Text: Chemistry: A Molecular Approach with Mastering Chemistry, 3rd by Nivaldo Tro


Required Materials:
1) A Pearson Mastering Chemistry account
2) A scientific, non-programmable calculator

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 BrightSpace 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 215
Office Hours: Monday 12:00pm -3:00pm, Wednesday 12:00pm - 2:00pm
Appointment Hours*: Mon. 3:00pm-5:00pm, Tues.12:00pm-1:00pm, Fri. 12:00pm-2:00pm
* these appointment hours are not always available every week. Email to schedule an appointment hour.

Lecture Time: M, W, F 11:00 am - 11:50 am
Lecture Room: Aderhold Learning Center 5

Important Dates:
First day of Class: January 11th
MLK Holiday: January 18th
Mid Point: March 1st
Spring Break March 14th - 20th
Classes End: April 25th
Final Exam: Wednesday, April 27th, 10:45-13:15, ALC 5

We have 38 lectures to cover chapters 11-19. This relates to roughly 4 lectures per chapter.
Chapter 11 Liquids, Solids, and Intermolecular Forces
Chapter 12 Solutions
Chapter 13 Chemical Kinetics
Chapter 14 Chemical Equilibrium
Chapter 15 Acids and Bases (actually more equilibrium)
Chapter 16 Aqueous Ionic Equilibrium
Chapter 17 Free Energy and Thermodynamics
Chapter 18 Electrochemistry
Chapter 19 Radioactivity and Nuclear Chemistry
## Point distribution

<table>
<thead>
<tr>
<th>In Class Multiple Choice</th>
<th>EXAMS (Best 3 of 4)</th>
<th>255</th>
</tr>
</thead>
<tbody>
<tr>
<td>On-line QUizzes</td>
<td>(Best 3 of 4)</td>
<td>75</td>
</tr>
<tr>
<td>Mastering Chem</td>
<td>HOMEWORK</td>
<td>70**</td>
</tr>
<tr>
<td>LABORATORY Grade</td>
<td></td>
<td>200*</td>
</tr>
<tr>
<td>Final EXAM</td>
<td>(ACS standardized test)</td>
<td>200</td>
</tr>
</tbody>
</table>

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* 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.**

** Mastering Chemistry Homework points will be calculated based on percentage.

### Schedule

<table>
<thead>
<tr>
<th>Week of….</th>
<th>Monday</th>
<th>Wednesday</th>
<th>Friday</th>
</tr>
</thead>
<tbody>
<tr>
<td>January 11&lt;sup&gt;th&lt;/sup&gt;</td>
<td>Intro Lecture</td>
<td>Lecture</td>
<td>Lecture</td>
</tr>
<tr>
<td>January 18&lt;sup&gt;th&lt;/sup&gt;</td>
<td><em>No Class</em></td>
<td>Lecture</td>
<td>Lecture</td>
</tr>
<tr>
<td>January 25&lt;sup&gt;th&lt;/sup&gt;</td>
<td>Lecture</td>
<td>Lecture</td>
<td>Lecture</td>
</tr>
<tr>
<td>February 1&lt;sup&gt;st&lt;/sup&gt;</td>
<td>Lecture</td>
<td>Lecture</td>
<td>Exam 1 Feb 5&lt;sup&gt;th&lt;/sup&gt;</td>
</tr>
<tr>
<td>February 8&lt;sup&gt;th&lt;/sup&gt;</td>
<td>Lecture</td>
<td>Lecture</td>
<td>Lecture</td>
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<tr>
<td>February 15&lt;sup&gt;th&lt;/sup&gt;</td>
<td>Lecture</td>
<td>Lecture</td>
<td>Lecture</td>
</tr>
<tr>
<td>February 22&lt;sup&gt;nd&lt;/sup&gt;</td>
<td>Lecture</td>
<td>Lecture</td>
<td>Exam 2 Feb 26&lt;sup&gt;th&lt;/sup&gt;</td>
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<tr>
<td>February 29&lt;sup&gt;th&lt;/sup&gt;</td>
<td>Lecture</td>
<td>Lecture</td>
<td>Lecture</td>
</tr>
<tr>
<td>March 1&lt;sup&gt;st&lt;/sup&gt; :Midpoint</td>
<td>Lecture</td>
<td>Lecture</td>
<td>Lecture</td>
</tr>
<tr>
<td>March 7&lt;sup&gt;th&lt;/sup&gt;</td>
<td>Lecture</td>
<td>Lecture</td>
<td>Lecture</td>
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<tr>
<td>March 21&lt;sup&gt;st&lt;/sup&gt;</td>
<td>Lecture</td>
<td>Lecture</td>
<td>Exam 3 Mar 25&lt;sup&gt;th&lt;/sup&gt;</td>
</tr>
<tr>
<td>March 28&lt;sup&gt;th&lt;/sup&gt;</td>
<td>Lecture</td>
<td>Lecture</td>
<td>Lecture</td>
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<tr>
<td>April 4&lt;sup&gt;th&lt;/sup&gt;</td>
<td>Lecture</td>
<td>Lecture</td>
<td>Lecture</td>
</tr>
<tr>
<td>April 11&lt;sup&gt;th&lt;/sup&gt;</td>
<td>Lecture</td>
<td>Lecture</td>
<td>Exam 4 Apr 15&lt;sup&gt;th&lt;/sup&gt;</td>
</tr>
<tr>
<td>April 18&lt;sup&gt;th&lt;/sup&gt;</td>
<td>Lecture</td>
<td>Lecture</td>
<td></td>
</tr>
<tr>
<td>April 25&lt;sup&gt;th&lt;/sup&gt;</td>
<td>Lecture</td>
<td>FINAL EXAM 10:45 am</td>
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* Midpoint on March 1<sup>st</sup>, 2016 is the last day to drop a class with a W

**Final Exam is Wed. April 27<sup>th</sup>, 2016 starting at 10:45 am in our classroom. It is the ACS standardized exam. Duration of exam is 110 min. It is a comprehensive exam covering Chpt 1-19. Yes, it includes all the material from CHEM 1211. Every one of your instructors 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.**
Grading:

<table>
<thead>
<tr>
<th>Points</th>
<th>Percent</th>
<th>Letter Grade</th>
</tr>
</thead>
<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>
</tr>
<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>
</tr>
</tbody>
</table>

No make-up examinations or quizzes will be given. Missed examinations and quizzes will be recorded as a zero. Allowable absences MUST be accompanied by verifiable documentation. This includes ‘family emergencies’. The note must be provided within a week of the missed test/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.

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 and quizzes.

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

Examinations: The best 3 of the 4 examination grades will be counted toward the student’s grade. Each student is allowed to drop one exam grade. There will be no make-up exams. If you miss an exam due to an allowable excuse, you MUST come discuss this with me in my office.

On-Line Quizzes: The best 3 quiz grades out of 4 will be counted toward the final grade. There will be no make-up quizzes. Missed quizzes will be recorded as zero. There will be a very specific time frame in which these quizzes must be completed. Once the quiz has begun, the deadline cannot be changed. There are usually no allowable excuses for a missed quiz. They are open and available for multiple days; any excuse would have to cover every day that the quiz was available.

Homework: Homework should be submitted online using “Mastering Chemistry”. The course code is: KERR1212S2016. Homework that is submitted in class will not be accepted. Do not wait until just before the deadline to report a problem. There are many, many places on campus that provide students computer access to the internet. If your internet is not working at home, please utilize these to complete your homework. Late
homework submissions will receive a reduced grade of 1% per day. Each answer allows for 5 attempts. There is a 1% deduction for each incorrect attempt. Homework should be completed promptly after finishing the material in class, due to this there will not be any “amnesty days” for homework.

**BrightSpace:** 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 BrightSpace. Students should regularly check their class BrightSpace 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 can not 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 test.
- 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.\textsuperscript{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)
\begin{itemize}
\item give a WF to all those students who are on their rolls but no longer taking the class and
\item report the last day the student attended or turned in an assignment.
\end{itemize}

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 \textit{in-laboratory} experimentation are permitted to be used, except when expressly \textit{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.

The foregoing provides a general plan for the course, deviations from which may be necessary. The instructor will announce any such changes in class.

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.”

\begin{enumerate}
\item http://chronicle.com/blogs/wiredcampus/taking-notes-by-hand-benefits-recall-researchers-find/51411
\item http://www.psychologicalscience.org/index.php/news/releases/take-notes-by-hand-for-better-long-term-comprehension.html
\end{enumerate}