CHEM 1210 - Principles of Chemistry 1

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Office Hours

On campus office hours MW 1:00-2:30 PM, or by appointment
On line office hours will be administered through Adobe Connect, a virtual classroom where we can chat, work problems, etc. The link for Connect is https://connect.usu.edu/chem1210-office-hours
If you can't make the specified on line office hours, I encourage you to email me from within Canvas with questions, or to make an appointment to meet me on line using AdobeConnect.

Course Description

Chemistry 1210 is the first of a two semester sequence of general chemistry for students in the physical and biological sciences and engineering. The course will cover topics presented in the first 13 chapters of the Brown, Lemay and Bursten text. Chemistry 1220 will cover the remainder of the material in the text.

Prerequisite

Previous or concurrent enrollment in Math 1050 or higher

Text

"Chemistry: The Central Science" 12th ed., 2012; Brown, Lemay & Bursten. A previous edition of this text (9th -13th ed.) will work just fine if that is what you have- no need to have the latest edition. Older editions can be bought for a fraction of the cost of the current edition from on line vendors. I am also writing an on line textbook, which can be used in place of a hardcopy text. The link to the on line text is in the class resources

Online Education

This section of chemistry 1210 is being offered via distance education. All lectures and tutorials (prerecorded), office hours, course materials and assignments (quizzes and exams) will be administered online through the Canvas instructure system. After registration, you will receive
instructions for logging into Canvas from the web address: [http://canvas.usu.edu](http://canvas.usu.edu). Note: Canvas will not be available to you until the first day of class.

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**Computer Requirements**

It is imperative that you have access to a computer with a high speed internet connection, and an up to date browser (internet explorer or firefox) with the necessary plug-ins to play html 5-embedded mp4 videos.

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**Canvas and Delivery of Materials**

Canvas instructure will be used for the management of Chem. 1210. You will also take your online chapter quizzes and exams using Canvas. To log on to Canvas, go to the web address: canvas.usu.edu, then select the course page for Chemistry 1210. Your **USERNAME** is your BANNER login and your default **PASSWORD** is your BANNER password.

You will access class resource materials (lecture overheads, lecture recordings, current exam keys, practice exams, end-of-chapter text solutions, etc.) from a link on the main Canvas course page titled “All resources”. The direct link is: [http://ensignchemistry.com/chemistry%201210%20preview/chemistry1210resources/resources.htm](http://ensignchemistry.com/chemistry%201210%20preview/chemistry1210resources/resources.htm)

The username and password for accessing the resources are:

Username: ensigns
Password: tadpoles2014

The “Start here” button on the main Canvas course page provides a series of tutorials for accessing and using the Canvas and class resources.

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**Lecture overheads and recordings**

Copies of my lecture overheads will be posted as PDF files. You may want to download and print out the appropriate overheads before listening to lecture, and have the print copies with you while you listen to lectures. Video recordings for lectures and tutorials are provided as mp4 files that play in your browser using flash or html.

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**Lecture content**

The number of lectures presented, and the content of lectures, will parallel the lecture content for the on-campus sections of chemistry 1210. This corresponds to approximately 40 “50 minute “lecture periods” presenting and explaining the principles summarized on the class schedule and developing problem solving skills, with an associated 50 minute recitation lecture for each 3 formal lectures (see description below).
Recitation lectures and online tutorials

For each chapter, and as review sessions prior to exams, there will be additional “recitation lecture” components which will focus solely on developing problem solving skills by working through problems similar to those you will encounter on your quizzes and exams. These “recitation lectures” will consist of a series of “on-line tutorials” containing solutions to selected textbook, sample quiz, and practice exam problems. All of these materials will be provided to you in the same format as the lecture recordings, where I work problems using a digitizer tablet which records my problem solving with voice over so you can watch and listen to the problem solving strategy in real time. What you will see on your computer screen is the equivalent to a classroom whiteboard with solutions being worked as if with a dry erase marker. Please note: if there are specific problems from practice exams or quiz problems that you would like me to work and post as “on-line tutorials”, simply email me or post a request to the discussions board and I will make an on-line solution to that problem for you.

Completion of Assignments

The course is offered in the spring semester of 2017 from 01/8/18 to 05/04/18. You must complete all assignments: 12 quizzes, three midterms, the optional comprehensive makeup exam, and a final examination within that time period within the time windows indicated on the class schedule. Please use the attached class schedule (also posted in Canvas) as a guide, and pace yourself properly. I recommend that you do not procrastinate taking the chapter quizzes, as they are an essential part of mastering the course material. A recommended sequence for each chapter is (1) print and look over the lecture overheads, (2) watch the lecture recordings, and use the textbook as needed to reinforce the lecture principles, (3) take the chapter self test (non-graded, (4) watch the on line solutions for the chapter self test, (4) take the first quiz attempt, (5) review the submitted quiz, (6) repeat steps (4) and (5) for your remaining quiz attempts.

Quizzes (graded)

There will be 12 chapter quizzes offered throughout the semester. Each quiz counts 10 points, is open book and consists of between 10 and 15 questions. You will take the quizzes on line through Canvas. You will have 60 minutes to take each quiz. You may repeat a given quiz up to four additional times during the availability period (indicated in Canvas) to improve your grade on that particular quiz, if you wish. Your highest score for the five attempts will be recorded. Note that each time you take a quiz you will receive a slightly different version, covering the same concepts but with different questions. I encourage you to take each quiz the full five times, as the problem solving skills you will gain from taking the quizzes multiple times will be very beneficial in preparing for the exams. Remember, there is no penalty for repeating a quiz;
your highest score of all attempts is the one that will be entered into the gradebook. The deadlines for taking the quizzes are indicted on the class schedule. Quizzes 1-4 cover midterm 1 materials, quizzes 5-7 cover midterm 2 material, quizzes 8-9 cover midterm 3 materials, and quizzes 10-12 cover the new material section of the final exam.

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**Midterm Exams (graded)**

Three hourly exams (100 points each) consisting of 25 multiple choice questions will be given on line through Canvas at proctored locations or by using proctorio within the “time windows” indicated on the course schedule. *Please read the instructions for taking proctored exams in the “Support” section of Canvas.* The examination formats will be the same as the on-campus sections of Chemistry 1210, with 25 questions worth 4 points each. You will be given 90 minutes to complete the midterm exams. The multiple choice exams are based on material covered in the on-line lectures, which will largely follow the organization of the chapters in the course text. **Many if not all of the exam questions will come directly from the chapter self test and chapter quiz questions,** so I strongly encourage you to work through each chapter self test, watch the accompanying tutorials for these self tests, and take each chapter quiz five times, even if you score perfectly on your first attempt. Your performance ultimately depends on your proficiency under testing conditions.

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**Online Make-Up Exam**

An optional “make-up exam”, covering all of the material covered on midterms 1-3 and worth 100 points, will be offered towards the end of the semester. If you score *higher* on this exam than on your lowest of three in-class midterms, the score will replace the lowest midterm score. If you score *lower* on the make-up exam than on all three of your in-class midterms, then this exam score will not count. You are strongly encouraged to take the make up exam as preparation for the final exam, and as a mechanism for improving your score on one of the three midterm exams. There is no penalty for taking the makeup exam, it can only help you.

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**Final Exam**

The final exam (200 points, to be completed in 140 minutes) will be given in the time period indicated on the class schedule. The final exam will consist of 50 questions, and contain both a “new material” section (100 points, material covered since exam 3) and a “comprehensive portion” (100 points, material covered on exams 1-3).
Grading

A total of 620 points are possible in Chem. 1210 and are distributed as follows:

- Total of 3 in-class midterms, or best two midterms and the on-line make-up exam = 300 pts.
- 12 online quizzes @ 10 points each = 120 pts.
- Comprehensive Final Exam = 200 pts.

Total points = 620 points

In terms of final assignment of grades, you are guaranteed the following grades if your final class percentage lies within the indicated ranges:

- A / A-: 100.00 to 88.00% (93.0 % or above is a guaranteed straight “A”)
- B+ / B / B-: < 88.00 to 77.00%
- C+ / C / C-: < 77.00 to 60.00%
- D+ / D: < 60.00 to 50.00%

Based on the overall class average, the percentage cuts for the various grades may shift lower than the above cuts. In other words, better grade may be assigned for lower percentages than those indicated above, a scenario that is to your favor. However, the percentages will never shift higher than the above, so you are assured the indicated or a higher grade, depending on the class average at the conclusion of the course.

In general, in order for grade breaks to be dropped lower than those indicated above, the overall class average on all assignments would be below 75%.

Extra credit opportunities

You can earn up to 8 points of extra credit by completing 3 quizzes covering the iclicker questions used for face to face chem 1210 sections. There is one quiz for each of exams 1, 2, and 3. The number of points you earn on the extra credit quizzes will be added to your exam scores as true extra credit. Look for more details on this opportunity in the class announcements.

Provisions

The administration of Chem 1210 will adhere strictly to the academic policies outlined in the most recent USU General Catalog: https://catalog.usu.edu/content.php?catoid=12&navoid=3587 and by the distance education program: http://distance.usu.edu/

Answers to frequently asked questions about distance education teaching are available at: http://distance.usu.edu/htm/faqs
UNIVERSITY POLICIES & PROCEDURES

Academic Freedom and Professional Responsibilities

Academic freedom is the right to teach, study, discuss, investigate, discover, create, and publish freely. Academic freedom protects the rights of faculty members in teaching and of students in learning. Freedom in research is fundamental to the advancement of truth. Faculty members are entitled to full freedom in teaching, research, and creative activities, subject to the limitations imposed by professional responsibility. Faculty Code Policy #403 further defines academic freedom and professional responsibilities.

Academic Integrity – "The Honor System"

Each student has the right and duty to pursue his or her academic experience free of dishonesty. The Honor System is designed to establish the higher level of conduct expected and required of all Utah State University students. The Honor Pledge: To enhance the learning environment at Utah State University and to develop student academic integrity, each student agrees to the following Honor Pledge: "I pledge, on my honor, to conduct myself with the foremost level of academic integrity." A student who lives by the Honor Pledge is a student who does more than not cheat, falsify, or plagiarize. A student who lives by the Honor Pledge:

- Espouses academic integrity as an underlying and essential principle of the Utah State University community;
- Understands that each act of academic dishonesty devalues every degree that is awarded by this institution; and
- Is a welcomed and valued member of Utah State University.

Academic Dishonesty

The instructor of this course will take appropriate actions in response to Academic Dishonesty, as defined the University’s Student Code. Acts of academic dishonesty include but are not limited to:

- **Cheating**: using, attempting to use, or providing others with any unauthorized assistance in taking quizzes, tests, examinations, or in any other academic exercise or activity. Unauthorized assistance includes:
  - Working in a group when the instructor has designated that the quiz, test, examination, or any other academic exercise or activity be done “individually;”
  - Depending on the aid of sources beyond those authorized by the instructor in writing papers, preparing reports, solving problems, or carrying out other assignments;
  - Substituting for another student, or permitting another student to substitute for oneself, in taking an examination or preparing academic work;
Acquiring tests or other academic material belonging to a faculty member, staff member, or another student without express permission;
Continuing to write after time has been called on a quiz, test, examination, or any other academic exercise or activity;
Submitting substantially the same work for credit in more than one class, except with prior approval of the instructor; or engaging in any form of research fraud.

- **Falsification**: altering or fabricating any information or citation in an academic exercise or activity.
- **Plagiarism**: representing, by paraphrase or direct quotation, the published or unpublished work of another person as one’s own in any academic exercise or activity without full and clear acknowledgment. It also includes using materials prepared by another person or by an agency engaged in the sale of term papers or other academic materials.

**Sexual Harassment**

Sexual harassment is defined by the Affirmative Action/Equal Employment Opportunity Commission as any "unwelcome sexual advances, requests for sexual favors, and other verbal or physical conduct of a sexual nature." If you feel you are a victim of sexual harassment, you may talk to or file a complaint with the Affirmative Action/Equal Employment Opportunity Office located in Old Main, Room 161, or call the AA/EEO Office at (435) 797-1266.

**Withdrawal Policy and "I" Grade Policy**

Students are required to complete all courses for which they are registered by the end of the semester. In some cases, a student may be unable to complete all of the coursework because of extenuating circumstances, but not due to poor performance or to retain financial aid. The term ‘extenuating’ circumstances includes: (1) incapacitating illness which prevents a student from attending classes for a minimum period of two weeks, (2) a death in the immediate family, (3) financial responsibilities requiring a student to alter a work schedule to secure employment, (4) change in work schedule as required by an employer, or (5) other emergencies deemed appropriate by the instructor.

**Students with Disabilities**

Students with ADA-documented physical, sensory, emotional or medical impairments may be eligible for reasonable accommodations. Veterans may also be eligible for services. All accommodations are coordinated through the Disability Resource Center (DRC). Please contact the DRC prior to or as early in the semester as possible. Alternate formats for course content are available with advanced notice.
Contacting the Disability Resource Center (DRC):

- On Campus: Room 101 of the University Inn
- Phone: 435-797-2444
Disability related resources for current students:

- **DRC Student Handbook**
- **Deaf and Hard of Hearing Student Handbook**
- **Disability Related Scholarships**
- **Campus Resources**
- **Documentation Guidelines**
- **Online Resources for Students with Disabilities**

**Diversity Statement**

Regardless of intent, careless or ill-informed remarks can be offensive and hurtful to others and detract from the learning climate. If you feel uncomfortable in a classroom due to offensive language or actions by an instructor or student(s) regarding ethnicity, gender, or sexual orientation, contact:

- Michelle Bogdan, Director of Access and Diversity Center: (435) 797-1728, michelle.bogdan@usu.edu
- James Morales, Vice President of Student Services: (435) 797-1712, james.morales@usu.edu
- Brooke Lambert, LGBTQA Program Coordinator, Access and Diversity Center: (435) 797-1164, brooke.lambert@usu.edu
- Daryn Frischknecht, Student Advocate: (435) 797-7460

You can learn more about your student rights by visiting [http://www.usu.edu/studentservices/studentcode](http://www.usu.edu/studentservices/studentcode).

**Grievance Process**

Students who feel they have been unfairly treated may file a grievance through the channels and procedures described in the Student Code: [Article VII. Grievances](http://www.usu.edu/studentservices/studentcode).

**Full details for USU Academic Policies and Procedures can be found at:**

- **Student Conduct**
- **Student Code**
- **Academic Integrity**
- **USU Selected Academic Policies and Procedures**
- **USU Academic Policies and Procedures**
- **Academic Freedom and Professional Responsibility Policy**
**Emergency Procedures**

In the case of a drill or real emergency, classes will be notified to evacuate the building by the sound of the fire/emergency alarm system or by a building representative. In the event of a disaster that may interfere with either notification, evacuate as the situation dictates (i.e., in an earthquake when shaking ceases or immediately when a fire is discovered). Turn off computers and take any personal items with you. Elevators should not be used; instead, use the closest stairs.