Chemistry 111, Principles of Chemistry – Fall 2015
Sections 3A and 3B, Linked Learning Community to Bio 111

Instructor: Dr. Amy Rogers
Class Time: MWF 9:00 am - 9:50 am
SSMB 127
Office: School of Science and Math Building, Room 308
Phone: 953-7292
Email: rogersaL@cofc.edu
Office Hours: Thursdays 10:00 – 12:00

Learning Outcomes:

1. Students apply physical/natural principles to analyze and solve problems.
2. Students explain how science impacts society.

The general education learning outcomes will be assessed in the second course of the natural science sequence, Chem 112/112L.

Chem 111 Learning Outcomes

· Explain the definition of chemistry and employ scientific method
· Express common mathematical techniques in the solving of chemistry problems
· Understand the role of the atom in chemistry
· Distinguish, classify, and explain the properties of compounds
· Recognize and explain the fundamental nature of chemical reactivity
· Differentiate and describe the principles of the phases of matter

After completing this course, you should have a strong foundation for upper-level courses in the Chemistry Department. We hope also that as part of this learning community that you will understand better the connections between the study of chemistry and how it relates to biology.

First Year Experience goals:
- Identify and use the appropriate academic resources and student support services at College of Charleston. These would include the Addlestone library, information technology, the Center for Student Learning, the Career Center, and other appropriate academic resources, student support services, and cultural resources.
- Use appropriate tools and search strategies for identifying particular types of information specific to the discipline. Evaluate the relevance, quality, and appropriateness of different sources of information. Recognize and classify the information contained within a bibliographic citation. Access and use information ethically and legally.
- Use appropriate critical thinking skills and problem-solving techniques in appropriate disciplinary contexts. Make connections across disciplines and/or relevant experiences.

Co-requisite: Chemistry 111 Lab, which is a separate one-hour course.

Calculator: You will need a calculator for class and exams. You will need to bring this calculator to class.
Texts:
1) Required: Chemistry: Atoms First 2nd Ed. (McGraw-Hill) by Burdge and Overby. Chemistry 112, the next course in the Chemistry sequence, will cover the remaining chapters in the book. Do not sell your text at the end of the semester if you are continuing on to Chem 112.
2) Optional: Problem-Solving Workbook with Selected Solutions to accompany Chemistry: Atoms First (El-Ashmawy and Richardson) available from Amazon.
3) Required: Max, D. T., The Family that Couldn’t Sleep: A Medical Mystery (Random House). This text is available online (Amazon, Barnes and Noble, etc.).

Course Materials: Course materials will be available to students on OAKS. You will need to print lecture notes and problems sets prior to coming to class. The best use of our time together is when you are following along in the notes and working examples/problems with me.

Learning and Assessment:
LearnSmart: If you purchased your textbook through the bookstore, it came with access via Connect to LearnSmart, which is the semester-long version of the LearnSmart Prep you completed this summer. This tool adapts the questions it asks you based on your correct or incorrect answers to help you identify the topics you are struggling with and therefore need more practice on. The assignments in LearnSmart cover simple one-step questions, focusing on the fundamental aspects of the material. After you have completed the LearnSmart assignment for each chapter, you will be ready to tackle the problems assigned from the problem sets and textbook (see below) to build on those fundamental skills.

To log onto LearnSmart and find the assignments for our course, follow this URL and log in with the same account you used this summer to complete your LearnSmart Prep assignment: https://connect.mheducation.com/class/a-rogers-chem-111-lc-3a-and-3b-fall-2015 (If you opted not to buy the textbook, you can use this URL to purchase access to ConnectPlus, which includes both LearnSmart access and the digital version of the textbook.) The due dates for each assignment are displayed when you log in, so be sure to make a note of when the assignments are due and log in frequently to see new assignments. Your grade is based on your percent completion of each assignment at its deadline.

Additional Problem Sets:
The key to success in this class is doing chemistry problems again and again. If you are not working out problems every single day, you will not do well in this class.

You will be expected to work through problem sets assigned as well as the end-of-chapter questions. These will not be graded or collected. Nonetheless, they are the key to your success. You will need to bring these problems to every class so we can learn through problem-solving.

Attendance: I do not take attendance in class but I will know when you miss. I provide all PowerPoint slides on OAKS but these notes are not intended to be the only material I discuss in class. Therefore, if you choose to miss class, it is your responsibility to find a classmate who will share their notes with you. And please do not come to me when you miss class and expect me to redo the entire lecture you missed.

Hourly Exams
The following are tentative dates for the exams. These dates are subject to change.
- Friday, September 18
- Monday, October 12
- Friday, November 13
- Monday, December 7
**Final Exam:**  Monday, December 14, 8:00 am. Your final is a standardized exam written by the American Chemical Society. It is a **TIMED, multiple choice** test. You will have 110 minutes to complete the 70 multiple-choice questions.

**Makeups:** There are NO makeup tests. An unexcused absence on the day of an exam will result in a zero on that exam. If you have an **excused** absence documented by the Dean of Undergraduate Studies that I find plausible, your remaining test scores will all be weighted equally and more heavily towards the final course grade to compensate for the missed exam. If you are going to miss an exam, **notify me ahead of time** by phone message or by email.

**Supplemental Instruction and Tutoring:** This learning community will have an SI for the course that is responsible for provide additional instruction of the chemistry content. Our SI will be Travis Varner. Travis will be arranging a variety of times when he will be available to work through problems with you. Your attendance is highly suggested. Data has shown that students who attend regularly do better in the course. Also, tutoring at the Center for Student Learning in chemistry is available to students at no cost. The hours of the walk-in science tutoring room are available online (http://csl.cofc.edu/labs/).

**Synthesis Seminar (SS):** Because this class is part of the First Year Experience Program, participation in the synthesis seminar is mandatory. Your participation in this seminar will count towards your grade in this course.

The SS will meet in ECTR 111 at 4:05 or 5:05 on Thursday (please check your schedule). Your Peer Facilitators for the Synthesis Seminars are Alex Faust and Haley Thornton.

Your attendance at SS will count as 2% of your grade in this course. These are the easiest points you will earn in your college career. Enjoy this gift to you and your grade. You will be allowed to miss one SS session without penalty to your attendance grade. For each absence after that, you will lose 15% of the attendance points. You will not be able to earn FYE credit if you miss more than four SS. The assignments in the SS are worth 5% of your overall grade. These assignments include a library project, a computer program assignment, a personal statement, and a paper on the book *The Family That Couldn’t Sleep* that will involve your doing some library research.

**Service Activity:** Details will be announced during class. You must sign a waiver to participate in this off-campus activity. If you are under the age of 18, your parents must sign a waiver for you. The service event is Beach Sweep on September 19, 2015.

**Deportment Grade:**
To maintain a classroom environment that is conducive to learning, I expect certain behavior from students in my classes. Students that text, chatter, giggle, sleep, whisper, whine, arrive late, leave early, or come unprepared are disrupting their fellow students’ learning experience. 10% of your grade is a deportment grade that will contain some subjective grading as well as grades in the form of quizzes. I don’t want to notice anything about you in class other than your attentiveness or your thoughtful, polite questions. At some point in your career as a College student you will be requiring oral or written recommendations from your professors here. In all of your courses, you should start behaving like the ideal student you want us to write about. This is another gift to you and your grade.
Grading:
Your final grade will be calculated by the following formula:

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<td>Final Exam, ACS</td>
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<td>Deportment/Quizzes/LearnSmart</td>
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<td>Synthesis Seminar Attendance</td>
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Important Dates to Remember:
- Aug. 25: First day of classes
- Oct. 19-20: Fall Break – No class
- Oct. 29: Last day to withdraw from classes with grade of “W”
- Nov. 25-27: Thanksgiving Break
- Dec. 7: Last day of class
- Dec. 14: Final Exam

Academic Dishonesty:
Cheating will not be tolerated in this course. The following description of cheating is from the student handbook:

“the actual giving or receiving of unauthorized, dishonest assistance that might give one student an unfair advantage over another in the performance of any assigned, graded academic work, inside or outside of the classroom, and by any means whatsoever, including but not limited to fraud, duress, deception, theft, talking, making signs, gestures, copying, electronic messaging, photography, unauthorized reuse of previously graded work, and unauthorized use or possession of study aids, memoranda, books, data, or other information. The term cheating includes engaging in any behavior specifically prohibited by a faculty member in the course syllabus or class discussion.”

For this course, entering formulas into a calculator to be used during an exam will be considered as an act of premeditated cheating.

Students that cheat and are then prosecuted through the Honor Board receive a grade of XF. This does not look good to all future employers and graduate programs. It is infinitely better to get an F than an XF.

Disabilities: If there is a student in this class who has a documented disability and has been approved to receive accommodations through SNAP Services, please feel free to come and discuss this with me during my office hours.