Chem 1AL, Fall 2015

Instructor:	Dr. Michelle Douskey 307 Latimer Hall Office Hours: Mondays 11AM-12PM, 307 Latimer Wednesday 9:30-10:30AM, 307 Latimer douskey@berkeley.edu
Lab Lecture:	Monday 4-5PM, Wednesday 4-5PM or Friday 2-3PM (webcast) In Pimentel Hall (attend one per week)
Enrollment Questions:	Dr. Robert Lamoreaux 211 Latimer lamoreau@berkeley.edu
Course Email, staffed by the Head GSI:	Matt Hauwiller chem1alfall2015@gmail.com (for general questions about the lab course) Weekly reviews, W 7:30-9:30P, 10 Evans
iClicker inquiries:	chem1iclicker@gmail.com (for iClicker inquiries only)
Required Materials:	• Chem 1A Lab Experiments, posted on bcourses • TI-30X IIS Calculator (or equivalent simple non-graphing calculator) • iClicker (original), iClicker+ (or iClicker 2)
Course Website	Chem 1AL F15 at bcourses.berkeley.edu

EXPECTATIONS: Your key goal in this laboratory course is to develop an understanding of the experimental nature of chemistry. We will be introducing concepts of green chemistry which is the practice of sustainability in chemistry.

BCOURSES: All announcements, grades and resources for the course will be posted on the course website.

PRELAB ASSIGNMENTS: Prior to coming to lab you must complete all the assigned prelab questions and bring them to lab. If you have not completed your prelab you will not be allowed to do the experiment.

LAB LECTURE: There will be a lab lecture that precedes every experiment. Lab lectures are offered three times a week. Please attend the lab lecture that makes the most sense based on when you have lab. Use the lab calendar posted on the course website to guide you. The lab lecture will consist of lecture, demonstrations of techniques and iClicker questions. Your participation in iClicker questions during class will contribute to your grade.

LABORATORY SECTION TIMELINE: Attendance in section is mandatory. The period lasts for 3 hours. The first few minutes will be a short prelab lecture by your graduate student instructor (GSI). The rest of the time will be devoted to performing the experiment and writing up your lab report.

LAB EXAM:
On December 4th there will be a lab exam from 7:30-9:30 PM. The exam will cover relevant chemistry concepts and calculations related to the experiments.

LAB REPORTS: There are two different types of laboratory reports in the class, formal and informal. For most lab experiments only an informal report is required. No late informal reports will be accepted. Your lowest lab report score for the informal lab reports will be dropped.
The experiment Biofuels 3 will require a formal lab report and is mandatory. If you miss the Biofuels 3 experiment due to illness, death in the family, or other unavoidable circumstances, you must discuss your absence with Dr. Robert Lamoreaux, lamoreau@berkeley.edu. He will help you to schedule a makeup lab in the remaining sessions for the missed lab experiment. You can only make up a lab experiment while that experiment is being run; check the lab calendar for details. Please provide paper documentation of illness or family crisis. Formal reports can be submitted late but incur a penalty of -10% per school day.

Below is a summary of the various assignments for the laboratory.

Lab Summary	**Percent of total**	
Daily lab performance points	2%	
iClicker	3%	
Informal Reports	70%	←11 informal lab reports, lowest dropped
Formal Report	10%	
Lab Exam (Dec. 4)	15%	
Lab total	**100**	

Detailed point breakdown for each laboratory assignment.

Assignment	Prelab	Report	Total
Lab 1 (Airbags)	0	12	12
Lab 2 (Smells)	3	9	12
Lab 3 (Light)	3	9	12
Lab 4 (Polymers- crosslinking)	3	9	12
Lab 5 (Polymers-toy design)	3	9	12
Lab 6 (Biofuels 1, seeds & synthesis)	3	9	12
Lab 7 (Biofuels 2, viscosity)	3	9	12
Lab 8 (Biofuels 3, combustion)-**FORMAL**	3	17	20
Lab 9 (Acids in Env 1-CO_2)	3	9	12
Lab 10 (Acids in Env 2-pH Curves)	3	9	12
Lab 11 (Acids in Env 3-indicator)	3	9	12
Lab 12 (Light inquiry)	3	9	12

OVERALL GRADE FOR THE COURSE:
In order to receive points for any given experiment, the following conditions must be met:

- You must attend lab.
- Prior to attending any given laboratory period you must have completed all of the reading assignments and attended the lab lecture.
- You must **arrive to lab on time**, which means no later than 8:10 AM for morning labs and 1:10 PM for afternoon labs. In general, the first 5-10 minutes of every laboratory period are dedicated to a safety discussion, which is an important part of the experiment. Therefore, if you show up late you will not be allowed to participate in lab for that day.

- You must wear protective clothing and safety goggles during the laboratory period. Your whole body should be covered, leaving only your face and hands uncovered. **Your GSI will ask you to leave** the lab for the day if you are not wearing such clothing or safety goggles.
- You must record detailed **observations** about the experiment. Do not just make a checklist of what you are supposed to do and then check off the procedures as you carry them out without making observations as to what actually happened. All observations must be written during, not after, the laboratory period.
- You must record all expected data during, not after, the laboratory period. This includes mass of things weighed, volume dispensed, yields, etc.
- Before leaving lab, you must meet with your GSI who will ask you to confirm that certain data is present in your notes.
- You must turn in a completed lab report at the beginning of the lab period it is due (the next lab period after the experiment was completed). The lab reports will be collected as your GSI checks prelabs. Late lab reports for informal reports will not be accepted. Lab reports cannot be submitted to the GSI using e-mail or any other type of electronic format.
- Any questions you have regarding a lab report grade must be resolved with your GSI within one week of having received the graded lab report. All regrades are subject to final approval by the course instructor.

If you do not complete all of the above conditions for any given lab, you will earn a 0 for that experiment. The consequences of a 0 are as follows:

- If you receive one zero during the semester, this will be your dropped lab score.
- If you receive two zeros during the semester, you not only will lose the 9 points associated with that experiment, but your course grade will also be dropped by one third of a grade. For example, if you earn enough points to get a B+ in the class, but you have two zero's, you will receive a B.
- If you receive three zeros you will receive a failing grade in the course.

Your final grade for the course will be determined by your participation credit, lab reports scores and your lab exam.

Grade	Range
A	90-100%
B	80-89%
C	70-79%
D	60-69%
F	<60%

ATTENDANCE POLICY
LABORATORY

- Students must attend every lab and complete every lab report.
- Excused absences are possible for documented illness, or emergency.
- Email Dr. Lamoreaux at lamoreau@berkeley.edu if you cannot make your lab section due to excused illness or emergency. Please include the following information:
    - Your name
    - Your GSI's name
    - Normal lab time
    - Date of absence
    - Preferred time to make up lab
    - Subject line: "make-up lab" or "excused absence"

- Students with an excused absence will receive permission from Dr. Lamoreaux to be excused from the lab write-up, or to make up the lab (Biofuels 3 only) during that same laboratory week
- If a student with an excused absence is unable to make up the lab, make-up points will be assigned based on the average from other labs. No make-up points are possible for unexcused absences.

HELPFUL RESOURCES

- Weekly review sessions will be conducted by the head GSI on W 7:30-9:30P, 10 Evans
- The campus Student Learning Center has assistance for Chem 1A students. http://slc.berkeley.edu
- The Chem 1AL GSIs will staff open office hours for about 20 hours each week. Look for announcements on bcourses with specific times and locations.

We strongly recommend that you enroll in a study group run by the Student Learning Center.

University Policy on Academic Honesty:

The honor code for UC-Berkeley states,

> **"As a member of the UC Berkeley community, I act with honesty, integrity, and respect for others."**

Incidences of cheating will be taken seriously and paperwork will be filed with the Office of Student Conduct. Resist the temptation to copy answers from other students or solutions you find online. When you collaborate, discuss thoroughly until you understand, then write brief notes. Do the bulk of your writing by yourself.

Note that 'plagiarized paper' also refers to lab reports in the context of Chem 1A, so cheating on any lab report can result in an F for the course.

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iCLICKER TRANSMITTERS AND IN CLASS CREDIT

I will be using the iClicker student response system in class this term. iClicker helps me to understand what you know and gives everyone a chance to participate in class. I will use iClicker to keep track of attendance; please see the attendance policy on page (2) of the syllabus. Participation with iClicker will account for (3% of your final grade). I will drop 2 of the lowest scores to account for times you forget to bring your clicker to class.

You may purchase one of the following models:
The original i>clicker
i>clicker +
i>clicker 2
The mobile application, i>clicker GO or REEF polling will not be allowed

How to register:
To receive credit for the responses you submit with iClicker, you must register by the drop/add deadline, (**September 4, 2015**). Students who register after this time will not receive credit.

Register your clicker within bcourses
You must register your clicker within our bcourses site. Do not register your clicker on iclicker.com: if you do, our staff will not be able to match your responses with your name and you will not receive credit.

Cheating and iClickers
Voting in multiple lectures during a given lab week will be treated as cheating. Responding for another student will be treated as cheating. Any student caught with multiple iClickers in hand responding for another student will lose iClicker credit for the course, the iClickers will be confiscated, and the case will be referred to the Dean of Students for possible further action as described in the Berkeley Code of Student Conduct.

PLEASE NOTE:

1) This course credit for iClicker quizzes is offered to encourage class participation and discussion of relevant topics.
2) This credit will appear, as soon as the data is processed, in a separate column in your online grade book.
3) You are responsible for providing a functional transmitter. We are not responsible for dead batteries or transmitters that randomly (and unfortunately) fail to function.
4) If you suspect your iClicker is not working, immediately contact the staff through the chem1iclicker@gmail.com account. Our staff will arrange a time with you to test your device.

Email Etiquette:

- You are expected to write as you would in any professional correspondence. Email communication should be courteous and respectful in manner and tone. Do not send emails that are curt or demanding.
- Your GSI should be your first point of contact if you have questions, comments, etc. If your GSI can't help you, he/she will contact the instructor on your behalf or you may contact the instructor directly.
- You *must* use your berkeley.edu address; emails from other domains will not be read.
- Do not expect an immediate response via email (normally, a response will be sent within one business day). If your email question is sent at the last minute it will not be possible to send you a response before an assignment is due or a test is given.
- Do not post personal information about yourself or others about third parties to bcourses.

Participation:

- Keep on the topic at hand. If you have questions off the current topic, address these outside of class at office hours or by email with the GSI or instructor.
- Do not talk out of turn. Wait to be recognized before speaking and do not try to dominate a discussion with your questions or comments – give others a fair opportunity to participate.

Common Courtesy:

- Do not read the newspaper during class. The shuffling of pages can be very distracting.
- Food and drink are discouraged in class. There may be times that you need a beverage or small snack during class. Avoid bringing in large meals or food that is noisy when unpackaged or chewed.
- Show respect for the staff and fellow classmates. Do not interrupt another who is speaking. It is okay to disagree with an idea but not okay to ridicule or make fun of another person and his/her ideas. Raised voices, derogatory language, name-calling, and intimidating behavior will not be tolerated.
- Do not disturb others by engaging in disruptive behavior. Disruption interferes with the learning environment and impairs the ability of others to focus, participate, and engage.