CHEM 1315 Syllabus  
General Chemistry  
**Instructor:** Jennifer Gray, JD | **Email:** jennifer-gray@ou.edu

**COURSE GOALS:** The first of a two semester sequence in general chemistry, this course will cover basic measurement, gas laws, and changes in state, stoichiometry, atomic theory, electron configuration, periodicity, bonding molecular structure and thermochemistry.

**REQUIRED TEXTS:**

**OTHER REQUIRED MATERIALS:**
- A simple scientific calculator (with no graphing or alpha-numeric functions) is permitted.
- A Sapling Learning Account. Your homework and quizzes will be completed here. Sign up for Sapling Learning by going to [www.saplinglearning.com](http://www.saplinglearning.com). This will be an additional fee of $34.00 paid to Sapling Learning at the time you sign up for your course on the Sapling Learning website. (Instructions for how to sign up for Sapling are listed on the content tab of your course under the heading “Sapling Sign-Up Instructions”)

**COURSE STRUCTURE:** Your course is comprised of the following units:
- Unit 1 = Fundamental Chemical Information, Atoms, Molecules, and Ions
- Unit 2 = Stoichiometry
- Unit 3 = Thermochemistry
- Unit 4 = Atomic Structure and periodicity
- Unit 5 = Molecular Structure and Bonding
- Unit 6 = Properties of Gases
- Unit 7 = Properties of Liquids, Solids, and Solutions
- Unit 8 = Organic Chemistry

**ASSIGNMENTS:**
This is a course that requires pen and pencil work. You will not be successful if you don't commit yourself to the work.

Your assignments and practice will include Sapling Learning Quizzes, online Labs, Practice Quizzes located in Desire2Learn as well as exercises and study questions from the book. Sapling learning homework is also available but not required.

To be successful in the class you should do all the assigned readings, examples, exercises, labs, and study questions from the book and the exercises.
Practice Quizzes
Complete the practice quiz at end of each unit first. Practice quizzes are located with the rest of your course materials in Desire2Learn and modeled after the exams. Each Practice Quiz has feedback for each question. After you complete the quiz and submit it, you will see the correct answers and the feedback for each question. You may take these practice quizzes as many times as you like to study the concepts and work out the problems. Your exam will be very closely based on the types of problems you are asked to solve in both the practice quizzes that accompany each unit. Each quiz can be completed for up to **5 points** of extra credit.

Sapling Homework and Quizzes
You will use your [www.saplinglearning.com](http://www.saplinglearning.com) account to complete your quiz assignments. You can access this link by clicking on the **Sapling** tab located at the top of your course.

At the end of each unit you will need to complete your Quiz assignment at Sapling Learning. (The homework assignment is practice and not worth points you will have 5 opportunities to attempt the homework.) The quizzes are worth **5 points** and you will have 5 opportunities to attempt the quizzes. Take the Practice Quiz before you attempt the Homework or Quizzes. If you miss a question, try to figure out what you have done wrong. If you cannot determine how to find the correct answer, you can email the instructor who will try to guide you through the problem on a step by step basis.

You may use your book and other resources for Lesson Assignments.

LABS:
This course includes virtual labs developed by Carnegie Mellon. You are required to complete all the labs and submit lab reports. These reports will be graded and constitute over 20% of your final grade. The labs are quite sophisticated and expand the reach of the virtual classroom to the laboratory.

Success in the labs requires you to read the introductory material, the procedure(s), and the assignment(s) before you attempt the lab. It is also important to keep a lab notebook. Write down your observations during the experiment and record all relevant data. Submit your lab in a timely manner!

EXAMS: The course has 4 exams. Each exam covers two units. All exams have 20 questions, 10 from each unit. All questions are worth 5 points apiece. Your grade in this course will mostly depend upon your performance on the four examinations and eleven labs.

GRADING: Evaluation of student performance and knowledge will be based upon your lab and exam scores. The point breakdown for all assignments is as follows:

<table>
<thead>
<tr>
<th>Lab</th>
<th>Description</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lab 1</td>
<td>Step-by-Step Demonstration</td>
<td>10</td>
</tr>
<tr>
<td>Lab 2</td>
<td>Density: Solutions</td>
<td>10</td>
</tr>
<tr>
<td>Lab 3</td>
<td>Density: Displacement Method</td>
<td>16</td>
</tr>
</tbody>
</table>
Lab 4: Writing Ionic and Covalent Formulas and Names 25 points
Lab 5: Stoichiometry 12 points
Lab 6: Limiting Reagents and Stoichiometry 20 points
Lab 7: Dilution Problem 6 points
Lab 8: Heat Transfer I 17 points
Lab 9: Heat Transfer II 18 points
Lab 10: Identifying Structures 18 points
Lab 11: Conservation of Mass and Aqueous Solutions 11 points

Lab Total 163 points

Exam 1 100 points
Exam 2 100 points
Exam 3 100 points
Exam 4 100 points
Exam Total 400 points

Sapling Quizzes 5 points (x 8) 40 points

GRAND TOTAL 603 points

The breakdown of grades is as follows:

A = 543 - 603 points (90 – 100%)
B = 482 - 542 points (80 – 89.9%)
C = 392 - 481 points (65 – 79.9%)
D = 302 - 391 points (50 – 64.9%)
F = 0 - 301 points (49.9% and below)

PROBLEMS OR QUESTIONS: If you have course content related questions, please email your instructor (jennifer-gray@ou.edu). If something isn’t working right in D2L, email cidldev@ou.edu with a description of the problem and the course you are in.

SPECIAL NEEDS: OU is committed to providing reasonable accommodation for all students with disabilities. Students who require accommodation are requested to speak with the instructor
as early in the semester as possible. Students with disabilities must be registered with the Disability Resource Center prior to receiving accommodation. (166 Goddard Health Center, 325-3852, http://drc.ou.edu).

**ACADEMIC MISCONDUCT & STUDENT CODE:** All work must be your own. Any evidence of copying from books, unacknowledged borrowing, or other plagiarism on exercises may warrant a failing grade, forfeiture of all fees, and an academic misconduct investigation by the university. See http://judicial.ou.edu/content/view/27/32/ for more information.