab score count in computation of your overall class grade. Please see me if this is the case.

**Attendance Policy:** In order to get the most from any course, each student should attend all scheduled classes. If late, please enter the room quietly. If you miss class, get notes from another student ASAP. **If it becomes apparent that you are not attending class (you have missed more than two lectures without discussing with me what is going on with you) then you may be dropped from the course.**

**Important Notes**

**Exams 1 & 2 are given in the regular class time / room. You must bring your Clemson Student ID card. Put the dates and time on your schedule. BRING YOUR OWN CALCULATOR.**

1. All exams should be considered comprehensive for the chapters covered.

2. No makeup exams will be given for any reason unless sanctioned by the university. Students who have conflicts with official university functions must see me by **MONDAY, January 18, 2016.** Check your commitments to NCAA sports programs, ROTC, or other university groups. **Pay particular attention to the time of the Final Exam.** Students are expected to resolve travel schedule conflicts and attend the Final Exam. **If you miss the Final Exam a grade of zero will be recorded.**

3. For an excused absence on any major exam, the weight for that exam will be applied to the Final Exam (this is the fairest way to handle absences for everyone concerned, including the absent student). Excused absences include documented student illness and family emergencies. If the Final Exam is missed for an excused absence (identified before the time of the final), the student will receive an Incomplete (I) grade in the course and they will be required to make up missed work within 30 days of the beginning of the following semester.

4. If errors occur with your exam grade, see your instructor. NOTE: Most grade problems are due to poor erasures, not using a #2 pencil, poorly filled out answers, I.D. number, section number, etc. Each exam will cover the material listed in the objectives posted on the class web site, or as modified in class. Attempts will be made to cover most of these in class. Covered or not, these objectives will be subject to examination; use your textbook often. Stay at least one half of a chapter ahead by reading the text and working the assigned problems.
5. Resolve Final Exam scheduling issues before finals week. A student who has more than two exams in one calendar day may request that one of the exams be taken at a different time. The registrar has established a priority as to which course must provide an alternative exam time. See the registrar’s webpage for additional information, http://www.registrar.clemson.edu/html/examSched.htm

6. Cancelled lectures: If I am more than 15 minutes late, do NOT assume that the lecture will be canceled for the day. If I am unexpectedly held up, someone from the chemistry department will arrive with instructions on what to do. However, you are still responsible for the material that would have been reviewed during this period. It would be to the student's advantage to use this period reading the missed material from the current chapter.

7. The last day to drop the course without a final grade is Friday, March 11, 2016.

Attendance Policy

If you miss more three TTh classes including exams without a valid excuse you may be dropped from the course. The university attendance policy can be found on pages 29-30 of the 2015-2016 Undergraduate Announcements. MyCLE (mycle.clemson.edu) should be used to notify instructors of an absence from class, whether anticipated or unanticipated. A brief explanation should be included in the notification along with dates and times of the absence. This notification does not serve as documentation of an excused absence. In case of an emergency, it is the responsibility of the student to make direct contact with his/her instructor preferably before a class or exam takes place.

Academic Integrity Policy

"As members of the Clemson University community, we have inherited Thomas Green Clemson's vision of this institution as a "high seminary of learning." Fundamental to this vision is a mutual commitment to truthfulness, honor, and responsibility, without which we cannot earn the trust and respect of others.

This course will be conducted utilizing the concepts embodied in the Honor System. Appropriate action will be taken against those found to be in violation of the Honor System. I understand the level of stress felt by students, especially first-year students attempting to get adjusted to college life. If you are having difficulties, please see me or a student councilor rather than be tempted to cheat. Dishonesty will not only detract from the value of your education, it may result in severe consequences. Refer to the Clemson Student Handbook for more information.

When, in the opinion of a course instructor, there is evidence that a student has committed an act of academic dishonesty, that instructor will make a formal written charge of academic dishonesty to the Associate Dean of Undergraduate Studies.
Accommodations for Students with Disabilities

Student Disability Services (SDS) coordinates the provision of reasonable accommodations for students with physical, emotional or learning disabilities. Accommodations are individualized, flexible and confidential based on the nature of the disability. Students with disabilities requesting accommodations should make an appointment with Dr. Margaret Camp, Director of Disability Services, to discuss specific needs within the first month of classes. Students should present a Faculty Accommodation Letter (FAL) from Student Disabilities Services when they meet with their instructor. This meeting should take place within the first month of class and at least one week prior to the first exam. Student Disabilities Services is located in Suite 239 Academic Success Building (656-6848); sds-l@clemson.edu. Please be aware that accommodations are not retroactive and new FALs must be presented each semester. Details on policies and procedures are available at www.clemson.edu/campus-life/campus-services/sds.

Clemson University Title IX Statement

Clemson University is committed to a policy of equal opportunity for all persons and does not discriminate on the basis of race, color, religion, sex, sexual orientation, gender, pregnancy, national origin, age, disability, veteran’s status, genetic information or protected activity (e.g., opposition to prohibited discrimination or participation in any complaint process, etc.) in employment, educational programs and activities, admissions and financial aid. This includes a prohibition against sexual harassment and sexual violence as mandated by Title IX of the Education Amendments of 1972. This policy is located at www.clemson.edu/campus-life/campus-services/access/title-ix/. Mr. Jerry Knighton is the Clemson University Title IX Coordinator. He also is the Director of Access and Equity. His office is located at 111 Holtzendorff Hall, (864) 656-3181 (voice) or (864) 565-0899 (TDD).

DISCLAIMER

Circumstances may require some changes to this syllabus during the conduct of the course.