

## CHEM 130 – General Chemistry Lecture Syllabus, Fall 2017

Lecture: *Mon, Wed, Fri 3:00-3:50 pm in 2001 Malott Hall*

Instructor: **Dr. Lisa Sharpe Elles**, 3033 Malott Hall, sharpeelles@ku.edu, 785-864-4494  
*Office Hours: Mon. and Wed. 4-5 p.m. or by appointment (3033 Malott)*

Lecture TA: **Kristen Burns**, B035 Malott Hall, kburns780@ku.edu  
*Office Hours: TBD in 6083 Malott*

Description: This integrated lecture and laboratory course provides the conceptual foundation and the quantitative chemical relationships on which subsequent chemistry courses are built. Students pursuing or considering a major in one of the chemical sciences should strongly consider taking CHEM 170 or CHEM 190.

KU Core: This course satisfies KU Core Goal 1, Outcome 2 – Quantitative Reasoning (GE12) and KU Core Goal 3 – Natural Sciences (GE3N)

### Required Materials:

Textbook: *Chemistry: Atoms First*, 3<sup>rd</sup> Edition, by J. Burdge and J. Overby (looseleaf, hardcover, or etext)  
*Connect* (online homework) Access

Clickers: iClickers will be used regularly during lectures. You will receive credit based on the frequency of your responses (described below). Register your clicker in Blackboard as soon as possible. *Access the iClicker registration page under the Student Tools tab in the course Blackboard site and follow the instructions.*

Calculator: You will need a non-programmable calculator for quizzes and exams. *No other calculators will be allowed, and you will receive a zero on any quiz or exam for which you use any other calculator!*

Website: The course website is available on Blackboard (<http://courseware.ku.edu>). All (lecture and laboratory) course announcements and materials will be available here. Please check Blackboard regularly.

Lectures: Lecture attendance is required and will directly affect your performance in the course. You are expected to *read* the assigned sections of the textbook prior to lecture, *ask questions* during lecture, and *review* the material afterwards. You will get most out of this class, and have the most fun, if you fully participate in all lecture, in-class activities, and laboratory activities. Don't hesitate to ask questions, after all, you probably are not the only one who wants to know the answer, so go ahead and ask!

Pre-lecture questions will be given on McGraw Hill Connect and will count towards your homework grade (see online homework below). The purpose of these questions is to help you understand the material in the assigned reading before lecture and therefore the majority of the answers can be found in the textbook. These will help guide the pace of the lecture material each week so it is in your best interest to answer the questions honestly. *If you don't know, it is ok because we will go over it in lecture or work through a problem together.*

Cell phones, laptops, tablets, or other distractions are **prohibited** in the classroom. Please silence the alarms and put them away prior to the start of class.

Grading: Your final grade in the course will be based on the total accumulation of points throughout the semester and assigned a letter grade (see below scale). An appropriate curve will be applied at the end of the semester if deemed necessary by the instructor.

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Clicker Participation ( <i>after 10% allowance</i> )	40 points
Class Participation ( <i>after 10% allowance</i> )	40 points
Online Homework	80 points
Exams ( <i>4 x 100 points each</i> )	400 points
Lab	240 points
ALEKS Pre- and Post- Test ( <i>optional</i> )	<i>20 extra credit points</i>

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**Total: 800 points**

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

*Clicker Participation:* Clickers will be used during most (or all) lectures. *You are responsible for registering your clicker and bringing your clickers with you to class every day.* The purpose of clicker questions is (1) to encourage you to actively participate in lectures and (2) to provide immediate feedback on the understanding of course concepts. Points will be awarded for participation alone (given a 10% allowance\*) and will be normalized if necessary\*\*. Please answer each question to the best of your ability even though you are not graded on the accuracy of your responses.

*Class Participation (group work):*

Periodically throughout the semester we will do in-class activities; worksheets or problems, in small self-assembled groups. The purpose of these activities is for the instructor to assess student learning and for the student to be held accountable for keeping up with the reading and lecture material. *All* of the activities will have “participation” credit associated with them, points for completing the activity, as well as credit for the correct answers. The points\* for each of these activities is varied but will not be more than 5 points for any given activity\*\*. Although you will be working in groups for these activities, you will be asked to turn in individual work for credit. Therefore, it is in your best interest to be an *active participant*. This means that you come to each class prepared – read your book, take notes in class, complete homework assignments and practice problems – and you work on (discuss) the activity with your peers.

\*An allowance of 10% of the total number of points will be dropped in order to account for unavoidable absences and all other potential issues. No other allowances will be made under any circumstances. No bonus points will be given – i.e., the maximum points you can earn is 40 (after the allowance).

\*\*Both Clicker and Class Participation points will be *normalized* if necessary. In other words, if we end up with less or more than 40 total points, a percentage will be used to determine your final score for this category. For example, if there were 80 possible points and you earned 66 of these points (or 83%), your score would be 83% of 40 points or  $[0.83 \times 40 = 33 \text{ points}]$ .

*“Nothing new that is really interesting comes without collaboration” – James Watson*

*Online Homework:* Weekly homework assignments and pre-lecture questions must be completed online via the McGraw Hill Connect website. Registration information will be posted on Blackboard. Working through the assigned problems is critical for understanding the material, and will prepare you for the exams. **Assignments will be due by midnight on the scheduled date.** *You must complete each assignment by the deadline, no late assignments will be accepted under any circumstances.*

Within Connect there will also be practice problems assigned. Sometimes they will count as extra credit towards the homework grade but oftentimes they will be for *practice alone*. Because these are not required and only for practice, there will be no make-ups on extra credit homework points.

If you are looking for more problems to practice, use your textbook. There are many end of chapter problems as well as worked examples for you to use.

*Exams:* Four exams will be used to evaluate your understanding of the material. **Only non-programmable calculators will be allowed.** As listed in the course catalog, the exams are scheduled for Thursday evenings except for Exam 4, which is on a Monday evening. Please let me know immediately if you have a conflict with any of these times. **No make-up exams will be offered.** No changes to exam scores will be considered more than one week after they are returned.

Exam 1:	Thursday, September 14	8-10 p.m.	110 Budig Hall
Exam 2:	Thursday, October 12	8-10 p.m.	110 Budig Hall
Exam 3:	Thursday, November 9	8-10 p.m.	110 Budig Hall
Exam 4:	Monday, December 11	7:30-10 p.m.	TBD

*Lab Grade:* Your attendance in lab is **required every week**. Students missing more than four lab sessions *for any reason* will not be allowed to pass the class. More information about the lab, required lab materials, and lab reports will be provided in the Lab syllabus found on Blackboard.

**Lab Safety regulations** are posted on Blackboard. In addition to reviewing these regulations carefully, you must pass an online safety quiz *before* coming to lab for the first time. You will not be allowed to participate (or receive points) in the lab until after you complete the safety quiz with a perfect score. As stated in the safety regulations posted on Blackboard, chemistry-department approved **full-coverage goggles, long pants, and close-toed shoes** must be worn at all times in the laboratory. If a student is found not in compliance with these regulations while in the laboratory, they will receive a warning or a grade penalty and may be asked to leave the room. (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.)

Lab Director: **Dr. Roderick Black**, 2021 Malott Hall, rsblack@ku.edu, 785-864-3481  
Lab TAs are assigned by section. Please see the information posted on the laboratory Blackboard page.

*Extra Credit:* The Chemistry department is employing a new assessment and learning system, ALEKS, this semester and as an incentive for you to test it out we are offering 20 extra credit points. More information will be provided in a separate document on Blackboard. However, the initial knowledge check should be completed by August, 23<sup>rd</sup> and will be worth 10 points for completion. A second knowledge check will be given at the end of the semester that will also be worth 10 points for completion. You will have ~2 weeks to complete this check, 11/27-12/8.

No additional extra credit opportunities will be provided beyond what is listed in this syllabus.

*PLUS (Peer Led Undergraduate Supplements):*

Peer led supplemental discussion sessions are coupled with interactive exercises that reinforce lecture materials in a small group setting. These sessions are specifically designed to bridge gaps between teaching and learning. PLUS is open to all students enrolled in the course, and those who regularly attend this free academic support activity perform better than the class average. Please come to any discussion that fits your schedule. The sessions are free!

Conduct: **Academic misconduct will not be tolerated.** You are encouraged to discuss practice problems and in-class exercises, and study for quizzes and exams with your classmates and in your groups. However, all graded exams and quizzes must be *your own work*, of your own thinking and effort. In submitting your answers, you explicitly agree that, during the time of the quiz or exam, you have neither given nor received any assistance to or from another student or from any other source not authorized in advance by the instructor. **Cell phones are not permitted to be out during exams and quizzes.** If you have an emergency, see the instructor before the exam or quiz begins.

All incidents will be reported, and students found in violation will be punished severely. A student who fails to observe these standards during an in-class exam or quiz will receive zero credit for that exam. Disruptions in the classroom constitute academic misconduct and will be dealt with accordingly.

Students should review the university policy on Academic conduct at: <http://policy.ku.edu/governance/USRR#art2sect6>

*Guidelines for working in groups (in lecture and laboratory)*

Why groups? Many of you will enter professions in which you will need to work with others. Your success relies on the ability to adapt to unique situations and interact with many types of people. I expect *all students* to help create a safe and supportive classroom environment where we all feel comfortable sharing ideas and contributing thoughts. Small group behavior will be respectful and professional. Those students not following these guidelines will be asked to leave and will receive a zero for the activity that day.

Course

Materials: Course materials prepared by the instructor, together with the content of all lectures and review sessions presented by the instructor are the property of the instructor. *Video and audio recording of lectures and review sessions without the consent of the instructor is prohibited.* On request, the instructor may 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 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 individual is enrolled in the course.

Disabilities: The Academic Achievement and Access Center (AAAC) coordinates academic accommodations and services for all eligible KU students with disabilities. If you have a disability for which you wish to request accommodations and have not contacted the AAAC, please do so as soon as possible. They are located in 22 Strong Hall and can be reached at 785-864-4064 (V/TTY). Information about their services can be found at <http://www.access.ku.edu>. Please contact me privately regarding your needs in this course.

## Religious

Observances: Should the examination schedule for this course conflict with your mandated religious observance, please contact me at the beginning of the semester so that we can schedule a make-up exam at a mutually acceptable time. In addition, students will not be penalized for absence from regularly scheduled class activities which conflict with mandated religious observances. Students are responsible for initiating discussion with the instructor to reach a mutually acceptable solution.

Link to policy on test taking, student responsibility and religious observance:  
<http://policy.ku.edu/governance/USRR#art1sect4>

Link to policy on attendance evaluation and mandated religious observance:  
<http://policy.ku.edu/governance/USRR#art2sect1>

## Concealed

Carry Policy: 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.

This course, specifically the lab, 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.

Instructors are allowed by Kansas Board of Regents policy, to require backpacks, purses and other bags be placed at the front of the room during exams, 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.

*This syllabus is subject to change in the event of extenuating circumstances. Any changes will be announced in-class (when possible) and posted on Blackboard.*