INSTRUCTOR
DR. LISA KENDHAMMER
OFFICE HOURS: TUES 10 – 11AM, WED 10 – 11AM, AND BY APPOINTMENT
OFFICE: PHSC 304
OFFICE PHONE: lkendhammer@csuchico.edu

WHAT MATERIALS DO YOU NEED FOR THIS COURSE?
Material Required:
TEXTS: Chemistry, 7th Ed., McMurry & Fay. The 6th edition is also ok, but page numbers and sections may be different.
Laboratory Experiments, 13th Ed., Nelson, Kemp
CLICKER: iClicker 2 or iClicker Reef (iClicker 1 is also ok)
Text and iClicker are available through:
The Wildcat Bookstore
The Faculty Bookshelf
Various websites online
You can also rent the eBook for 1 semester through the publisher’s website.

ONLINE HOMEWORK: Aleks
CALCULATOR: Non-Graphing calculator; a TI-30 series or the equivalent
SUPPLIES: Safety Glasses or Goggles (required); Lock (required); Lab coat (supplied); Molecular Model Kit (optional)

WHAT SHOULD YOU BE ABLE TO DO FOR SUCCESSFUL COMPLETION OF THIS COURSE?
• summarize how the chemical and physical behavior of atoms and compounds are related to their internal structure
• demonstrate how the interaction between atoms can form chemical bonds by constructing representations of the reactions and processes
• explain how the chemical and physical properties of chemical compounds are related to their structure and geometric shape
• demonstrate how chemical reactions occur
• compare the relationship of energy to chemical reactions and processes.
• explain basic interactions between molecules
• implement the scientific process through hands on laboratory experience
• differentiate between the different representations used in chemistry, specifically the macroscopic, particle, and symbolic representations and demonstrate when to use them
• interpret tables, figures, and graphics used in materials
• perform calculations appropriate to the different content areas

These are adapted from the ACCM
HOW CAN YOU BE SUCCESSFUL IN THIS COURSE?
1. Come to class and participate in activities and discussions. Discuss questions with the people around you—they are great learning tools.
2. If you miss class, the slides will be posted on blackboard after lecture and you should get detailed notes from one of your classmates.
3. **Attend SI Sessions.** Supplemental Instruction (SI) is offered for this course. For information about the days, times, and locations for SI sessions, refer to the [SLC website](#). Research within the CSU system has shown that students who attended SI sessions regularly received higher exam scores and earned high grades in the course than those who did not attend. Start early and go often.
4. Keep up with your Aleks homework and take it seriously. You will have assignments due twice a week.
5. Take your Aleks assessment seriously. It will be the basis for all of your future assignments.
6. Read the textbook before class. Take notes, go through the practice problems, and study worked examples.
7. Start studying now and form study groups. Study each day and do not wait until the night before the exam. You may find it helpful to schedule an hour each day devoted to just studying chemistry.
8. Come to my office hours. Bring questions about the lecture, your notes, the exams, etc.

WHAT TOPICS ARE WE GOING TO BE COVERING EACH WEEK?

<table>
<thead>
<tr>
<th>Week</th>
<th>Week of</th>
<th>Lecture/Chapter Topics</th>
<th>Laboratory Experiments &amp; Topics</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Aug. 21</td>
<td>Chapter 1: Matter and Measurement</td>
<td>Check In, Introduction, Safety Rules; <em>E1</em>: Parts D &amp; E; Basic Laboratory Techniques</td>
</tr>
<tr>
<td>2</td>
<td>Aug. 28</td>
<td>Chapter 2: Atoms, Molecules, and Ions; Nomenclature</td>
<td><em>E2</em>: Identification of Substances by Physical Properties</td>
</tr>
<tr>
<td>3</td>
<td>Sept. 4</td>
<td>Chapter 3: Formulas, Equations and Moles; Limiting reagents and % yield</td>
<td><em>E5</em>: Chemical Formulas</td>
</tr>
<tr>
<td>4</td>
<td>Sept. 11</td>
<td>Chapter 4: Reactions in Aqueous Solutions</td>
<td><em>E4</em>: Chemical Reactions</td>
</tr>
<tr>
<td>5</td>
<td>Sept. 18</td>
<td>Chapter 4: Reactions in Aqueous Solutions Chapter 5: Atomic Structure</td>
<td><em>E21</em>: Reactions in Aqueous Solutions: NIEs</td>
</tr>
<tr>
<td>6</td>
<td>Sept. 25</td>
<td>Chapter 5: Atomic Structure</td>
<td><em>E20</em>: Titration of Acids and Bases</td>
</tr>
<tr>
<td>7</td>
<td>Oct. 2</td>
<td>Chapter 6: Periodicity and Ionic Bonding</td>
<td><em>E15</em>: Activity Series</td>
</tr>
<tr>
<td>8</td>
<td>Oct. 9</td>
<td>Chapter 7: Covalent Bonding</td>
<td><em>E6</em>: Chemical Reactions of Cu and % Yield</td>
</tr>
<tr>
<td>9</td>
<td>Oct. 16</td>
<td>Chapter 7: Covalent Bonding Chapter 8: Molecular Structure</td>
<td><em>X1</em>: Gravimetric Analysis of Calcium Oxalate (On Blackboard)</td>
</tr>
<tr>
<td>10</td>
<td>Oct. 23</td>
<td>Chapter 8: Molecular Structure</td>
<td><em>E11</em>: Molecular Geometries of Covalent Molecules</td>
</tr>
<tr>
<td>11</td>
<td>Oct. 30</td>
<td>Chapter 9: Thermochemistry</td>
<td><em>E28</em>: Heat of Neutralization</td>
</tr>
<tr>
<td>12</td>
<td>Nov. 6</td>
<td>Chapter 9: Thermochemistry Chapter 10: Gases</td>
<td><em>E13</em>: Molar Mass of a Vapor</td>
</tr>
<tr>
<td>13</td>
<td>Nov. 13</td>
<td>Chapter 10: Gases Chapter 11: Liquids and Solids</td>
<td><em>E14</em>: Determination of the Gas Constant</td>
</tr>
<tr>
<td>14</td>
<td>Nov. 20</td>
<td>Thanksgiving Week</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>Nov. 27</td>
<td>Chapter 11: Phase Changes Chapter 12: Solutions</td>
<td><em>E19</em>: Freezing Point Depression</td>
</tr>
<tr>
<td>16</td>
<td>Dec. 4</td>
<td>Chapter 12: Solutions</td>
<td>Clean-Up and Check-Out</td>
</tr>
<tr>
<td>17</td>
<td>Dec. 11</td>
<td>Finals Week</td>
<td></td>
</tr>
</tbody>
</table>

This is a tentative schedule and changes may occur at the discretion of the instructor.

WHEN ARE MY EXAMS?

<table>
<thead>
<tr>
<th>Exam 1</th>
<th>Monday, September 11</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exam 2</td>
<td>Friday, October 6</td>
</tr>
<tr>
<td>Exam 3</td>
<td>Friday, November 3</td>
</tr>
<tr>
<td>Exam 4</td>
<td>Friday, December 1</td>
</tr>
<tr>
<td>Final Exam</td>
<td>To be determined</td>
</tr>
</tbody>
</table>
HOW WILL I BE EVALUATED?

<table>
<thead>
<tr>
<th>Graded Items</th>
<th>Weighted Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Four hour exams</td>
<td>40%</td>
</tr>
<tr>
<td>Final exam</td>
<td>20%</td>
</tr>
<tr>
<td>Laboratory</td>
<td>20%</td>
</tr>
<tr>
<td>Aleks Homework</td>
<td>10%</td>
</tr>
<tr>
<td>Clicker/Class Activities</td>
<td>10%</td>
</tr>
</tbody>
</table>

Letter Grade Equivalents

- 100 – 92%: A
- 91 - 88%: A -
- 87 – 84%: B+
- 83 – 80%: B
- 79 – 76%: B-
- 75 – 72%: C+
- 71 – 68%; C
- 67 – 60%; C -
- 59 – 56%; D+
- 55 – 52%; D
- <52% F

WHAT ARE THE COURSE POLICIES?

Attendance/Participation in Lecture
Participation is an integral component of success in this course. It is important to read the textbook before coming to class and be ready to participate. While attendance is not required for lecture, you will receive points for using your classroom response device (i.e. iClickers) and for participating in activities. You can find the iClicker registration information on our course Blackboard Learn page. At the end of the semester I will drop approximately 20% of your lowest clicker days. If you miss class, no matter the reason, it will result in that day counting as one of your dropped days.

Laboratory
According to department policy, you must be on time for the first day of lab. If your tardiness exceeds 15 minutes your spot in the class could be given to another student; resulting you in being dropped from the class.

Labs are to be handed in at the end of your lab class in the week they are performed. If you turn in your labs late, your score will be penalized 25% per day. The only way you can make up a missed lab is if you find another lab section that same week in which to do the lab. However, this MUST be approved by both your lab instructor and the lab instructor who is in charge for the lab section in which you are making up the lab. Because of the extensive preparation for these labs, no make-up labs can be conducted in the week(s) after the missed lab.

You may miss no more than two labs in the semester. If you miss 3 or more labs, it will result in you failing the laboratory component of the course. You must pass the laboratory component of the course to pass the course.

There are a couple of lab regulations that must be followed. Lab glasses or goggles, long pants, and closed toed shoes are to be worn at all times inside the lab. This is department policy and must be followed (however, your lab instructor may be forgiving the first week of the semester).

Homework
One way to be successful in Chem111 is to have a strong foundation in your math skills and to increase your retention of all the new material you are going to be learning. To help you with this, we will be using an
adaptive learning technology call Aleks (Assessment and Learning in Knowledge Spaces). Aleks will be used in place of traditional homework. It will feel different to you because Aleks is a defined outcome (i.e., you need to master the concept of instantaneous rates) as opposed to a defined effort (i.e., you need to complete problems 1-7). As part of your mastery of each topic, Aleks will ensure that your background knowledge on each topic is complete. This may mean that the time spent on Aleks each night is quite variable. Consequently, it is important to get and stay on it; procrastination with your Aleks assignment will make you very unhappy and will not help meet your goals for success in the class. To earn more about Aleks or if you encounter any technical difficulties you can consult the Aleks FAQs page or contact Aleks technical support.

It is your responsibility to access a working computer with internet connectivity to access Aleks and complete your online homework. There will be two components to your Aleks score. The first component consists of meeting the twice a week (Wednesday and Sunday nights) deadlines for all of the objectives throughout the course of the semester. Included in these objectives will be the initial assessment and the prerequisite review. This portion will make up 70% of your Aleks homework percent. The remaining 30% will be earned by completing your Aleks “pie” by December 15.

Late work will not be counted so make sure to submit your work before the deadline. I will drop five of your lowest homework objectives (not including the initial assessment and prerequisite review). If you do not submit your homework, no matter the reason, it will result in that objective counting as one of your dropped objectives.

**Exams**
The first four exams will be given during class time on the dates listed above. If an exam is missed it will result in a score of 0, unless it was prearranged or if there were extremely dire circumstances for missing the exam. If the score on your final exam is greater than any of your non-zero hourly exams, then the score from your final exam can replace the lowest score of your hourly exams.

**Grade Disputes**
If you would like to dispute a grade on an assignment or examination, you must wait 24 hours before contacting me about the dispute. After the 24 hours, you may submit a written response describing the dispute and I will look over the item(s) in question. The written response must be submitted within 7 days of when the assignment or examination was given back to you.

**Add/Drop/Withdrawal Policy**
Note: This was taken directly from Chico Accessible Syllabus Template
“You are responsible for understanding the policies and procedures about add/drops, withdrawal, academic renewal, etc., found in the CSU Chico University Catalog. You should be aware of the new deadlines and penalties for adding and dropping classes.”

**Disability Accommodations**
Note: This was taken directly from Chico Accessible Syllabus Template
“If you need course adaptations or accommodations because of a disability or chronic illness, or if you need to make special arrangements in case the building must be evacuated, please make an appointment with me as soon as possible, or see me during office hours. Please also contact Accessibility Resource Center (ARC) as they are the designated department responsible for approving and coordinating reasonable accommodations and services for students with disabilities. ARC will help you understand your rights and responsibilities under the Americans with Disabilities Act and provide you further assistance with requesting and arranging accommodations.”
**Academic Dishonesty**

It is your responsibility to have read and understood the "Executive Memorandum 04-036", CSU Chico’s policy on Academic Integrity. Copying of material, cheating, unauthorized collaboration, plagiarism, self-plagiarism and the unauthorized use of materials during exams and labs is forbidden. Do your own work and make sure it is from this semester. Any violations will result in a minimum consequence of a zero for that assessment, and failure in the course or referral to the Office of Student Judicial Affairs may occur. For the online homework, feel free to discuss the items with your classmates and you may work together, but each individual should complete the work and submit their own answers.

**Title IX: Confidentiality and Mandatory Reporting**

As a Chico State instructor, one of my responsibilities is to help create a safe learning environment for Chico State students. It is my goal that you feel able to share information related to your life experiences in classroom discussions, in your written work, and in our one-on-one meetings. I will seek to keep information you share private to the greatest extent possible. However, I am required to share information regarding sexual misconduct with the University.

Students may speak to someone confidentially by contacting the Counseling and Wellness Center (898-6345) or Safe Place (898-3030). Information about campus reporting obligations and other Title IX related resources are available on the [Title IX website](http://www.titleixwebsite.com).