**Text:** Chemistry: A Molecular Approach, 4th ed by Nivaldo Tro

Supplemental: Preparing for Your ACS Examination in General Chemistry: The Official Guide, by Lucy T. Eubanks and I. Dwaine Eubanks

Required Materials: A scientific, non-programmable calculator

*You will bring your calculator with you to every class and every lab.*

*Never forget it. One will not be provided for you.*

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Instructor: Dr. Tracy A. Kerr       Email: tkerr@gsu.edu

*Send emails from your GSU email account to my GSU email account only.*

*Do not email from our icollege class web page (If you do, they will not be answered).*

Please use proper etiquette in your emails. This is a formal communication between us. I will strive to respond to all emails within 24 hours during the work week. On the weekends, you may not receive a response until Monday.

**Office:** Courtland North Room 215 (Beside the Sports Arena across the street from Library South)

**Office Hours:** T, R 2pm-4pm

**Lecture Time:** T, R 5:30pm - 6:45pm

**Lecture Room:** Aderhold Learning Center 5

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**Important Dates:**

- First day of Class: August 22nd
- Labor Day Holiday: September 4th
- Mid Point: October 10th
- Thanksgiving Break November 20 -25th
- Classes End: December 4th
- Final Exam: Tuesday, December 5th, 4:15pm-6:45pm, ALC 5

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**Learning Outcomes**

The goals of this course are set forth by the chemistry department.

- The student should demonstrate a general knowledge of the chemical concepts of kinetics, equilibria, buffers, thermodynamics, electrochemistry, and states of matter.

- The student should demonstrate the ability to successfully apply math skills previously learned to chemical systems.

- The student should demonstrate the ability to apply chemical principles to problems in physics, biology, and medicine.
We have 28 lectures to cover chapters 11-20.
Chapter 11 Liquids, Solids, and Intermolecular Forces
Chapter 12 Solids and Modern Materials (12.3-12.6 will work in with Chapter 11)
Chapter 13 Solutions
Chapter 14 Chemical Kinetics
Chapter 15 Chemical Equilibrium
Chapter 16 Acids and Bases (more equilibrium)
Chapter 17 Aqueous Ionic Equilibrium
Chapter 18 Free Energy and Thermodynamics
Chapter 19 Electrochemistry
Chapter 20 Radioactivity and Nuclear Chemistry (Sections 20.1 and 20.2. 20.6 will be covered in chapter 14)

Point distribution
3 In Class Multiple Choice EXAMS 300 (percent of each exam taken)
Quizzes 100 (percent of all quizzes taken)
LABORATORY Grade 200*
Final EXAM (ACS standardized test) 200

TOTAL 800

* You must attend your laboratory section. At the end of the semester your laboratory instructor will give me a list of students in their section and their grades. Do NOT switch lab sections without notifying ME. I am the only one to input the final grades.

3 in-class exam dates: Sept 19th, Oct 26th, Nov 30th
Midpoint on Oct. 10th, 2017 is the last day to drop a class with a W

Final Exam is Tuesday December 5th, 2017 starting at 4:15pm in our classroom. It is the ACS standardized exam. Duration of exam is 110 min. It is a comprehensive exam covering Chapters 1-20. Yes, it includes all the material from CHEM 1211. Every one of your instructors this semester should have given you the date and time of your final exams. Check to make sure that you do not have any conflicts. Do this within the first two weeks of class.

No make-up examinations or quizzes will be given for any reason. Missed examinations and quizzes will be recorded as a zero. Allowable absences MUST be accompanied by verifiable documentation given, in person, to Dr. Kerr. The note must be provided within a week of the missed exam/quiz. Please note: traveling does not constitute an allowable absence !!!!!!

The final examination is a multiple-choice test provided by the American Chemical Society (ACS) and is nationally normalized.
Grading:

<table>
<thead>
<tr>
<th>Points</th>
<th>Percent</th>
<th>Letter Grade</th>
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<tbody>
<tr>
<td>760 - 800</td>
<td>95% - 100%</td>
<td>A+</td>
</tr>
<tr>
<td>720 - 759</td>
<td>90% - 94%</td>
<td>A</td>
</tr>
<tr>
<td>696 - 719</td>
<td>87% - 89%</td>
<td>A-</td>
</tr>
<tr>
<td>680 - 695</td>
<td>85% - 86%</td>
<td>B+</td>
</tr>
<tr>
<td>640 - 679</td>
<td>80% - 84%</td>
<td>B</td>
</tr>
<tr>
<td>624 - 639</td>
<td>78% - 79%</td>
<td>B-</td>
</tr>
<tr>
<td>584 - 623</td>
<td>73% - 77%</td>
<td>C+</td>
</tr>
<tr>
<td>520 - 583</td>
<td>65% - 72%</td>
<td>C</td>
</tr>
<tr>
<td>480 - 519</td>
<td>60% - 64%</td>
<td>C-</td>
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<tr>
<td>456 - 479</td>
<td>57% - 59%</td>
<td>D</td>
</tr>
<tr>
<td>&lt;456</td>
<td>&lt;57%</td>
<td>F</td>
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</tbody>
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To receive a passing grade the student MUST:
1. Take the final examination of the lecture
2. Meet certain minimum requirements in the laboratory portion of the course:
   a) Submit a final laboratory report
   b) Take the final lab examination (see lab manual for further details)

The instructor reserves the right to seat students during examinations.

Only non-programmable calculators are allowed. Use of programmable calculators in class and in lab is considered academic dishonesty.

Examinations: Three examination grades will be counted toward the student’s final grade. **There will be no make-up exams for any reason.** If you miss an exam due to an allowable excuse, you **MUST** come discuss this with me in my office within a week of the missed exam and bring the appropriate documentation.

Quizzes: There will be 10 on-line quizzes given in this class. Missed quizzes will be recorded as a zero. A strict deadline for submission will be given for the quizzes. Any quiz not submitted by this time will not be graded. On-line quizzes will not be opened again after the due date.

icourse: This site will be used for posting class materials including lecture notes and student materials. Announcements related to class will also be posted here. All of your exam and quiz grades will be posted on icourse. Students should regularly check their class icourse sites at least twice a day for class materials.

Class Attendance and Preparation: Students are responsible for class preparation and for any material presented in the course of the lectures **whether or not it is contained in the textbook.** Chemistry is a highly-structured course, with each new topic based on others previously developed. Thus, it is critical for students to keep consistently up-to-date in their readings and assignments. To fall even one class period behind is to risk considerable difficulty in mastery of future material.
To succeed in this class, it is expected that a student should:

1) Read and make notes on the chapter material before attending lecture.

2) Ask relevant questions in class on any material that was not fully understood while reading the chapter.

3) Each night after a lecture, the student should log all of the information they can remember from class without any aids. Any information that cannot be recalled requires more in-depth review.

4) Attempt all of the posted chapter problems before the instructor covers them in class.

5) Attempt the self-assessment quiz at the end of each chapter in the textbook.
   Suggestion: When attempting to solve problems do not look for similar questions. Try to answer questions based on the material you have covered in class. Looking for similar questions usually means that you do not understand the material and can only identify how to solve problems by memorizing the steps to get the answers.

6) Students are expected to attend all classes and laboratories (even when attendance is not recorded) and are responsible for all assignments and materials presented. In the event of unavoidable absences, it is the responsibility of the student to find out what materials were covered or what assignments were given in his or her absence.

Some Examples of Unacceptable Student Conduct:
- Leaving class before the lecture is over.
- Not following the testing procedures as instructed.
- Talking while your professor is lecturing.
- Arguing with the professor about student conduct.
- Not sitting up straight with paper directly in front of you during an exam.
- Not keeping your scantron or exam papers covered during an exam.
- Using a disrespectful tone of voice, harsh words or profanity.
- Making inappropriate gestures of any kind.
- Letting your cell phone ring audibly during a lecture or exam.
- Having a cell phone available during a quiz or exam.
- Arriving late for lecture or for an exam.
- Allowing your laboratory data or answers to be copied.

Cell Phones and Electronics: In consideration of your classmates, turn off all sound alerts during every lecture and examination. If you must have the cell phone during the daily lectures, please set it to ring on vibrate mode (silent). If you need to be on call during an exam, please inform the instructor and leave the phone with the instructor. You may not use cell phones as calculators during exams/quizzes.

If you wish to use a computer to view class notes or to take class notes, you are required to sit in the last three rows of the lecture hall. Believe it or not, laptops prove to be a distraction in classrooms and hand written notes more beneficial to the student.\(^1\)\(^2\)

You may not record my lecture (audio and/or video) without prior permission.
The University requires that faculty members must, on a date after the midpoint of the course to be set by the Provost (or his designee)

1. give a WF to all those students who are on their rolls but no longer taking the class and
2. report the last day the student attended or turned in an assignment.

All examinations must represent your individual effort, with no unauthorized aid. To either give or receive unauthorized information during an examination is cheating, as is the use of any unauthorized supplementary material. In addition, all laboratory work performed in conjunction with this course must represent your individual effort. Only original data obtained by your own in-laboratory experimentation are permitted to be used, except when expressly authorized by your laboratory instructor. Data from supplementary sources, handbooks, reference literature, etc. must be clearly referenced (title, author, volume, pages(s), etc.). Falsification or destruction of data constitutes cheating as well. Conduct disruptive of class, examinations, or laboratories or falsification or destruction of information related to chemistry courses will be taken as a violation of the policies of the Board of Regents of the University System of Georgia and the Georgia State University Student Code of Conduct, Section 6.0. Any suspected offenses may be referred to the Chairman of the Department or the Dean of Students for appropriate disciplinary action.

As per the Georgia State University Student Code of Conduct and Administrative Policies p.45: “Religious Observance

Students wishing to have an excused absence due to the observation of a religious holiday of special importance must provide advanced written request to each instructor by the end of the first week of classes.”

The foregoing provides a general plan for the course, deviations from which may be necessary.

The instructor will announce any such changes in class.