CHEM 1415 Syllabus
General Chemistry
Instructor: Jennifer Gray, JD | Email: jennifer-gray@ou.edu

COURSE GOALS: The second of a two course sequence, this class covers kinetics, equilibrium, acid/base chemistry, aqueous solutions, thermodynamics, electrochemistry, inorganic compounds, and nuclear chemistry.

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. 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 = Kinetics
- Unit 2 = Chemical Equilibrium
- Unit 3 = Acids and bases
- Unit 4 = Buffers, Titrations, and Solubility
- Unit 5 = Chemical Thermodynamics
- Unit 6 = Electrochemistry
- Unit 7 = Inorganic Chemistry
- Unit 8 = Nuclear 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 Homework and Quizzes, online Labs, Practice Quizzes located in Desire2Learn as well as exercises and study questions from the book.

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: Practice quizzes are located with the rest of your course materials in Desire2Learn and modeled after the exams. Each quiz can be completed for up to 5 points of extra credit for the first submission. 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. Use the Practice Quizzes for your exam preparation.

Sapling Homework and Quizzes: You will use your 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 non-credit homework. The quizzes are worth 5 points and you will have 5 opportunities to attempt the quizzes.

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. Exams 1 through 3 have 20 questions, 10 from each unit with all questions worth 5 points apiece. Exam 4 is worth 50 points. 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, sapling homework/quizzes 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>Dilution Problem</td>
<td>7</td>
</tr>
<tr>
<td>Lab 3:</td>
<td>Kinetics (Parts 1-4)</td>
<td>30</td>
</tr>
<tr>
<td>Lab 4:</td>
<td>Cobalt Lab</td>
<td>17</td>
</tr>
<tr>
<td>Lab 5:</td>
<td>Temperature and Le Châtelier’s Principle</td>
<td>22</td>
</tr>
</tbody>
</table>
Lab 6: Acidic and Base Solutions and Salts 24 points
Lab 7: Create a Buffer 15 points
Lab 8: Titrations and Finding pKa and Equivalence Point 17 points
Lab 9: Thermodynamics I 15 points
Lab 10: Thermodynamics II 10 points

Lab Total 167 points

Sapling Quizzes 8 @ 5 points each 40 points

Sapling Total 40 points

Exam 1 100 points
Exam 2 100 points
Exam 3 100 Points
Exam 4 50 points

Exam Total 350 points

GRAND TOTAL 557 points

The breakdown of grades is as follows:

A = 502 - 557 points (90 – 100%)
B = 446 - 501 points (80 – 89.9%)
C = 363 - 445 points (65 – 79.9%)
D = 279 - 362 points (50 – 64.9%)
F = 0 - 278 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.