CHEM 103-01
Calculations in Chemistry
Syllabus
Summer II 2019
MWF 8:30-9:45am
SSMB 327

Instructor: Dr. Pam Riggs-Gelasco
Office: SSMB 324
Phone: 953-5587
E-mail: gelascop@cofc.edu
Office Hours: Tuesday and Thursday 3:15-4:00 pm or by appointment

About this course: This course previews mathematical manipulations common to general chemistry. It serves as a good preparation course for Chem 111.

Student Learning Outcomes
1. To practice fundamental math skills as applied to Chemistry problems
2. To develop problem-solving techniques that will serve throughout your college career
3. To be able to properly name, manipulate and write chemical compounds and formulas
4. To use stoichiometry to calculate theoretical and percent yields

Attendance: Students are expected to attend all class sessions. Attendance counts 10% of the final grade calculation. Students may have one excused absence without penalty. Each absence after that will incur a loss of 2%.

Textbook: Some materials will be provided as handouts in class. An online general chemistry textbook to read as a supplement to lecture can be found here:
https://openstax.org/details/books/chemistry

Tentative Schedule
Friday, July 6 Syllabus, Opening Exercise, Math Exercise Intro
Monday, July 9 Turn in Math Exercise homework
                       Metric Conversions, Sig Figs,
Wednesday, July 11 Quiz on Math Exercises, Metric conversions and sig figs;
                      Mole concept/Parts of Atom/Periodic table
Friday, July 13 Turn in Mole concept/parts of atom homework
                      Mass %
Monday, July 16 Quiz on Mole concept and Mass %
                      Types of compounds
Wednesday, July 18 Turn in compound homework
                      Types of compounds and naming
Friday, July 20 Test 1
Monday, July 23  Balancing equations, stoichiometry
Wednesday, July 25  Turn in Stoichiometry homework
                  Stoichiometry continued
Friday, July 27   Quiz on equation stoichiometry
                  Limiting reagents
Monday, July 30  Turn in limiting reagent homework
                  Other algebraic topics in chemistry (light equations and gas laws)
Tuesday, July 31 Test 2

Grading:
Homework: 20%
Attendance: 10%
Quizzes: 30%
Tests: 40%

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**Accommodations for Disability:** Any student eligible for and needing accommodations because of a disability is requested to speak with the professor during the first two weeks of class or as soon as the student has been approved for services so that reasonable accommodations can be arranged.

**Academic Integrity:** Students are expected to abide by the College of Charleston’s Honor Code and are referred to the Student Handbook to review this policy: [http://studentaffairs.cofc.edu/honor-system/studenthandbook/index.php](http://studentaffairs.cofc.edu/honor-system/studenthandbook/index.php).