Instructor: Dr. Dawne M. Taylor
Office: SSMB 112
Phone: 953-5052
e-mail: taylord@cofc.edu
course material found on OAKS

Schedule

<table>
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<tr>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
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<tbody>
<tr>
<td>10-11:30 am Office Hours</td>
<td>12pm Chem 112 SSMB 127</td>
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<td>12pm Chem 112 SSMB 127</td>
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<td>12pm Chem 112 SSMB 127</td>
<td>1p Chem 112 SSMB 127</td>
<td>1p Chem 112 SSMB 127</td>
<td>1p Chem 112 SSMB 127</td>
<td>1:40-4:40 pm Chem 231 Lab</td>
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<td>5-7:45 SMFT SSMB 300 or lab</td>
<td>3:30-6:30 Chem 231 Lab SSMB 109</td>
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Text: None and notes will be provided

Competency at the level of MATH 104, which includes algebra and graphing, is assumed. You will need a calculator that can perform logarithmic and exponential functions. Bring this calculator to all class meetings.

Course Objectives:
- Solve chemistry problems using common mathematical techniques
- Distinguish, classify, and explain the properties of compounds
- Recognize and explain the fundamental nature of chemical reactivity
- Understand fundamental physical properties of matter.
- Develop practical lesson plans for the classroom based upon the content learned and experienced.
- Align new science content with existing SC State Science Standards.
- Experience hands-on applications of science and technology.
- Understand the relationship among science, technology, and society.
- Understand the role of science education in learning to teach certain concepts related to the electromagnetic spectrum.

Drop/Add: In order to change sections or change courses you must do so no later than 5 p.m Monday August 31, 2015.

Withdrawal: The last day to drop with a grade of "W" is Thursday October 29th at 5 pm.

Course Format: There will be 6 units of major basic Chemistry content topics. Each unit will be covered over a two week period. The first week will be comprised of mostly teaching and you will be given a problem set, an activity (2-5 minute class participation) that illustrates the minor concept you had been assigned. The second week of each unit we will have 45 minutes for each of you to do your activity with the rest of the class, for me to answer any questions you may have on the problem set and we will then have 2 hours to perform a laboratory experiment. Problem sets and lab reports for the unit will be turned in the week following the unit lab.

Schedule: A schedule of major is attached material that will be covered on which dates.

Attendance and Participation: Attendance is expected. You are responsible for all information presented in class whether are present or not. No make-up tests or problem sets or Activities will be permitted.
Calculators: You will need a calculator that performs exponential and logarithmic functions. You will need to bring it to ALL class meetings.

Responsibilities: You are responsible for all material covered or assigned in class or assigned via OAKS. You should check OAKS at least weekly for any updates. There will be a schedule with all notes, homework assignments and quizzes for each class period. It is absolutely vital that you keep current in your studies. My expectation is that for every hour spent in lecture you will spend a minimum of 3 hours of study. The instructor is here to explain the material and help you to the best of her time and ability. However, the burden of learning is upon you, the student, which includes making use of supplemental instruction and office hours and working through the homework sets provided sometimes more than once.

Contacting Dr. Taylor: The best way to contact Dr. Taylor is by email. Her email address is taylord@cofc.edu and she will check her email between the hours of 8 am and 9 pm. If she has not responded to your email, please send her another one as your email may have gone to her junk folder or gotten lost in cyber space. She makes a point to respond to every email

Office Hours/ Emailed questions: These are not the same thing as lecture. During this time, please come prepared with specific questions you have. For most people, chemistry is a foreign language and the best way to learn a foreign language is to speak it. “I don’t get anything we did today” IS NOT A QUESTION. Dr. Taylor prepares lectures and explains the material in a way she believes will be understood and would only repeat herself if you made that statement and since it clearly didn’t help you understand the material the first time, starting with a question or a homework problem is a much better place to start.

Problem Sets: will be given and will be worth 20% of your final grade. Problems appear to be very easy in class when Dr. Taylor is doing the work for you or prompting you. You will want to attempt to do every problem and complete them. If you are having trouble, write some idea of what the question is asking or the topic of the question so that you can ask a question in week 2 of the unit. Problem sets will be due the week after the unit is complete

Activities: Activities will account for 20% of your final grade. You will receive a minor concept that is part of the overall major concept of the unit in the first week of the unit. You will then have a week to create a 2-5 minute activity for the class to participate in during week 2 of the unit. The activity will consist of a presentation, doing the activity and debriefing the activity. You will NOT be allowed to go longer than 5 minutes. You will be cut off after 5 minutes and anything not completed in that time will be deducted from your activity score. You will be given the grading rubric when you are assigned the topic.

Lab Reports: will account for 20% of your final grade. We will go into the lab on the 2nd week of each unit to perform an experiment. The following week you will turn in a report sheet that will be given to you with the lab along with a typed summary giving an overall description of the experiment with results and conclusions.

Exams: There will be two exams a midterm worth 20% covering units 1-3 and a final worth 20% covering units 4-6. You will need a calculator for these exams. Material covered on the exams is clearly outlined in class. Do not stop class to ask Dr. Taylor the format on the exam, what will be on the exam, or how she will ask a question on the exam. The answer will always be everything and difficultly. I believe you have been given all of the tools you need to answer a question and firmly believe that the subject has been discussed in class even if the discussion is: Make sure you look over thus and so. Typically, exams are 10 multiple choice questions and 4-8 short answer questions. When you receive your exam back it is important for you to look over the exam and any notes made by Dr. Taylor. If you have any questions regarding your grade on an exam or how to work through a problem on the exam, see Dr. Taylor during office hours.
Grading Scale:

A  93-100%
A- 90-92%
B+  87-89%
B  83-86%
B-  80-82%
C+ 77-79%
C  73-765
C-  70-72%
D  66-67%
D-  65%
F  Below 65%

Grading:

Lab Reports  20%
Problem sets  20%
Activities  20%
Midterm  20%
Final  20%

Calculation of Final grade =
(0.20 * average lab report grade) + (0.20 * average of problem set grades) + (0.20 * unit activity average grades) + (0.20 * midterm exam grade) + (0.20* Final Exam grade)

Date | Activity during Class | What’s due
---|---|---
August 31 | Syllabus, safety, begin unit 1 | 
Sept 7 | Unit 1: molecules and their names Problem set Activity Lab assignment Given | 
Sept 14 | Unit 1 problem set questions Activity presentations Laboratory experiment (dress appropriately) | Unit 1 Activity
Sept 21 | Unit 2 How molecules interact with each other Problem set Activity and Lab assignment given | Unit 1 Problem set And lab report
Sept 28 | Unit 2 problem set questions Activity presentations Laboratory experiment (dress appropriately) | Unit 2 Activity
Oct 5 | Unit 3 Atoms, moles, molar mass and percent composition Problem set Activity and Lab assignment given | Unit 2 Problem set And lab report
Oct 12 | Unit 3 problem set questions Activity presentations Laboratory experiment (dress appropriately) | Unit 3 Activity
Oct 19 | Midterm Units 1-3 | Unit 3 problem set and Lab report
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<tr>
<th>Date</th>
<th>Activity</th>
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<tr>
<td>Oct 26</td>
<td>Unit 4 making solutions</td>
<td>Problem set</td>
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<td>Activity and</td>
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<td>Lab assignment given</td>
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<td>Nov 2</td>
<td>Unit 4 problem set questions</td>
<td>Activity presentations</td>
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<td>Laboratory experiment (dress appropriately)</td>
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<td>Nov 9</td>
<td>Unit 5 Chemical Reactions</td>
<td>Problem set</td>
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<td>Activity and</td>
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<td>Lab assignment given</td>
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<td>Nov 16</td>
<td>Unit 5 problem set questions</td>
<td>Activity presentations</td>
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<td>Laboratory experiment (dress appropriately)</td>
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<td>Nov 23</td>
<td>Unit 6 Types of Chemical Reaction</td>
<td>Problem set</td>
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<td>Nov 30</td>
<td>Unit 6 problem set questions</td>
<td>Activity presentations</td>
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<td>Laboratory experiment (dress appropriately)</td>
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| Dec 7   | Final on Units 4-6              | Unit 6 problem set and Lab report due