

CHEM 3341 Organic II Lab Syllabus, Summer 2017

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Web Site: www.orgchemboulder.com

Experiment Schedule

Day	#	Experiment
Tue Jul 11		Check-in & NMR review
Wed Jul 12	14	Microscale Column Chromatography
Thu Jul 13	15	Identification of Unknowns, day 1
Tue Jul 18	15	Identification of Unknowns, day 2
Wed Jul 19	16	Epoxidation of Cholesterol
Thu Jul 20	17	Grignard Dyes
Tue Jul 25	18	Reduction of Ketones (ID of Unknowns Paper due)
Wed Jul 26	19	Wittig Reaction
Thu Jul 27	20	Liquid Crystals
Tue Aug 1	21	Fischer Esterification
Wed Aug 2	22	Aldol Condensation
Thu Aug 3	23	Diels-Alder Reaction
Tue Aug 8	24	Electrophilic Aromatic Substitution
Wed Aug 9		Checkout and final quiz
Thu Aug 10		(no labs)

List of Sections

Lab	Days	Time	Location	TA	TA Email
211	TWR	11:30 AM-2:20 PM	EKLC M1B20	Brendan Griffiths	brendan.griffiths@colorado.edu
212	TWR	11:30 AM-2:20 PM	EKLC M1B25	Aaron Hinds	aaron.hinds@colorado.edu
213	TWR	11:30 AM-2:20 PM	EKLC M1B35	Eric Miller	eric.miller-2@colorado.edu
214	TWR	11:30 AM-2:20 PM	EKLC M1B65	Will Yi	duk.yi@colorado.edu
221	TWR	3:00 PM-5:50 PM	EKLC M1B20	Matthew Farmer	matthew.farmer@colorado.edu
222	TWR	3:00 PM-5:50 PM	EKLC M1B25	Ed Guzman	edward.guzman@colorado.edu
223	TWR	3:00 PM-5:50 PM	EKLC M1B35	Patrick Nordeen	patrick.nordeen@colorado.edu

Grading

D2L: This course will use Desire2Learn or D2L, which can be accessed at learn.colorado.edu. Grades for course work will be posted here. You can check the grades of individual items against your own records to make sure they're correct, but your course total might not reflect any excused absences or curves.

Lab Reports: For directions on how to write lab reports, see Chapter 4 in the Handbook and the example lab report on the course website. Lab reports will be graded according to the rubric which is posted on the course website and attached to the back of this syllabus. You should make sure to attach a copy of this rubric to the front of each lab report you turn in. During the summer terms, each lab report is due at the second lab

meeting after you perform the experiment – for example, if you perform a lab on Wednesday, the report is due the following Tuesday.

Quizzes: Quizzes cover assigned reading, procedures, and Experiment Manual study questions. They are given out during the first fifteen minutes of each lab; if you arrive late, you might not be given the full amount of time, or you might not be given the quiz at all. Study questions from the Experiment Manual have answers posted on the course website. You do not need to turn in the answers to the study questions in your lab reports but they are helpful for studying.

Regrades: Please keep all of the graded work that is returned to you so that it can be checked in the case of a discrepancy with your TA's grade records. If you notice a missing or erroneous grade on a quiz or lab, you must bring it to your TA's attention within two lab periods of the graded document being returned to the class, whether you are there to receive it or not. After this point, no regrades will be accepted.

Late work: If you turn in any item late, you will lose 10% of the maximum possible points per day or partial day. For instance, a 20-point assignment will have 2 points deducted for each day that it is late. This applies to each day, not just weekdays, since you still have extra time to work on the assignment that your classmates did not get. You can turn in late items to your TA's mailbox. If you need to turn in a late report during a time when you cannot access the mailboxes (for example, on weekends), you can email an electronic copy to your TA and then turn in a hard copy as soon as you have access to the building again. In this case, the assignment will be dated from the time you send the email. In order to submit final grades on time, no late work will be accepted after the final quiz for the course.

Curving: At the end of the semester, if the average grade for your lab section (excluding the students who have at least one unexcused absence) is below 85%, the average will be curved up to 85%. There is no guaranteed number of As, Bs, etc. per section. Your final letter grade will be based on the standard scale: 93% and up is an A, 90-92.99% is an A-, etc. Grades near a cutoff will not be bumped up except in extenuating circumstances, at the discretion of the lab director.

Excused Absences and Make-up Labs: All make-up labs and excused absences must be arranged through the Makeup Lab Scheduler at www.orgchemboulder.com/Labs/Makeup.shtml. Further information is included on this page. Note that your TA cannot excuse absences! If your absence is not input into the Makeup Lab Scheduler, then it will count as unexcused and you will be given a grade of zero for the lab you missed.

Cleanup Points: In the organic chemistry teaching labs you are expected to take care of the equipment and lab space that you use. Each lab period that involves a wet lab (using chemicals, not just model kits or paperwork) has 5 cleanup points associated with it, and lab checkout has 10 cleanup points associated with it. Those points are awarded to the whole class as a group. If the lab is left in disarray after your lab section, you and everyone else in your section will lose points for each violation of the cleanup requirements. These requirements are posted at www.orgchemboulder.com/Labs/Cleanup.shtml. Each section's cleanup points will be posted on this page on a regular basis. Although it is not required, you can greatly increase your chance of getting full points by assigning cleanup to two or three students per class meeting. A sheet will be passed around during the first week to help you organize this.

Course Policies

Lab Safety Rules: You are required to follow the lab safety rules at all times or risk being expelled from the lab for the day and taking an unexcused absence. These rules are given in Chapter 1 of the Lab Handbook.

Lab Drawers: You are accountable for the contents of your lab drawer throughout the semester. Further information is given on the lab drawer check-in sheet you will use during the first lab session.

Pregnancy and Chemical Exposure Notice: Pregnant students should be aware that there are risks associated with the development of the embryo and fetus from exposure to certain chemicals. Likewise, students with certain medical conditions could also experience an adverse effect from exposure to chemicals. The Department of Chemistry recommends that you discuss the Organic Chemistry chemical list, procedures, and required safety precautions with your physician. The Department of Chemistry will work with you to discuss possible options regarding meeting the requirements of the course. Please contact the instructor of your course to discuss these options and any questions you may have.

Required Texts and Supplies:

- *Experiments for Organic Chemistry 2 Lab (CHEM 3341), Summer 2017*
- *Handbook for Organic Chemistry Lab, 11th Edition*
- Carbon or carbonless laboratory notebook (OK to reuse a notebook from previous courses)
- Approved safety goggles or glasses
- Organic chemistry model set

All of these items are available at the campus bookstore, and the handbook is also on reserve at the library. Please note that due to the large number of recent changes to the organic labs, **older versions of the handbook and experiment manual are not acceptable substitutes.**

Organic modeling kits from various different manufacturers are available for lower cost online, but whichever kit you purchase, you should make sure it has at least 10-15 carbon atoms (they are usually the ones made of black plastic).

The website for this course is www.orgchemboulder.com. This website also contains a large amount of supporting information including photos and videos of lab techniques being performed, and is a useful supplement to the Handbook.

Prerequisites and Corequisites: Students enrolled in CHEM 3341 must also be enrolled in CHEM 3331 or 3371, unless they have already passed one of these courses. They must also have passed Organic Chemistry 1 lab and lecture (either majors or nonmajors), with a grade of C- or better in both courses. Failure to meet this requirement will result in being administratively dropped from the course. Exceptions will be determined by the Lab Director.

Add/Drop: Students who do not attend the first laboratory session may be automatically dropped from the lab or the lecture to make room for people on the wait list. It is your responsibility to know your schedule and to make changes accordingly. Information regarding drop/add deadlines can be found at <http://www.colorado.edu/registrar/students/academic-calendar/registration-calendar>.

Email Policy: Announcements from your TA or Lab Director will occasionally be sent to your official CU email address, via the roster emailing system. It is your responsibility to check your CU email account frequently. You may set up email forwarding from your CU account to another email address if you prefer, but you do so at your own risk. If you suspect your email account is not working properly, you must contact CU's tech support at help@colorado.edu and make sure it is in order. Missed email will not be considered a valid excuse for missing or incorrect assignments. See full details at <http://www.colorado.edu/policies/student-e-mail-policy>.

Disability Accommodations: If you qualify for accommodations because of a disability, please submit to your professor a letter from Disability Services in a timely manner (for exam accommodations provide your letter at least one week prior to the exam) so that your needs can be addressed. Disability Services determines accommodations based on documented disabilities. Contact Disability Services at 303-492-8671 or by e-mail at dsinfo@colorado.edu. If you have a temporary medical condition or injury, see Temporary Injuries under Quick Links at Disability Services website (<http://www.colorado.edu/disabilityservices/>) and discuss your needs with the Lab Director.

Religious Observances: Campus policy regarding religious observances requires that faculty make every effort to deal reasonably and fairly with all students who, because of religious obligations, have conflicts with scheduled exams, assignments or required attendance. In this class, absences for religious reasons will be handled the same way as any other excused absence. See full details at <http://www.colorado.edu/policies/observance-religious-holidays-and-absences-classes-and-or-exams>.

Classroom behavior: Students and faculty each have responsibility for maintaining an appropriate learning environment. Those who fail to adhere to such behavioral standards may be subject to discipline. Professional courtesy and sensitivity are especially important with respect to individuals and topics dealing with differences of race, color, culture, religion, creed, politics, veteran's status, sexual orientation, gender, gender identity and gender expression, age, disability, and nationalities. Class rosters are provided to the instructor with the student's legal name. Your TA will gladly honor your request to address you by an alternate name or gender pronoun. Please advise your TA of this preference early in the semester so that they may make appropriate changes to their records. See policies at <http://www.colorado.edu/policies/student-classroom-and-course-related-behavior> and at http://www.colorado.edu/osc/#student_code.

Discrimination and Harassment: The University of Colorado Boulder (CU-Boulder) is committed to maintaining a positive learning, working, and living environment. The University of Colorado does not discriminate on the basis of race, color, national origin, sex, age, disability, creed, religion, sexual orientation, or veteran status in admission and access to, and treatment and employment in, its educational programs and activities. (Regent Law, Article 10, amended 11/8/2001). CU-Boulder will not tolerate acts of discrimination or harassment based upon Protected Classes or related retaliation against or by any employee or student. For purposes of this CU-Boulder policy, "Protected Classes" refers to race, color, national origin, sex, pregnancy, age, disability, creed, religion, sexual orientation, gender identity, gender expression, or veteran status. Individuals who believe they have been discriminated against should contact the Office of Institutional Equity and Compliance at 303-492-2127 or the Office of Student Conduct at 303-492-5550. Information about the above referenced policies and the campus resources available to assist individuals regarding discrimination or harassment can be obtained at <http://www.colorado.edu/institutionalequity>.

Honor Code: All students of the University of Colorado at Boulder are responsible for knowing and adhering to the academic integrity policy of this institution. Violations of this policy may include: cheating, plagiarism, aid of academic dishonesty, fabrication, lying, bribery, and threatening behavior. All incidents of academic misconduct shall be reported to the Honor Code Council (honor@colorado.edu; 303-735-2273). Students who are found to be in violation of the academic integrity policy will be subject to both academic sanctions from the faculty member and non-academic sanctions (including but not limited to university probation, suspension, or expulsion). Other information on the Honor Code can be found at <http://www.colorado.edu/policies/student-honor-code-policy> and at <http://honorcode.colorado.edu>.