

Important Dates:

Jan 14 First day of class
Jan 25 Last day for late registration, drops with no appearance on academic record
Feb 8 EXAM I
Mar 8 EXAM II
Mar 29 Last day for withdrawal with W
Apr 5 EXAM III
Apr 24 EXAM IV
Apr 29 Last day of class
May 1 FINAL 1-3pm
May 9 Grades Posted

Student Learning Outcomes A more detailed list of more specific learning outcomes for each chapter is posted on Blackboard and sent via Blackboard before each quiz. Broadly, at the end of this course, students should be to:

- Understand fundamental concepts of bonding and acidity of organic functional groups.
- Name a variety of organic compounds.
- Predict the reactivity of organic compounds involving nucleophilic and electrophilic substitution, elimination, and addition mechanisms and combinations thereof.
- Know common reagents used for hydrocarbon transformation into other functional groups.
- Interpret IR, NMR, and mass spectra of organic compounds to arrive at a structure.
- Draw and interpret 3D structures of stereoisomers.
- Write out synthetic pathways using the correct order of reactants and reagents in order to arrive at a target molecule.

Evaluation and Grade Assignment:

A = 900 – 1000 points

B = 800 – 899 points

C = 700 – 799 points

D = 600 – 699 points

F = 0 – 599 points

Final Grade Rounding Policy: If cumulative final grade is within 5 points of a grade point cutoff **AND** final exam percentage falls into a letter grade above that from the cumulative letter grade, then final grade will be rounded up to next letter grade.

Your instructor follows the UAF Incomplete Grade Policy:

“Incomplete” is a temporary grade used to indicate that the student has satisfactorily completed (C or better) the majority of work in a course but for personal reasons beyond the student's control, such as sickness, has not been able to complete the course during the regular semester. Negligence or indifference are not acceptable reasons for an “IN” grade.”

Notes and Policies

Homework (Hmwk) consists of near-daily assignments derived from the textbook and graded for completion, each out of 10 points. Expect homework to take *at least* a few hours each week. All listed assignments are posted on Blackboard and are due at the start of class (either turned in in class, emailed, or to professor's mail box in REIC 194 – make sure any scans, photos, or written assignments are legible and clear to read!). HW will be averaged and scaled to 120 points. Extra credit assignments will average into the total homework score.

Assignments should be written on paper with your name as it appears on UAOnline and Assignment listed at top left. If multiple pages, please staple together and write name on all pages. Label each question clearly and write neatly and legibly. Note some questions have been abbreviated in homework compared to textbook. Only listed question parts in homework packet are required.

Laboratory 250 pts	Exam I 100 pts	Exam II 100 pts
	Exam III 100 pts	Exam IV 100 pts
Quizzes 80 pts	Hmwk 120 pts	ACS Final 150 pts

Hmwk Extension Policy: A 2-day extension period is allowed to apply either all to one homework of a student's choice or to split into two 1-day extensions on two assignments of their choice. In these cases, this must be communicated to the professor before assignment due date by email, and then assignment must be turned in via methods above by 1:00 pm on the extended due date.

Exams allow the use of molecular model kits and non-programmable calculators only. You must turn in your exam before leaving the room. The final exam will be the American Chemical Society Organic Chemistry exam, covering the entire 2-semester course sequence of organic chemistry (CHEMF321 & CHEMF325). Grading on the ACS exam will be applied to the course grade after scaling according to the following formula:

$$\text{Final Exam \%} = (\text{ACS_SCORE} + 40) / 100$$

Quizzes. 9 quizzes (lowest score dropped) will be administered by paper or clicker, each worth 10 points for a total of 80 points (see syllabus schedule; 5 questions each, ~15 min). Students will be notified ahead of time of the format for upcoming quizzes.

Smartwork5 (FREE). Instructions are on Blackboard under Course Materials for Smartwork5 registration. Smartwork is available as extra practice problem opportunities to aid in studying.

Class Participation. Several in-class activities involve individual responses using Turning Technologies Clickers. **It is thus important to attend and bring your clicker to class every day.** It is the student's responsibility to bring the clicker/responseware-installed-device to each class, replace if lost, verify it is registered correctly on the instructor's database, and keep it supplied with fresh batteries. **It is ultimately the student's responsibility** to address problems with their clicker and/or check with the instructor concerning their clicks. **Clicker IDs must be registered through Blackboard by SUNDAY, Jan 22nd, 11:59 PM.** Clicker registration directions are posted on Blackboard.

Instructor-Initiated Withdrawals. Until **Friday, March 29th**, the instructor has the right to withdraw a student who has not participated substantially in the course. Any (or combination) of the following constitute non-participation: 1) Missed exam or 2 quizzes without excused absence, 2) At least 2 incomplete homework assignments, or 3) Less than 50% attendance as registered by clickers.

Support & Accommodations

Chemistry Learning Center (CLC) – CHEM 325 TAs keep regular office hours, which can be found on the CLC calendar: www.uaf.edu/chem/clc/ and will be posted on Blackboard once available. Chemistry computer lab (REIC 172) is available for **course related activities** – www.uaf.edu/chem/instrumentation/policies

Student Protections and Services Statement. Every qualified student is welcome in my classroom. As needed, I am happy to work with you, disability services, veterans' services, rural student services, etc. to find reasonable accommodations. Students at this university are protected against sexual harassment and discrimination (Title IX), and minors have additional protections. As required, if I notice or am informed of certain types of misconduct, then I am required to report it to the appropriate authorities. For more information on your rights as a student and the resources available to you to resolve problems, please go the following site: www.uaf.edu/handbook/.

Veteran Support Services. Walter Crary (wecrary@alaska.edu) is the Veterans Service Officer at the Veterans Resource Center, 111 Eielson Building, 474-2475. Fairbanks Vet Center: 456-4238. VA Community Based Outpatient Clinic at Ft. Wainwright: 361-6370.

Mobile Devices and Laptops. Mobile devices must be turned to silent or “vibrate” mode during class. Use of electronic devices that facilitate learning are permitted.

Absences. Make-up exams/quizzes are *only* allowed in the event of a legitimate cause **and** proper notification to the instructor. Known absences (e.g., intercollegiate sports, travel for military or university purposes) are required to provide notification by email **before** the absence; unexpected/emergency absences (e.g., illness, family, or personal emergency) need to provide notification at the earliest possible opportunity. Students may be asked to provide documentation for the absence. Make-ups should be scheduled as soon as possible from the originally scheduled date. *Summary: If you have **any** absences (scheduled or unscheduled), or questions about absences/make-ups, email your instructors: Dr. Guerard (jguerard@alaska.edu) for lecture, and Dr. Green (tkgreen@alaska.edu) for lab.*

Ethical Considerations and Honor Code. Students must adhere to UAF policies, the student code of conduct as well as the University of Alaska *Honor Code*. The Chemistry and Biochemistry Department Policy on Cheating states: Any student caught cheating will be assigned a course grade of F. The student's academic advisor will be notified of this failing grade and the student will not be allowed to drop the course. Use of cell phones or electronic devices other than a non-programmable scientific calculator during exams constitutes cheating and will result in an F in the course.

UA is an AA/EO employer and educational institution and prohibits illegal discrimination against any individual: alaska.edu/nondiscrimination.

Disabilities Services. The Office of Disability Services implements the Americans with Disabilities Act (ADA), and ensures that UAF students have equal access to the campus and course materials. I will work with the Office of Disabilities Services (*208 Whitaker, 474-5655) to provide reasonable accommodation to students with disabilities.

Student Support Services. The Student Support Services (SSS) program (trio.sss@alaska.edu), located in 512 Greuning (474-6844), provides opportunities for academic development, assists students with college requirements, and serves to motivate students toward successful completion of their degree programs. For more information: 474-6844 www.uaf.edu/sss/

Amending this Syllabus: *Before the drop date, I may revise the syllabus to correct for any errors. Revision at a later time would require majority vote by students present in class on day issue is decided. Adjustments to the lecture schedule and homework due dates may be made at the instructor's discretion anytime during the semester. Any revisions will be distributed via Blackboard and announced in class.*



CHEM F325 Spring 2019 Tentative Schedule

Date			Topic	Assigned Readings	Klein	Assignments & Quizzes
Week 1	M	1/14	Mass Spec	16: 16.16-16.19, IC G		
	W	1/16	Nuc Add I	17a: 17.1-17.4	Ch 6	
	F	1/18		17b: 17.5-17.6		
Week 2	W	1/23	Nuc Add I	17c: 17.7-17.13		Quiz 1, HW 16 due
	F	1/25		17c: 17.7-17.13		HW 17a due, xc1 due
Week 3	M	1/28	Nuc Add II	18a: 18.1 – 18.3	Ch 6, 8	HW 17b due
	W	1/30		18b: 18.4 – 18.9		HW 17c due
	F	2/1		18c: 18.10-18.11		Quiz 2, HW 18a due
Week 4	M	2/4		18c: 18.10-18.11		HW 18b due
	W	2/6		EXAM I Review		HW 18c due
	F	2/8		EXAM I: Ch 16-18, IC G		
Week 5	M	2/11	Org Synthesis II	19a: 19.1-19.2		
	W	2/13		19b: 19.3-19.5		
	F	2/15		19c: 19.6-19.7		Quiz 3, HW 19a due
Week 6	M	2/18	Nuc. Add. Elim. I	IC F, 20a: 20.1, 20.3	Ch 7	HW 19b due
	W	2/20		20b: 20.2, 20.4-20.5		HW 19c due
	F	2/22		20c: 20.6-20.8		Quiz 4, HW 20a due
Week 7	M	2/25	Nuc. Add. Elim. II	21a: 21.1-21.3	Ch 7	HW 20b due
	W	2/27		21b: 21.4-21.8		HW 20c due
	F	3/1		21c: 21.9-21.10		Quiz 5, HW 21a due
Week 8	M	3/4		21d: 21.11-21.14		HW 21b due
	W	3/6		EXAM II Review		HW 21c due, HW 21d due
	F	3/8		EXAM II: Ch 19-21, IC F		
☺ ☺ SPRING BREAK WEEK – PRACTICE ORGANIC CHEMISTRY ☺ ☺						
Week 9	M	3/18	Aromaticity	Ch 14	Ch 1	
	W	3/20	EAS I	22a: 22.1 – 22.7	Ch 4	
	F	3/22		22b: 22.9		Quiz 6, HW 14 due
Week 10	M	3/25	EAS II	23a: 23.1-23.6	Ch 5	HW 22a due
	W	3/27		23b: 23.7-23.9		HW 22b due
	F	3/29		23c: 23.10-23.12		Quiz 7, HW 23a due
Week 11	M	4/1		Spectroscopy Review		HW 23b due
	W	4/3		EXAM III Review		HW 23c due
	F	4/5		EXAM III: Ch 14, 22, 23		
Week 12	M	4/8	Pericyclic Reactions	24a: 24.1-24.6	Ch 10	
	W	4/10		24b: 24.7-24.10		
	F	4/12		25a: 25.1-25.4		Quiz 8, HW 24a due
Week 13	M	4/15	Radicals	25b: 25.5-25.6		HW 24b due
	W	4/17		25c: 25.7-25.8		HW 25a due
	F	4/19	Polymers	26a: 26.1 – 26.4		Quiz 9, HW 25bc due
Week 14	M	4/22	Polymers	26b: 26.5 - 26.9		HW 26 due
	W	4/24		EXAM IV: Ch 24-26		
	F	4/26		Final REVIEW		In-class xc opportunity
Week 15	M	4/29		Final REVIEW		HW xc2 due (rev.)
	W	5/1		**ACS COMPREHENSIVE FINAL** 1-3 PM		