CH 1050 General Chemistry Syllabus  
Fall 2017  
Clemson University  
Chemistry Department

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 www.clemson.edu/chemistry/genchem. Course objectives, exam information including dates and lab information are posted on this site.


- The soft cover text book is available in the Clemson bookstore, or you can buy an e-book version for the duration of the semester from the hw website, or you may be able to find a used version on the internet.

**Homework:** Access to Sapling Learning on-line homework system. Instructions for the registration process can be found both on our General Chemistry homepage, where the General Syllabus for CH 1050 is, and on the Canvas site.

- You may purchase access for a single semester (if you plan to take only CH 1050) or for two semester (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 Mr. B. 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 by using the general principles of chemistry. 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:** This average score will be based on the laboratory grade (comment 1), three exams (final exam included), class quizzes, assignments (homework, in-class-activities, etc.), and your paper. 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%
- Paper 10% (Electronic submission) and Power Point group presentation

**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), your grade will be reduced dramatically.

**Grading Scale:** Final grades will be assigned based 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

Exams will be given after every two chapters. The final exam will consist of chapters 5 and 6 only with some questions from the paper presentation included. The topics to be covered are those stated below:

- Chapter 1 - The Air We Breathe
- Chapter 2 - Protecting the Ozone Layer
- Chapter 3 - The Chemistry of Global Climate Change
- Chapter 4 – Energy from Combustion
- Chapter 5 - Water for Life
- Chapter 6 - Neutralizing the Threat of Acid Rain and Ocean Acidification

Group work may be assigned in class throughout the semester. Groups should contain around 4 people that will discuss the assigned questions and pass in only one answer.
• After mid-term, a group 2-3 page summary of a news event involving a topic from the chapters 1 through 6 will be due followed by a group power point presentation

• The news event summary will count 10% of the final grade

• The final grade will be determined using the rubric above

Course Assignments: These assignments (quizzes, homework, and other assignments) 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 each 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. The quizzes will be similar in style to the exams and will complement the homework problems assigned. 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 plaguing our world today.

Laboratories: Labs will begin the week of September 4, 2017. 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/CH1051.html](http://www.clemson.edu/ces/chemistry/genchem/Labs/CH1051.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 from the point of view of general principles of chemistry; previously covered material will be tested.

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, September 4, 2017**. 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. Should a student be unable to take a scheduled exam due to an emergency situation, the student should contact his/her instructor as soon as possible, providing documentation of the emergency. For an excused absence, the student has two options as to making up the missed work. It is the student’s responsibility to notify her/his instructor within one week of his/her return to class as to which option the student chooses for making up the exam. Option 1 is recommended by the Chemistry department.
   a. **Option 1:** Allow the score from the Final Exam to replace the missed exam score. Essentially, the missed exam score is treated as the student’s lowest score and handled as per comment 2 above.
   b. **Option 2:** Take a make-up exam that is scheduled for Friday December 15 at 9:00 a.m. This exam will be a mix of multiple choice and fill-in-the-blank questions and will cover material similar, but not identical, to that of the missed exam. A student who chooses this option is not eligible for the exam replacement policy detailed in comment 2 above.
   c. Should you be unable to take the final exam due to an emergency situation contact your instructor prior to the exam time, providing documentation. A make-up will be scheduled and the student will receive an Incomplete (I) grade in the course.
The expectation is that the make-up exam will be completed within 30 days of the beginning of the spring 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 only the material studied in the class. Attempts will be made to cover most of the relevant objectives 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 October 31, 2017.

Attendance Policy

If you miss more than three TR classes or four MWF classes including exams without a valid excuse you may be dropped from the course. The university attendance policy can be found on pages 27-28 of the 2017-2018 Undergraduate Announcements (https://www.registrar.clemson.edu/publicat/catalog/2017/2017catalog.pdf). Email (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. Furthermore, we recognize that academic dishonesty detracts from the value of a Clemson degree. Therefore, we shall not tolerate lying, cheating, or stealing in any form."
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**

Clemson University values the diversity of our student body as a strength and a critical component of our dynamic community. Students with disabilities or temporary injuries/conditions may require accommodations due to barriers in the structure of facilities, course design, technology used for curricular purposes, or other campus resources. Students who experience a barrier to full access to this class should let the professor know, and make an appointment to meet with a staff member in Student Accessibility Services as soon as possible. You can make an appointment by calling 864-656-6848, by emailing studentaccess@lists.clemson.edu, or by visiting Suite 239 in the Academic Success Center building. Appointments are strongly encouraged – drop-ins will be seen if at all possible, but there could be a significant wait due to scheduled appointments. Students who receive Academic Access Letters are strongly encouraged to request, obtain and present these to their professors as early in the semester as possible so that accommodations can be made in a timely manner. It is the student’s responsibility to follow this process each semester. You can access further information here: [http://www.clemson.edu/campus-life/campus-services/sds/](http://www.clemson.edu/campus-life/campus-services/sds/). Please be aware that a new Academic Access Letter must be presented each semester. These letters are not retroactive and do not take effect until the letter is presented to the instructor.

**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/](http://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).

**Final Comment on Learning Chemistry.**

Learning chemistry can be a challenge because you are confronted with a new language (terminology and symbolism) and you must synthesize new ideas while integrating your previous understanding of basic math and science. Success is a matter of exposure and practice, as any successful chemistry student will tell you. Take advantage of all
opportunities provided for your study of chemistry: the text, lecture, computer software, lab, help sessions, and office hours with your instructor. Study of your text and attention in class will be most effective if you work with chemistry in small sessions, as opposed to "cramming" right before an exam. Do not expect that just because you go to class and listen that you are learning. You must explore chemistry and its role in our society on your own to make the subject a part of your working knowledge.

DISCLAIMER

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