CHEM 135 General Chemistry I

Spring 2018; 5 credit hours

General Information

Lecture: MWF 9:00 – 9:50 AM BUDIG 120

Instructor: Dr. Shuai Sun

Office Hours: TBA

Appointments: http://chem130135.setmore.com
Office: 3012 Malott Hall

Lecture TA: TBA
Office Hours: TBA

Course E-mail: chem135a@ku.edu

Only the course email ID shall be used for all correspondences. Emails sent to the instructor’s personal email will not be addressed or replied to. Discussion Forum on Blackboard provides equation editor if needed.

Course Outcome:
This course, which is a continuation of CHEM 130, focuses on chemical kinetics, chemical equilibrium, acid-base chemistry, and thermodynamics. Additional topics, such as environmental chemistry, electrochemistry, coordination chemistry, nuclear chemistry, organic chemistry, and/or polymers, may also be introduced in this integrated lecture and laboratory course. Prerequisite: CHEM 130, CHEM 170, or CHEM 190 with a grade of C- or higher. Satisfies: Goal 3 Natural Sciences (GE3N), Lab and Field Experiences (LFE), N Natural Science (N)

Textbook:

Chemistry – Atoms First, 3rd Edition by Burdge, Custom, loose-leaf textbook with Connect access (available at bookstore), ISBN: 9781260242775


If you purchased the access to Connect within 2 years, you do NOT need to buy new code.
Grading

Five Exams  
\[5 \times 100 = 500 \text{ points}\]

Participation and Performance Points via Clicker  
100 points

Pre-lecture and Post-lecture Assignments via Connect  
100 points

Weekly Practice  
Complete

Lab  
300 points

Total  
1000 points

Extra Credits  
See Page 5

Grading Scale:
90% - 100% A
80% - 89% B
70% - 79% C
60% - 69% D
59% and below F

Notice:
1. We use normal rounding rules for this course. For example, 89.5% is rounded to 90%, and 89.4% is to 89%.

2. Lab is up to 30% (300 points) of the total points in this course. Therefore, missing any labs without being excused will lower your grades significantly. This often happens in the first few labs because students forgot to wear safety goggles, long pants and/or proper shoes.
Examinations

Exam Schedule:

Exam 1 8:00 – 10:00 PM  **February 8, 2018  Room: Budig 120**
Exam 2 8:00 – 10:00 PM  **March 8, 2018  Room: Budig 120**
Exam 3 8:00 – 10:00 PM  **April 5, 2018  Room: Budig 120**
Exam 4 8:00 – 10:00 PM  **April 26, 2018  Room: Budig 120**
Final Exam 7:30 – 10:00 PM  **May 8, 2018  Room: TBA**

Notes on Examinations:

1. All examination will be taken as scheduled. **There are no make-up exams.**
2. Excused absences consist of confirmed illness, unavoidable emergencies, etc. Excused absences are to be cleared in advanced if such clearance is possible. Legitimate reasons include only University related events, other conflicting classes or exams, medical crisis or religious holidays. Reasons that do not fall under the above-mentioned categories will not be excused under any circumstances. Medical documents are required if a student is excused for medical reasons. The documents should include **student’s name, the dates and the reason being excused.**
3. The score of the excused exam will be replaced by the average of student’s other three exams. **In general, students should not be excused from more than one exam.** Otherwise, students need to contact the course instructor.
4. **Absences that are not excused will result in exam scores of zero.**
5. Taking exams earlier than scheduled time is possible with the permission from course instructor. Please contact the course instructor for details as early as possible.
6. **Final exam is cumulative. Students are recommended to use the previous four special exams as reviewing materials.**
7. **Programmable calculators are not allowed**. You should bring to each of the exams a basic scientific calculator. Use of programmable calculators during exams will result in a grade of zero.
Notes and Handouts

- **Notes and handouts will be posted** on Blackboard regularly. Three types of notes will be posted: skeleton notes before each chapter, notes with solutions after each lecture, and complete notes after each chapter. Students are encouraged to use these to preview/preview the lectures and **prepare their exams**.

- **Active note-taking** is much more helpful than passively writing down every word on the slides.

- It is very important that you develop good note taking skills and **attend lectures regularly** to be successful in this course. **You are advised to bring a copy of the lecture slides to class with you.**

Participation Points

- Each question will be scored out of 2 points based on **participation**, and 1 point based on **accuracy**. 3 points each lecture for participating more than 80% of the questions in that lecture. **No written responses** will be accepted.

- The **average percentage score up to five lecture dates will be dropped** to handle various situations, like the bus running late, dead batteries, excused absences, etc.

- Normalization of points will be carried out as follows: if you earned 75 of 120 points, your clicker total points at the end of the semester will be $100 \times \frac{75}{120} = 62.5$ This will be rounded up to 63, as per normal rounding rules.

- **Clicker Registration**:  
  1) Go to the CHEM 135 page in Blackboard. Click the link at the bottom of the left panel that says, “Clicker registration.”  
  2) In the new window, enter your clicker ID. You can find the ID on the back of the clicker below the bar code, or found on the clicker window when the clicker is turned on.  
  3) **Do NOT** register through iclicker.com, as this does not allow us to match your responses with your name in Blackboard.  
  The deadline for registering your i-Clicker2 on Blackboard is January 19th.

- **Check the clicker frequency of the classroom at the first day of class**, and make sure you set your clicker to the correct frequency. Otherwise the clicker device cannot record your clicker answers.
Homework

- **Registration to Connect:**
  Follow the instructions from the website. **Make sure you register with the same name and KU email address you have on Blackboard** (not email address from gmail etc.).

  If you have trouble registering, you can get help here: [http://bit.ly/StudentRegistration](http://bit.ly/StudentRegistration)

  Customer service for Connect: [https://mhedu.force.com/CXG/s/ContactUs](https://mhedu.force.com/CXG/s/ContactUs)

- **Two assignments are given after each lecture.** One is the post-lecture homework which reviews the lecture on that day, and the other is the pre-lecture homework used to preview the next lecture.

- **Weekly practice** will be given each week in Connect. These questions are useful resources to **review the lecture materials** as well as **prepare the examinations**. **It is recommended that students complete the weekly practice on time.** Weekly practices are graded as extra credits, and it will be normalized to 30 points that can be used *only* to max out the clicker and homework points.

- Reading assignments aims to help students read the corresponding chapters in the textbook and lecture notes **before** each lecture, i.e., three days a week.

Extra Credits

- **Extra credit questions in exam:** TBA
- 5 points if the **instructor remembers your name** in the end of the semester
- **Survey:** 5 points in total for completion
- **Weekly Practices:** 30 extra credits only to max out clicker and homework points
- **Other extra credits:** TBA 25 points
Laboratory

Lab Director: Dr. Roderick Black, 2021 Malott, 864-3481, rsblack@ku.edu

Laboratory:

Learning the proper laboratory skills is essential to being a successful chemist. You need to go to each lab prepared to do the assigned experiment. Read the experiment before you go to the laboratory and make sure you have some idea of what you need to do. Your laboratory Teaching Assistant will help you throughout each experiment. See separate website sheet for additional scheduling information. Students are required to pass an online safety examination before being allowed to participate in the laboratory experiments. More details will be given in class.

Laboratory Safety:

Follow the link to Safety Regulations for Chemistry Lab on the Chemistry Lab website, and review these Regulations often. Chemistry Department-approved full-coverage goggles must be worn at all times. If a student is found not wearing goggles at any time while laboratory work is being conducted anywhere in the room, this student will receive a warning or a grade penalty, and may be asked to leave the room. Laboratory students must wear long pants. It is not acceptable to wear shorts of any kind, Capri pants or intermediate-length pants of any kind, or skirts. Shoes must cover the entire foot. Open-toed shoes, open-heeled shoes, sandals, or shoes containing holes are not acceptable. (If a student's attire fails to meet these guidelines because of religious or cultural requirements, the student must contact the instructor in advance of the lab period.)
Useful University Policies

Withdrawal Policy:

Students adding classes or increasing credits will need the signature of the course instructor on the Schedule Change Form. Students should bring their completed forms to Enrollment & Financial Aid Services, 121 Strong Hall or the KU Visitor Center.

Recording of Lectures:

Video and audio recording of lectures and review sessions without the consent of the instructor is prohibited. On request, the instructor will usually grant permission for students to audio-tape lectures, on the condition that these audio tapes are only used as a study aid by the individual student making the recording. Unless explicit permission is obtained from the instructor, recordings of lectures and review sessions may not be modified and must not be transferred or transmitted to any other person, whether or not that person is enrolled in the course.

Commercial Note Taking:

Pursuant to the University of Kansas’ Policy on Commercial Note-Taking Ventures, commercial note-taking is not permitted in CHEM 135. Lecture notes and course materials may be taken for personal use, for the purpose of mastering the course material, and may not be sold to any person or entity in any form. Any student engaged in or contributing to the commercial exchange of notes or course materials will be subject to discipline, including academic misconduct charges, in accordance with University policy. Please note: note-taking provided by a student volunteer for a student with a disability, as a reasonable accommodation under the ADA, is not the same as commercial note-taking and is not covered under this policy.

Notes on Academic Misconduct:

It is expected at the University of Kansas that students adhere to high standards of personal and scientific integrity. In scientific endeavors the same is also expected. Science cannot work without honest reporting of data and the proper attribution of authorship. The following statements are given as reminders of the expectations for this class and the labs:

"Cheating, or the appearance thereof, including giving or receiving help on an exam, looking at another student’s paper while taking an exam, falsifying exam papers, using unauthorized materials, notes, crib sheets, or the equivalent, etc., faking laboratory data, reporting other people’s results as your own, etc., are not acceptable and will be dealt with in accordance with published University regulations."

“Students who engage in disruptive behavior, including persistent refusal to observe boundaries defined by the instructor regarding inappropriate talking, discussions, and questions in the classroom or laboratory may be subject to discipline for non-academic misconduct for disruption of teaching or academic misconduct, as defined in the Code of
Student Rights and Responsibilities (CSRR).”

It is perfectly OK - and strongly to be encouraged - to study and work problems with others outside of class and to discuss lab procedures, results and interpretations with others, both during and outside of lab. It is essential, however, that the data you report be yours and as you observed it and that all the write-ups are in your own words.

Concealed Carry:

Individuals who choose to carry concealed handguns are solely responsible to do so in a safe and secure manner in strict conformity with state and federal laws and KU weapons policy. Safety measures outlined in the KU weapons policy specify that a concealed handgun:

- Must be under the constant control of the carrier.
- Must be out of view, concealed either on the body of the carrier, or backpack, purse, or bag that remains under the constant control of the carrier.
- Must be in a holster that covers the trigger area and secures any external hammer in an un-cocked position
- Must have the safety on, and have no round in the chamber.

Exam:

Instructors are allowed by Kansas Board of Regents policy, to require backpacks, purses and other bags be placed in the front of the classroom during exams and quizzes, and as such those items will not be under the constant control of the individual. Students who choose to carry a concealed handgun in a purse, backpack, or bag must review and plan each day accordingly, and are responsible for making alternate arrangements as necessary. The university does not provide appropriate secured storage for concealed handguns.

Individuals who violate the KU weapons policy may be asked to leave campus with the weapon and may face disciplinary action under the appropriate university code of conduct.

Lab:

This course takes place in spaces that will require students to leave belongings such as backpacks and purses away and unattended for the duration of class time. Students who choose to carry a concealed handgun in a purse, backpack, or bag must review and plan each day accordingly, and are responsible for making alternate arrangements as necessary. The university does not provide appropriate secured storage for concealed handguns.

Individuals who violate the KU weapons policy may be asked to leave campus with the weapon and may face disciplinary action under the appropriate university code of conduct.