Quick Reference

Course Instructor: Dr. Betty Cep Gailbreath  
Office: SSMB Rm 114  
Email: gailbreathbd@cofc.edu  
Phone No: 843.953.3093  
Office Hours: T, W & Th: 11:00 – 12:00 pm; or by appointment

Office Hours Online: Zoom will be used to conduct office hours if CofC is online or if you are uncomfortable with meeting in person. Emailing me when you want to Zoom will make it easier to set up times.

Course Time/Location: TTh: 12:15 pm – 1:30 pm  
Rm: Jewish Studies Center Rm 233 (F2F)  
This syllabus is subject to change by the professor at any time. All changes will be announced via OAKS.

Hybrid Course

In general, this is a hybrid course, where approximately 50% of the course will take place in a traditional face-to-face classroom (after September 14th) and 50% will be delivered via OAKS, your online learning management system, where you will interact with your classmates and with the instructor. Within the course OAKS site you will access important learning materials and syllabus; discuss issues; submit assignments; take quizzes; complete homework; email the instructor, etc. This will be a semi-flipped course, meaning that you will need to do some preparation before class meets (either F2F or on Zoom).

Online activities are for:
1. Pre-assessment quizzes so the student has a better idea of what material they will need to learn.
2. Provide a Checklist so the student can see what to do and when items are due.
3. Reading, videos, fill-in power points, and homework provided to help the student understand the key concepts.
4. Post-assessment quizzes so the student knows what they have learned and what they still need to improve upon.
5. The final exam will be taken online; while the exams might or might not be taken online.

Class time is for:
1. Explaining and practicing difficult concepts
2. Expanding on the textbook to include newer and more advanced information
3. Getting an overview of major concepts, minor points, and how they fit together
4. Asking and answering questions
5. Taking higher stakes tests – possible.

All courses, regardless of their primary modality during the semester will move online after Thanksgiving and for the duration of the semester through final exams. The semester does not end at Thanksgiving and instruction must continue during the week of November 30 through December 4. Online final exams will begin on December 8 and run through December 14 with final grades due no later than 5:00 pm on December 16. Certain courses in which students are assessed based on a performance or activity (e.g. PE Activity courses, labs, studio, and performance courses) will be encouraged to complete in-person assessments prior to Thanksgiving.
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. CHEM 111 is taught with the assumption that students have learned the fundamental concepts covered in a full year of high school chemistry class. If you have not taken any chemistry courses, it is highly recommended that you take CHEM 101 before taking CHEM 111.

Learning Outcomes

General Education Student Learning Outcomes
- Students apply physical/natural principles to analyze and solve problems.
- Students will develop an understanding of the impact that science has on society.
  The general education learning outcomes will be assessed in the second course of this General Education Sequence, Chem 112L

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

Course Structure

F2F or Alternating F2F with Online Presence (Hybrid) or Online Course with Synchronous (Scheduled) Online Lectures
Due to the uncertainty of COVID-19, this course structure can change. This course has been designed to accommodate Face to Face (F2F), Alternating F2F with online presence (Hybrid) and online with synchronous online lectures. You will participate in this course by attending the scheduled meeting times when F2F or if online, you will attend the online lectures. You will also complete homework assignments, quizzes and exams.

The course is divided into 14 modules. Each new module will open in accordance with the course schedule. Within each module, there will be videos, power points, highly recommended homework assignments, ALEKS assignments, worksheets, tutorials and a quiz to assess your knowledge.

Course Requirements

Proper Public Health Guidelines for F2F class
- You must wear a face mask when attending class and when you are in the building
- You must social distance (6 feet apart from the next person)
- You must sanitize your learning area (wipes will be provided)
- You must sanitize your hands frequently
- You must stay home if sick
Course Co/Prerequisites

Co-requisite: CHEM 111L. If you drop the lab, you may or may not drop the lecture. If you have passed the lab, you do NOT need to take the lab in order to retake the lecture; contact the Chemistry Department office (phone number 843.953.1406) before or during the Drop/Add period to correct your schedule if this applies to you. The two courses (CHEM 111 & 111L) are graded independently of each other.

Co-requisite(s) or Prerequisite(s): MATH 111 or equivalent

Textbook

General Chemistry: Atoms First 4th Edition Authors: Burdge, Julia and Overby, Jason

Access to OAKS

As a CofC student, you are given a CofC account with access to OAKS. This is where all of the class’s assignments, course material and tutorials are located. It is very important to that you log into this account on a daily basis and complete the assignments on time.

ALEKS

You will need to purchase an ALEKS account which will need to include an ebook (comes with one of the packages). Homework assignments will be assigned throughout the semester (see course schedule for assignments and deadlines).

- The ALEKS website is https://www.aleks.com.
- The ten digit code needed to sign up is LEK6F-PURYY
- Directions on how to access and sign up for ALEKS are located at https://www.aleks.com/highered/math/Higher_Ed_Student_Registration.pdf

Electronic Requirements

- Access to consistent, reliable high speed internet connection
- Computer with microphone and external speakers or a headset with a microphone. A laptop is required by the CofC. More information about the laptop requirement and other technologies to support your learning can be found at https://go.cofc.edu/laptop.
- Web camera
- Calculator - A calculator that performs exponential and logarithmic functions is required
- Printer or access to one
- Adobe Scan App: A way to take a photo of your work and quickly upload it as a PDF file to an OAKS dropbox. Use Adobe Scan to compile pictures of all your written work (in order) into a single PDF document and submit it to the appropriate location in OAKS. Before submitting, you should review the file to make sure all the pages are present in the right order and legible; re-take scans in different lighting if necessary. See the tutorial below or Tutorials/Resource page in OAKS for more information.
- A way to videotape yourself explaining how you are solving a problem.

It is important to maintain your computer so that it is functional throughout the term. In addition, if you encounter a computer problem or have any technical problems, please contact the Student Computing Support Desk at (843)953-5457 or studentcomputingsupport@cofc.edu. Additional support and computing downloads and tutorials can be located at blogs.cofc.edu. Please be sure to promptly resolve problems. Computer failure/unavailability does not constitute an excuse for not completing or submitting work by the due date.
Community and Communication Expectations

Communication with the Professor
The best way to communicate with me will be through email. Email address: gailbreathbd@cofc.edu
All email correspondence will be sent through the CofC official system. My response time will be within 24 hours during the weekdays; however, will vary on weekends and holidays – within 36 to 48 hours.
When corresponding with me, please:
- Include Chem 111 in the subject line
- Include a respectful greeting (for example, Hi or Dear Dr. Gailbreath)
- Fully sign your name
- Proofread your email
- If you are sending a picture of your work, make sure it is readable

To save you and me time, before you email me, make sure you have consulted the class schedule or syllabus, checked your emails, discussion posts, OAKS announcements, or have asked other classmates.

Communication with you
I will communicate to you through email, announcements, Zoom meetings, and discussion posts. Weekly announcements will be posted on the Course Home Front Page. I highly encourage you to subscribe in OAKS to receive these update notifications. See Tutorials/Resources under Content page for instructions in OAKS or below under tutorials in Additional Resources.

Working in Small Groups
In order to get more acquainted with your classmates and the material, you will be placed in a small group that will solve chemistry problems and discuss chemistry concepts. Your group will present an answer to the class.

Questions/ Discussion Forums
Two discussion boards (two forums) will be set up for continuous communication. Discussion boards can be found in Discussion under the Communication Tab in OAKS. One will be a “Technical Issues” board where you can post questions/answers concerning technical issues such as unable to access material. A second discussion board labeled “Chemistry” will help with chemistry homework questions (don’t post answers just help) and will help with general chemistry course questions. Students will be encouraged to post questions; help answer questions or make suggestions. I will reply to discussion posts within 24 hours unless it is a weekend or holiday then 36 to 48 hours.

Classroom Etiquette (F2F)
A couple of simple rules need to be followed for our class to proceed in a safe and professional manner:
1. Arrive on time. If for some reason, you are late, please enter quietly. Do not walk in front of my area but walk around to the back.
2. No cell phone use. Only cell phone use if I ask you to use it.
3. No side conversations. It is very distracting to have conversations going on when I am talking.
4. Treat everyone with respect.
5. Ask questions.
Netiquette – Network Etiquette
For our course to proceed in a safe and professional manner, please follow the following etiquette rules:

1. **Read first.** Take the time to read the instructions and discussion posts thoroughly before asking or answering a question.
2. **Think before you type and set a respectful tone.** Avoid outbursts of extreme emotion or opinion, sexist, racist and homophobic language. A certain level of formality is expected including proper punctuation and spelling, respectful greetings and writing in full sentences. Remember once it is posted, it can not be taken back.
3. **Use your "inside" writing voice;** in other words, avoid writing in all CAPS due to it looking like you are yelling and it’s hard to read.
4. **Respond back to questions, assignments, or comments in a timely, kind and concise manner.**
5. **Be forgiving.** If something written is confusing you, ask for clarification. Do not assume or jump to conclusions. However, if you experience any questionable or outright inappropriate behavior, please let me know.
6. **Help each other.** If you can assist help to a posted question or a written problem, answer it.

Attendance Policy
**I expect all students to be on time and attend every class meeting whether we are F2F or on Zoom.**
In the past, my students have reported meeting whether in class or on Zoom helped them keep up with the class and helped them have a better understanding of the material because they could ask questions and participate in real time. Note that missing 10% or more of the scheduled classes is excessive whether it is excused or unexcused. This can affect your grade. If you must be absent for a good reason (illness, emergency, etc.), please discuss the absence with me at your earliest opportunity or e-mail me. Students are responsible for all information presented in class whether they are present or not. Students should obtain notes from a classmate or watch the recorded Zoom video and read the associated material in the text BEFORE they meet with me to ask questions about material missed. Missing class does not entitle you to make up or be excused from any work, assignment or test. If you are a student-athlete or away from class due to college-related business, an accommodation will be made as long as you make arrangements **BEFORE** your absence.

Recording of Classes (via ZOOM)
Class sessions will be recorded via both voice and video recording. By attending and remaining in this class, the student consents to being recorded. Recorded class sessions are for instructional use only and may not be shared with anyone who is not enrolled in the class.

Student Responsibility

- **It is essential that you stay on top of the course assignments.** I will post due dates and reminders, but it is your responsibility to keep current in your studies. You are responsible for all material covered or assigned in class or assigned **via OAKS.** You should **check OAKS at least once a day** for any updates.

- **Depending on your level of competence, you are expected to spend as much time as needed to understand this material by** viewing videos, completing power points, completing highly recommended homework problems, completing assigned work problems and ALEKS, taking quizzes and preparing for exams. All this will be found in the individual Modules under Content on your Course page in OAKS. The problems are representative of what you need to know for the
quizzes and exams. 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 my office hours (either in person or on Zoom), discussion posts, SI sessions, Student Learning Center, and tutors.

- **Practice Makes Perfect!** It cannot be over emphasized that homework is the “heart” of this course. The key to success in this class is working through chemistry problems again and again. You cannot effectively learn the subject matter without doing the homework. I suggest you keep an organized notebook for solving problems. Problem-solving should be a continuous, almost daily exercise. You must practice solving chemistry problems; which in theory should help you immensely in preparing for the quizzes and exams. Seeing problems reviewed in class or on video is not the same as working them yourself. Effective studying should be challenging and uncomfortable; if it is easy, most likely it is ineffective! You should practice working problems regularly; leaving all of your studying until the last minute is not likely to result in a grade you want.

**Honor Code and Academic Integrity**

**Bottom Line:** You need to understand this chemistry material in order to proceed to Chem 112 and Organic Chemistry with confidence; therefore trying to cheat your way through this class will only prolong your suffering when you severely struggle with the later chemistry classes and you will be very frustrated when you realize how much time you wasted when you have to change majors because you could not pass these classes and/or your science grade point average drops.

Students in this class must know, observe, and not compromise the principles of academic integrity. It is not permissible to cheat, which includes unauthorized collaboration without permission – such as working together on a quiz or exam to copy data or calculations from another student, to fabricate or falsify information, to submit the same academic work in more than one course without prior permission, to plagiarize, to receive unfair advantage, to otherwise abuse accepted practices for handling and documenting information or other violations described in the Student Handbook. Be aware that other forms of cheating include using any resources or work from other students or websites when completing your exams and quizzes. This course is conducted under the Honor Code of the College of Charleston and the department’s Policy on Scientific Integrity. If you are caught cheating, you will be reported to the chair and dean and then brought before the Honor Board where you can receive a grade of XF (failed course due to cheating).

Students can find the complete Honor Code and all related processes in the Student Handbook at: [http://deanofstudents.cofc.edu/honor-system/pdf/honor-code-sample-language-for-syllabi.pdf](http://deanofstudents.cofc.edu/honor-system/pdf/honor-code-sample-language-for-syllabi.pdf)

**SNAP - Students Needing Access Parity**

Any student eligible for and needing accommodations because of a documented disability is requested to communicate with to me in person, by email or Zoom, 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. You will need to send me your letter from the SNAP documenting the approved accommodations. Extended time on tests will only be allowed if arrangements are made in advance. If you have a disability and do not have a letter, please contact the Center for Disability Services / SNAP office located on the first floor of the Lightsey Center, Suite 104. [http://disabilityservices.cofc.edu/](http://disabilityservices.cofc.edu/)
Center for Student Learning (highly recommend)
The Center for Student Learning’s (CSL) academic support services provide assistance in study strategies, speaking & writing skills, and course content. Services include tutoring, Supplemental Instruction, study skills appointments, and workshops. Students of all abilities have become more successful using these programs throughout their academic career and the services are available to you at no additional cost. For more information regarding these services please visit the CSL website at http://csl.cofc.edu or call (843) 953-5635.

Inclement Weather/College Closure
If the College of Charleston closes and members of the community are evacuated due to inclement weather or for other reason (COVID-19 for example), students are responsible for taking course materials with them in order to continue with course assignments consistent with instructions provided by faculty. In cases of extended periods of institution-wide closure where students have relocated, instructors may articulate a plan that allows for supplemental academic engagement despite these circumstances.

OAKS
OAKS, including Gradebook, will be used for this course throughout the semester to provide the syllabus and class materials and grades for each assignment, which will be regularly posted.

Evaluation of Student Performance and Grade Policy

<table>
<thead>
<tr>
<th>Description and Information</th>
<th>Calculation of Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>College is designed to be challenging and grades are earned, not given.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Student Work</th>
<th>Grade Percentage</th>
<th>Description and Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Module Quizzes</td>
<td>15 %</td>
<td>To help you keep up and access your knowledge of the material properly, a quiz will be given in each module and will be due on certain scheduled Tuesdays. Quizzes can be accessed in the modules. Quizzes may consist of a variety of types of questions including but not limited to true/false, matching, multiple choice, fill in the blank, and short answer. <strong>It will be a timed quiz and you will have unlimited attempts to complete the quiz by the due date (see schedule for due dates).</strong> Quizzes will be generated from a large pool of questions; therefore, no two quizzes will be the same. <strong>Late quizzes will not be accepted.</strong></td>
</tr>
<tr>
<td>ALEKS</td>
<td>15 %</td>
<td>ALEKS on-line tutorial homework. 30% is completion and 70% is learned topics. Therefore, to get 100% on the completion, you need to finish the assignment by the due date; however, you have all semester to finish the learned topics. This is an online program that will help you understand the basic chemistry material and to help you retain this information. ALEKS assignments will be due on Sundays and Wednesdays.</td>
</tr>
</tbody>
</table>
In order for me have a better understanding on how you are solving problems, you will turn in problem sets with all your work shown for credit. There will be about 5 problems sets. They will be announced a head of time and instructions will be provided. You may also be asked to produce a video of yourself explaining how you are solving certain problems with these problem sets. *Late assignments will not be accepted.*

<table>
<thead>
<tr>
<th>Graded Problem Sets and Videos</th>
<th>7%</th>
<th>Participation includes attending class (F2F or online); participating in discussion posts, participating in group work, etc.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participation</td>
<td>3 %</td>
<td>Exams 45%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>There will be 3 scheduled exams during the semester (see course schedule for dates). Each exam will cover a certain number of chapters plus a few problems from previous exams. The three exams can be administered in-class or using OAKS depending on the situation at the time. If online - there will be a combination of online questions in the Quiz Area and turn-in worked problems via DropBox. Exams may consist of a variety of types of questions including but not limited to true/false, matching, multiple choice, fill in the blank, and short answer. It will be a timed exam with one attempt. Deadlines will not be extended. <strong>You may not use any resources or work with other students or computer aid when completing your exams.</strong></td>
</tr>
<tr>
<td>Final Exam</td>
<td>15%</td>
<td>A comprehensive, timed (one attempt), online final exam will be given during the schedule exam period for this class. (See important dates section). Deadlines will not be extended. <strong>You may not use any resources or work with other students or computer aid when completing your exams. The lowest exam grade will be replaced with the final exam grade if it is higher.</strong></td>
</tr>
<tr>
<td>“Make-Up” Policy and Absentee Policy</td>
<td></td>
<td>I know life happens that is why I have the policy - <em>The lowest exam grade will be replaced with the final exam grade if it is higher or if you missed an exam</em> – so if you miss an exam (which results in a zero), your final exam grade will replace the first zero. I will need to be notified as soon as possible if you miss an exam. Extended absences for any reason cannot be accommodated for this course. If you have missed more than three modules worth of material, I highly suggest a withdrawal (W) from the class before the deadline. If you test positive for COVID-19 and need to quarantine, but do not have symptoms, you are expected to keep up with the material. Everything you need to study will be online. Not keeping up can result in poor grades.</td>
</tr>
</tbody>
</table>

**Extra credit:** One point will be added to your final overall grade if you have attended 7 different SI sessions. One per week will count. No other extra credit is available.

**3 Tokens:** You are given 3 tokens. These tokens can only be used to extend the due date of an ALEKS assignment or a Module Quiz by 3 days. Be careful using these 3 tokens because once they are used, no more are given.

**Reminder:** There are no dropped grades in this class.
<table>
<thead>
<tr>
<th>Grade</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>93.0</td>
<td>100.0</td>
</tr>
<tr>
<td>A-</td>
<td>90.0</td>
<td>92.9</td>
</tr>
<tr>
<td>B+</td>
<td>87.0</td>
<td>89.9</td>
</tr>
<tr>
<td>B</td>
<td>83.0</td>
<td>86.9</td>
</tr>
<tr>
<td>B-</td>
<td>80.0</td>
<td>82.9</td>
</tr>
<tr>
<td>C+</td>
<td>77.0</td>
<td>79.9</td>
</tr>
<tr>
<td>C</td>
<td>73.0</td>
<td>76.9</td>
</tr>
<tr>
<td>C-</td>
<td>70.0</td>
<td>72.9</td>
</tr>
<tr>
<td>D+</td>
<td>68.0</td>
<td>69.9</td>
</tr>
<tr>
<td>D</td>
<td>66.0</td>
<td>67.9</td>
</tr>
<tr>
<td>D-</td>
<td>65.0</td>
<td>65.9</td>
</tr>
<tr>
<td>F</td>
<td>&lt; 65</td>
<td></td>
</tr>
</tbody>
</table>

**Assignment of Grades**

**Additional Resources**

**Tech Support**  
(These support links will also be in OAKS under Resources)

- **Student Computing Support** (for questions about computing)
  - 843-953-5457
  - studentcomputingsupport@cofc.edu
  - blogs.cofc.edu/scs

- **Helpdesk** (other on campus services for IT)
  - 843-953-3375
  - helpdesk@cofc.edu
  - it.cofc.edu/help/helpdesk


- **Zoom** (for individual meetings or meetings with small groups)
  - [https://support.zoom.us/hc/en-us/articles/206175806-Top-Questions](https://support.zoom.us/hc/en-us/articles/206175806-Top-Questions)
  - [https://support.zoom.us/hc/en-us](https://support.zoom.us/hc/en-us)

**Tutorials**  
(These tutorial directions will also be listed in OAKS under Course Resources)

- **To subscribe to announcement**: select the down arrow next to the “Announcement/News” header on the course home page. Select Notifications then select the types and methods of notifications you wish to receive.

- **How to turn in your written work as a PDF file.**
  - [https://www.youtube.com/watch?v=HE3IRDblu8U&feature=emb_logo](https://www.youtube.com/watch?v=HE3IRDblu8U&feature=emb_logo)

- **How to take the online quizzes/exams.**
  - [https://www.youtube.com/watch?v=l-tnxjSasVQ](https://www.youtube.com/watch?v=l-tnxjSasVQ)

- **How to join a Zoom meeting**
  - [https://cofc.brightspace.com/d2l/le/content/239928/viewContent/2907866/View](https://cofc.brightspace.com/d2l/le/content/239928/viewContent/2907866/View)
# Course Assignments/Important Dates

<table>
<thead>
<tr>
<th>Date</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tuesday, Aug. 25th</td>
<td>First Day of Class</td>
</tr>
<tr>
<td>Monday, Aug. 31th</td>
<td>Last Day to Drop/Add Course</td>
</tr>
<tr>
<td>Thursday, Sept. 24th</td>
<td>Exam # 1</td>
</tr>
<tr>
<td>Tuesday, Oct. 20th</td>
<td>Midterm Grades Available</td>
</tr>
<tr>
<td>Thursday, Oct. 22nd</td>
<td>Exam # 2</td>
</tr>
<tr>
<td>Wednesday, Oct. 28th</td>
<td>Last Day for students to withdraw with a grade of “W”</td>
</tr>
<tr>
<td>Tuesday, Nov. 3rd</td>
<td>No school - Election Day</td>
</tr>
<tr>
<td>Thursday, Nov. 19th</td>
<td>Exam #3</td>
</tr>
<tr>
<td>Tuesday, Nov. 24th</td>
<td>Last F2F Class</td>
</tr>
<tr>
<td>Wed.-Fri., Nov. 25-27th</td>
<td>Thanksgiving Break</td>
</tr>
<tr>
<td>Thursday, Dec. 3rd</td>
<td>Last Day of Class</td>
</tr>
<tr>
<td>Monday, Dec. 7th</td>
<td>Reading Day</td>
</tr>
<tr>
<td>Thursday, Dec. 10th</td>
<td>Final Exam, 1-3 pm</td>
</tr>
<tr>
<td>Thursday, Dec. 17th</td>
<td>Final Grades Available</td>
</tr>
</tbody>
</table>

# Topics Covered in 111

<table>
<thead>
<tr>
<th>Chapters in Textbook</th>
<th>TOPIC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chapter 1</td>
<td>Chemistry: The Science of Change</td>
</tr>
<tr>
<td>Chapter 2</td>
<td>Atoms and the Periodic Table</td>
</tr>
<tr>
<td>Chapter 3</td>
<td>Quantum Theory and the Electronic Structure of Atoms</td>
</tr>
<tr>
<td>Chapter 4</td>
<td>Periodic Trends of the Elements</td>
</tr>
<tr>
<td>Chapter 5</td>
<td>Ionic and Covalent Compounds</td>
</tr>
<tr>
<td>Chapter 6</td>
<td>Representing Molecules</td>
</tr>
<tr>
<td>Chapter 7</td>
<td>Molecular Geometry, Intermolecular Forces, and Bonding Theories</td>
</tr>
<tr>
<td>Chapter 8</td>
<td>Chemical Reactions</td>
</tr>
<tr>
<td>Chapter 9</td>
<td>Chemical Reactions in Aqueous Solutions</td>
</tr>
<tr>
<td>Chapter 10</td>
<td>Energy Changes in Chemical Reactions</td>
</tr>
<tr>
<td>Chapter 11</td>
<td>Gases</td>
</tr>
</tbody>
</table>