Chemistry 1301-003
Fall 2014
Preparatory Chemistry

Instructor: Dr. Anthony Cozzolino
Email: I prefer communication through Blackboard. If you must contact me through email, then use anthony.f.cozzolino@ttu.edu and include CHEM1301 in the subject line or your email will be ignored.

Lectures: TR 2:00 – 3:20 pm Chemistry 49
Office Hours: MWF 2:00 – 3:00 pm Chemistry 125-A
TR 3:30 – 4:30 am Chemistry 125-A
Virtual Office Hours: https://meet.ttu.edu/anthony.f.cozzolino/B4V2FZGT
Same hours as regular office hours. Additional hours will be provided as necessary.

Required Items:
1. Steve Russo and Mike Silver Introductory Chemistry Atoms First 5th Edition
2. Modified Mastering Chemistry http://www.pearsonmylabandmastering.com (Included with textbook)
3. Donald J. Dahm and Eric A. Nelson Calculations in Chemistry
4. Turning Point Response Pad

Calculator:
Chem 1301 will follow calculator policy adapted from the SAT calculator policy. Please see posted documentation of Blackboard.

Objective:
The purpose of CHEM 1301 is to prepare students for the general chemistry sequence, Principles of Chemistry I (1307) and II (1308). The focus of CHEM 1301 is on helping students master the basics that are vital to success in this and all higher level chemistry courses.

Course Outline:
This schedule is to be used as a guideline for what will be covered throughout the course. You are responsible for any changes to material announced in class or through e-mail.

<table>
<thead>
<tr>
<th>Week of:</th>
<th>Chapters:</th>
<th>Week of:</th>
<th>Chapters:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aug 25</td>
<td>Syllabus, 1</td>
<td>Oct 20</td>
<td>8</td>
</tr>
<tr>
<td>Sep 1</td>
<td>2, 3</td>
<td>Oct 27</td>
<td>9</td>
</tr>
<tr>
<td>Sep 8</td>
<td>3, Exam 1</td>
<td>Nov 3</td>
<td>12, Exam 3</td>
</tr>
<tr>
<td>Sep 15</td>
<td>4</td>
<td>Nov 10</td>
<td>10</td>
</tr>
<tr>
<td>Sep 22</td>
<td>5</td>
<td>Nov 17</td>
<td>11</td>
</tr>
<tr>
<td>Sep 29</td>
<td>6</td>
<td>Nov 24</td>
<td>11</td>
</tr>
<tr>
<td>Oct 6</td>
<td>7, Exam 2</td>
<td>Dec 1</td>
<td>Review</td>
</tr>
<tr>
<td>Oct 13</td>
<td>8</td>
<td>Dec 8</td>
<td>Final Exam</td>
</tr>
</tbody>
</table>

Learning Outcomes:
Upon completion of the course, students will be able to:
1. Understand and use scientific notation.
2. Use dimensional analysis to solve problems while using proper units and significant figures.
3. Understand and identify the physical and chemical properties of matter.
4. Distinguish between elements, compounds, mixtures and pure substances.
5. Understand the past models and modern model of the atom.
6. Learn and utilize various features of the periodic table.
7. Determine names and formulas of binary molecular compounds, ionic compounds and acids.
8. Recognize, balance and identify basic types of chemical reactions and predict the outcome of these reactions.
9. Understand and use the concept of a mole in chemical calculations.
10. Calculate and utilize solution concentration units such as molarity.
11. Use stoichiometric relationships between species in a reaction.
12. Understand the ideal gas law and apply it to quantitative problems.

Assessment:
The expected learning outcomes will be assessed through the use of online homework, quizzes and examinations. The following table provides a grade breakdown:

<table>
<thead>
<tr>
<th>Assessment Type</th>
<th>Percentage of Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quizzes/clickers</td>
<td>14%</td>
</tr>
<tr>
<td>Homework</td>
<td>14%</td>
</tr>
<tr>
<td>Exam 1</td>
<td>14%</td>
</tr>
<tr>
<td>Exam 2</td>
<td>14%</td>
</tr>
<tr>
<td>Exam 3</td>
<td>14%</td>
</tr>
<tr>
<td>Final</td>
<td>30%</td>
</tr>
</tbody>
</table>

Letter Grades:
The following cutoffs will be used to determine letter grades for the class:

A: 89-100%  B: 77-88%  C: 65-76%  D: 53-64%  F: 0-52%

Quizzes/clickers:
There will be a number of quizzes throughout the semester. There will be no make-up quizzes, the bottom 25% of the quizzes will be dropped. Quizzes will typically be based on the pre-lecture work assigned from Calculations in Chemistry and will occur at a random point in the class utilizing the clickers.
Clickers will be used every class meeting. Grading is based on a random combination of participation and correctness of answers. It is considered against the spirit of Academic Integrity to submit responses for another student. If this behavior is observed then both parties will receive a 0 for all quiz/clicker grades.

Homework:
Online homework will be posted and submitted using Modified Mastering Chemistry http://www.pearsonmylabandmastering.com. An access code to this system is packaged with a new text if you buy the text at one of the area bookstores. If you purchase a used text, you must also purchase access to the Modified Mastering Chemistry online homework system. There will be multiple homework assignments for each chapter. The dates that the assignments are available for completion, announcements regarding assignments and any course updates
will be posted on the Modified Mastering Chemistry website. Homework sets will generally be assigned every day the class meets and may often be due before the start of the next class. **Students should expect to spend several hours completing homework each week.**

It is strongly recommended to complete all homework even after the due date because completing the homework assignments is the best way to learn the material and prepare for the examinations. Late homework will be penalized by 2% for every day that the homework is late to a minimum of 50%. The last day to submit late homework will be December 5th. Typically you will be given 5 attempts to get a question correct. Each attempt will cost you 10% for a multiple-choice or true/false question or 5% for any other type of question. Hints will be available but will cost 2% per hint.

**Examinations:**

Midterm examinations will be held at the times listed below. The exam rooms will be released during the lecture before the exam and posted to the electronic resources associated with this course. The room for the final will be announced at the end of the semester.

<table>
<thead>
<tr>
<th>Exam</th>
<th>Date and Time</th>
<th>Chapters</th>
</tr>
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<tbody>
<tr>
<td>1</td>
<td>Wednesday, Sep 10, 7:00 – 8:30 pm</td>
<td>1-3</td>
</tr>
<tr>
<td>2</td>
<td>Wednesday, Oct 8, 7:00 – 8:30 pm</td>
<td>4-6</td>
</tr>
<tr>
<td>3</td>
<td>Wednesday, Nov 5, 7:00 – 8:30 pm</td>
<td>7-9</td>
</tr>
<tr>
<td>Final</td>
<td>See University schedule</td>
<td>1-12</td>
</tr>
</tbody>
</table>

*Bring a calculator, #2 pencils (erasers), and a picture ID to all examinations*

Exam questions will focus on fundamental concepts and problem-solving skills. Exams will consist of **multiple choice questions** with answers recorded on a scantron (provided). All exam scores will be reported electronically.

There will be **no make-up examinations**. If you miss one examination for a **valid verified** reason (ie. Personal health problem, death in the family), the final exam will count for 44% of your final grade. If you miss more than one exam then you will receive a 0 on that exam.

Also, because you are allowed to keep the test questions, no student will be allowed to leave the exam before 30 minutes have expired and no student will be able to begin an examination after he first student has left the room. **Be on time!**

The final exam is **mandatory**. If you do not take the final exam, you will be unable to pass the course. If you have an exam conflict for any reason, you must inform the instructor **one week before the scheduled exam** so alternate plans can be made. The final exam date and time are listed online under Common Final Exams. The final exam will consist of **multiple choice questions** with answers recorded on a scantron (provided).

All absence notes must be delivered to the instructor within **one week** of the absence or no excuses will be accepted.

No graphing calculators will be permitted for use on examinations.

**Cheating:**

Texas Tech University fosters a spirit of honesty and academic integrity. The attempt by a student to present as their own work material not honestly performed is regarded as a serious offense and renders the student liable to course failure as well as possible suspension. For a
broader scope on Academic Integrity (including cheating, plagiarism, collusion, etc.) please see http://www.depts.ttu.edu/studentconduct/academicinteg.php

**Absences:**

Student attendance is expected for all lectures and all students are responsible for the information presented in lectures, including changes to course policies or schedules.

**Religious Observations:**

A student who intends to observe a religious holy day should make that intention known to the instructor one week prior to the absence. A student who is absent from class for the observance of a religious holy day shall be allowed to take an examination or complete a homework assignment for that day within a reasonable time frame.

**Special Conditions:**

Any student who, because of a disability, may require special arrangements in order to meet the course requirements should contact the instructor as soon as possible to make any necessary arrangements. Students should present appropriate verification from Student Disability Services during the instructor’s office hours (or scheduled appointment if office hours are inconvenient). Please note instructors are not allowed to provide classroom accommodations to a student until appropriate verification from Student Disability Services has been provided. For additional information, you may contact the Student Disability Services office in 335 West Hall or 806-742-2405 (http://www.depts.ttu.edu/students/sds/).

**Important University Dates:**

- **First Class Day:** August 25
- **Holiday:** September 1
- **Last day to drop:** September 10 (no penalty)
- **Midterm Grades Due:** October 20
- **Last day to drop:** October 27 (with penalty)
- **No examinations:** November 24 – December 3 (except makeup exams)
- **Holiday:** November 26–28
- **Last Class Day:** December 3
- **Final Exams:** December 5–10

**Register for Mastering**

2. Under Register, click Student.
3. Enter your instructor’s course ID: cozzolino27806, and click Continue.
4. Sign in with an existing Pearson account or create an account:
   - If you have used a Pearson website (for example, MyITLab, Mastering, MyMathLab, or MyPsychLab), enter your Pearson username and password.
   - Click Sign in.
      - If you do not have a Pearson account, click Create. Write down your new Pearson username and password to help you remember them.
4. Select an option to access your instructor’s online course:
• Use the access code that came with your textbook or that you purchased separately from the bookstore.
• Buy access using a credit card or PayPal.
• If available, get 14 days of temporary access. (Look for a link near the bottom of the page.)

5. Click Go To Your Course on the Confirmation page. Under MyLab & Mastering New Design on the left, click Chem 1301-003 to start your work.

Retaking or continuing a course?
If you are retaking this course or enrolling in another course with the same book, be sure to use your existing Pearson username and password. You will not need to pay again.

Access Mastering after registering:
2. Click Sign in.
3. Enter your Pearson account username and password. Click Sign in.
4. Under MyLab & Mastering New Design on the left, click Chem 1301-003 to start your work.

Blackboard:
Blackboard is an online content management center for Chemistry 1301. It will serve as an area for me to post lecture notes, post course information, make announcements, report grades, and a place for you to ask me, and your fellow students, questions about the homework, exams, etc. You are responsible for accessing any of these documents and printing them for yourself as I will only provide electronic copies. Sign up at: ttu.blackboard.com