Welcome to the first semester of general chemistry at the College of Charleston. This course will be fast-paced and challenging, but I am confident that with hard work you will do well and enjoy the topics that we cover together. Please keep in mind that chemistry is a cumulative subject. You will continue to be responsible for the information we cover for any future semesters of chemistry that you take. If you have questions about the material or are struggling, please contact me. I have weekly office hours and want you to succeed, but I cannot help you if you do not let me know that there is a problem. I look forward to our semester together!

Course description: An introductory course in chemistry emphasizing theoretical aspects and designed primarily for students who intend to take one or more additional courses in chemistry.

Course Co- and Pre-requisites: Chem 111L is a co-requisite for this class. If you drop the lab, you must drop this lecture class. Unless exempt via diagnostic testing, Math 111 is also a pre/co-requisite for Chem 111.

Student Learning Outcomes

- Describe how to employ the scientific method
- Solve chemistry problems by employing mathematical techniques and chemical reasoning
- Understand how atoms interact covalently and non-covalently to form molecules and compounds
- Identify the properties of compounds
- Employ an understanding of chemical reactivity to analyze chemical reactions

General Education Learning Outcomes: General Education Learning Outcomes are assessed in the second semester of the Science Gen Ed sequence, Chem 112L.

- Students apply physical/natural principles to analyze and solve problems.
- Students will develop an understanding of the impact that science has on society.

Required Materials:

- Textbook: Chemistry: Atoms First, third edition, by Julia Burge and Jason Overby (can use electronic version, which comes with purchase of online access via Connect)
- Online access: You must purchase online access to Connect for this class. Homework will be given through this website. To access the site and register, use the following link: http://connect.mheducation.com/class/barker-spring-2018
- Non-programmable calculator: Bring a non-programmable scientific calculator that can perform exponential and logarithmic functions to every class. Programmable (ie graphing)
calculators will not be permitted on quizzes or exams. You may not share a calculator, and a cell phone is NOT an acceptable option. Examples of acceptable calculators: TI-30X, TI-34

**Recommended Materials:** Several copies of the booklet “Preparing for your ACS exam in General Chemistry: The official guide” are available at the library on reserve, or you may purchase your own copy online. The bookstore also has copies of *Prep for Success in Chemistry* by Sorge, which contains other practice problems.

**Supplemental Instruction:** Supplemental instruction will be provided by Ian Larson, email larsonij@g.cofc.edu More information on the supplemental instruction program is available at http://csl.cofc.edu/supplemental-instruction/

**Course topics:** We will cover Ch. 1-11 of the textbook.

**Important Dates:**
- Jan. 8: First day of classes (Jan. 9 for us)
- Jan. 16: Last day to drop/add course
- Jan. 23 at 11pm: Due date of Aleks Prep
- Mar. 6: Midterm grades available
- Mar. 13: Last day to withdraw with a W
- Mar. 18-24: Spring break; no class
- Apr. 19: Our last day of class (officially Apr. 23)
- Sat. Apr. 28 at 4:00pm: Final exam

**Exam dates:** Please note that these dates are tentative and subject to change!
- Exam 1: Thursday, Feb. 1
- Exam 2: Tuesday, Feb. 27
- Exam 3: Thursday, Mar. 29
- Exam 4: Thursday, Apr. 19
- Final exam: Saturday, April 28 at 4:00pm

**Grading Scale:**

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<tr>
<th>Grade</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>A</td>
<td>93.0-100</td>
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<tr>
<td>A-</td>
<td>90.0-92.9</td>
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<tr>
<td>B+</td>
<td>87.0-89.9</td>
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<tr>
<td>B</td>
<td>83.0-86.9</td>
</tr>
<tr>
<td>B-</td>
<td>80.0-82.9</td>
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<tr>
<td>C+</td>
<td>77.0-79.9</td>
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<tr>
<td>C</td>
<td>73.0-76.9</td>
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<tr>
<td>C-</td>
<td>70.0-72.9</td>
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<td>D+</td>
<td>67.0-69.9</td>
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<td>D-</td>
<td>60.0-62.9</td>
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<td>F</td>
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**Course Grade:**
- 5% Aleks Prep
- 60% Exams (4)
- 20% Final Exam
- 15% Homework assigned through Connect
**Aleks Prep:** due Tuesday, Jan. 23 at 11pm. Please see the department website, OAKS, and the emails from Dr. Riggs-Gelasco for more information. This assignment is graded on completion, so it is possible for everyone to receive full credit.

**Exams:** There are four exams scheduled for the semester. If your final exam percentage is higher than the average score of your four exams, I will replace your lowest exam score with your final exam score. **In order to take advantage of this policy, you must take all four exams.** You will be given a periodic table; it is the same one that will be posted on OAKS.

You are responsible for bringing an appropriate non-programmable calculator for the exams. Cell phones and translators may not be used. You may not share. You may be required to follow a seating chart. In order to receive credit for an answer, you must show work that demonstrates a logical thought process to arrive at the correct answer. You must also use legible handwriting.

**Final exam:** 4:00pm on Saturday, April 28th in our classroom. This exam is a standardized exam by the American Chemical Society. It contains 70 multiple choice questions and requires 110 minutes. Be on time. I highly recommend studying the ACS practice exam booklet (see “Recommended Materials”). Any request to change a final exam administration time need to be processed officially by filling out the “Change of Final Exam” form.

**Homework:** Homework is entirely online. It will be administered through the Connect website. It will be a combination of LearnSmart assignments due at least every class period and problem sets due weekly. The LearnSmart assignment scores are completion based—everyone should get 100% if you do the work. The problem sets will be graded on correct answers. Please be sure to allow enough time for the assignments. Since they are computer based, the due date and time are not flexible. Even if you complete an assignment after the due date, the score at the actual due date will be the one recorded in my gradebook. **Please email me immediately and contact customer service if you notice any issues with the Connect website.** You may be able to obtain two weeks of courtesy access if you are waiting for a code to arrive. There is a 200 pt buffer built into your homework score—I will grade out of 200 fewer points than the point total for the overall homework score, but it is not possible to score more than 100% for your homework grade. This is meant to allow for the effects of a sudden illness, computer trouble, etc.

**Other class policies:**

**Academic Honesty:** While I encourage you to study together, academic misconduct, cheating, and plagiarism will not be tolerated. If you participate in academic misconduct, you will receive a zero for the assignment. **This grade will not be dropped or replaced by the final exam grade, if an exam!** You will also be reported to the dean, and you may be given a failing grade in the class.

Academic misconduct is defined in the handbook. You may not copy, allow another person to copy or otherwise knowingly assist them in a disallowed manner, plagiarize, use disallowed sources of information (cheat sheet, cell phone), or falsify data, among possible offenses. Using a calculator to store equations or text is also cheating. Use of a wireless communication device, such as a phone, during an exam is a violation of the honor code. Please see the school’s honor policy in the handbook for more details.

**Attendance:** Daily attendance is expected and mandatory. I reserve the right to give pop quizzes. Without the lecture information and practice, you will not be able to learn the material. If you decide
not to attend the class, it is your responsibility to drop the course. Office hours are not the time to get a “make-up lecture” from me. If you do miss a class, you are responsible for obtaining notes from another student.

Please note that obtaining an Absence Memo does not mean that an absence is excused; it merely documents the absence. It is important that if you will be absent for something important, you let me know ahead of time and with as much warning as possible—email provides a time stamp!

**Courtesy:** This class should be a positive learning experience for you. Please be courteous and arrive on time, turn off or silence your cell phone, refrain from conversations, don’t do homework for other classes during our time together, and stay awake! If you need to leave for some reason, please sit near the door.

**Successful studying:** An important part of the class is reading the textbook and practicing what you learn by doing homework problems. You are responsible for bringing all materials to each class, including an appropriate calculator. The LearnSmart program is designed to help give you an overview of the material and help you identify what you are struggling with. The LearnSmart assignments will be due on Connect immediately before the class period. You will also have problem sets to help you practice the material.

The best way to succeed in chemistry is by practicing lots of problems. There is no substitute for working problems. Don’t wait until the last minute! You can’t cram for a chemistry exam. You should plan on spending **about 9 hours a week** outside of class studying for this class. I highly recommend forming a study group.

A course website will be maintained on OAKS with lecture slides, exam keys, worksheets, and other information. It is your responsibility to be aware of resources on OAKS. **I recommend printing out the lecture slides before class so that you can take notes directly on the printouts.** There will be frequent assignments on Connect; it is your responsibility to keep track of those due dates.

**Communication:** Email is the best way to contact me. If I do not respond within 24 hours, please resend, as it is probably in my junk folder. Please notify me of all important issues via email, even if you have already talked to me about it! I will send out emails to the whole class containing important information about class materials, due dates, upcoming assignments, etc. It is important that you check your email frequently.

**Center for Disability Services/ SNAP  Students Needing Access Parity:** If you are approved for accommodations by SNAP, please let me know as soon as possible. You are responsible for contacting me at least one week in advance of any accommodation needed. If you have a documented disability that you need accommodation for in this class, please contact SNAP at 843-953-1431 to arrange.

As always, if you have any questions or special circumstances arise, please let me know as soon as possible. It is easier to solve a problem that I know about ahead of time.

This syllabus is subject to change with appropriate notice.