



4 Credits
Spring 2022

General Information

Dr. Tom Green



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vision is that this course will serve as a foundational experience in organic chemistry, as you pursue your field of study, whether it be chemistry, biochemistry, biology, medicine, pharmacy, or some other field.

Course Readings/Materials

The following materials are for the course and can be purchased.

1. Organic Chemistry, 9th edition, Leroy G. Wade and Jan William Simek, Pearson, 2017
2. Mastering Chemistry, digital platform from Pearson for online Homework.
3. Lab notebook for recording experimental data, results and conclusions. The lab notebook will be supplied by the department. Student Lab Notebook, 2012 Book Factory, Lab-050-7GSS, 50 pages.
4. Textbook: Making the Connections³; A How-to-Guide for Organic Chemistry Lab Techniques, 3rd edition, Anne B. Padias, 2015, Hayden McNeil.
5. Laboratory kit with chemicals and equipment for conducting online experiments. Your lab fee was used to help offset the costs of this kit. We will send this to you by mail. It is important to understand that you are required to return this laboratory kit at the end of the semester, and that you agree to do this. Please inform me immediately if you cannot agree to do this. A separate laboratory schedule with more details will be on Canvas.

Purchasing Options:

Organic Chemistry, 9th edition, eText and Mastering: ISBN-13: 9780134130040, \$120

A University of Alaska email address is required for all communication in the class. This also provides access to the Canvas system for individual scores and grades.

Technology requirements

A University of Alaska email address is required for all communication in the class. This also provides access to the Canvas system for individual scores and grades.

Students must have regular access to a computer and the Internet to access online materials in Canvas. Students will be expected to download course material as well as upload assignments. The lectures for this course will be posted in Canvas in the form of recorded videos.



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Demonstrate competency of modern laboratory techniques, including reaction, isolation, purification, and analyses of organic molecules.

Demonstrate how organic chemistry is relevant to other scientific disciplines such as biochemistry and molecular biology.

Instructional Methods

Lectures: All lectures will be delivered asynchronously by Canvas. Good internet connectivity is required.

Homework will be delivered online using a program called Mastering. Homework is correlated with each chapter as covered in the text. All students need to purchase the access code and register through Canvas.

Exams. All exams will be delivered via Gradescope. The student is responsible for all information from the assigned text, lecture, and homework. Any of these sources will be used to construct exam questions. Three exams and a cumulative final exam will be given as indicated in the course schedule. All students are required to take the final exam in order to pass the course. No exam scores will be dropped.

Laboratory. The laboratory will be entirely conducted at your place of residence. I will publish guidelines for the lab. You will need to have a place to conduct the laboratory experiments in a safe manner. You are also required to agree to return the equipment to the Department of Chemistry & Biochemistry, UAF, at a later date, depending upon whether you decide to take the second semester of organic chemistry.

Explanation of Student Effort

Students are expected to spend 2-3 hours per credit hour outside of class to be successful. Thus, you should expect to spend 8-12 hours outside of class on study for this class. Although this is typical, you may spend more or less than this, depending on your previous experience studying chemistry.



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Laboratory Description

The laboratory is designed to illustrate modern techniques of isolation, purification, analysis and structure determination of covalent, principally organic, compounds. Lab portion will include an introduction to synthetic techniques and spectroscopy.

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Tentative Due Dates for Lab Reports

Experiment	Due Date (11:59 pm)
Exp 1:: NMR of Unknowns (30 pts)	Feb 6
Exp 2 Mass Spectrometry and Fragmentations (30 pts)	Feb 20
Exp 3: Isolation of Natural Products (50 pts)	Feb 27
Exp 4: Diels-Alder Reaction (50 pts)	Mar 6
Exp 5a and b: Iodination of Vanillin (50 pts), WebMO (30 pts)	Mar 20
Exp 6: Suzuki Coupling (50 pts)	Mar 27
Exp 7: Synthesis of Soap; Saponification (50 pts)	Apr 3
Exp 8: Synthesis of Aspirin (50 pts)	Apr 10

Category	Points
Lab Reports	390 pts
Lab Notebook	50 pts
Total Points	440 pts*

Grading

*The points that you earn will be normalized to 250 pts of your overall grade, which represents 25% of the grade 4.



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Course Policies

Expectations on Progress in Coursework.

Students are expected to complete all online homework in timely manner. Students are expected to take all quizzes and exams during the scheduled times. If these are not completed on time, the students is expected to provide a legitimate excuse or explanation to the Professor in writing, preferably prior the anticipated missed deadline, so that appropriate rearrangements can be made to make up the missed assignment.

Plagiarism and Academic Integrity

Academic dishonesty applies to examinations, assignments, and laboratory reports. Examples include, but are not limited to:

- Presenting as their own the ideas or works of others without proper citation of sources;
- Utilizing devices not authorized by the faculty member;
- Using sources (including but not limited to text, images, computer code, and audio/video files) not authorized by the faculty member;
- Providing assistance without the faculty member's permission to another student, or receiving assistance not authorized by the faculty member from anyone (with or without their knowledge);
- Submitting work done for academic credit in previous classes, without the knowledge and advance permission of the current faculty member;
- Acting as a substitute or utilizing a substitute;
- Deceiving faculty members or other representatives of the university to affect a grade or to gain admission to a program or course;
- fabricating or misrepresenting data;
- Possessing, buying, selling, obtaining, or using a copy of any material intended to be used as an instrument of assessment in advance of its administration;
- Altering grade records of their own or another student's work;
- Offering a monetary payment or other remuneration in exchange for a grade; or
- Violating the ethical guidelines or professional standards of a given program.

For more, see [Students Rights and Responsibilities](#).

Extended Absence Policy

Extended absences are defined as missed classes or course work by students beyond what is permissible by the instructor's written course policies. Students may need to miss class and/or course work for a variety of reasons, including, but not limited to:

Official UAF activities such participation in athletic events, conferences, etc.

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Rural Student Services

Responding to student needs by providing quality services to Native and rural students who expend positive effort in the pursuit of higher education and its opportunities. Please see: <https://uaf.edu/ruralss/>. Additional student support services can be found here: <https://www.uaf.edu/ruralss/tutoring-services/>.

UAF Help Desk

Go to <https://alaska.edu/oit/> to see about current network outages and news. Reach the Help Desk at: helpdesk@alaska.edu or 907-450-8300 (in the Fairbanks area) or 1-800-478-8226 (outside of Fairbanks).

eCampus Student Services

UAF eCampus Student Services helps online students with registration and course schedules, provides information about lessons and student records, assists with the examination process, and answers general questions. Their Academic Advisor can help students communicate with instructors, locate helpful resources, and maximize their learning experience. Contact the UAF eCampus Student Services staff at 907-479-3444 (toll free 1-800-277-8060) or contact staff directly – for directory listing see: <https://ecampus.uaf.edu/contact>

Effective Communication Resources

UAF Speaking Center (907-474-5470, speak@uaf.edu, Gruening 507)

Writing Center (907-474-5314, uaf-writingcenter@alaska.edu, Gruening 8th floor)

UAF Math Services, uafmathstatlab@gmail.com, Chapman 305 (for math fee paying students only)

Debbie Moses Learning Center at CTC (907-455-2860, 604 Barnette St, Room 120).

Developmental Math Lab, Gruening Building, Rm 406

For more information and resources, please see the academic advising resource list:

https://www.uaf.edu/advising/lr/SKM_364e19011717281.pdf

Veteran and Military Support Services

UAF is committed to all veterans and military students—active duty, reserve, guard, separated and retired—as well as their dependents who are exploring UAF's academic opportunities. Staff members in Financial Aid, Admissions, Career Services, Veterans' Services and the Veterans' Resource Center are here to help you with any challenges you encounter while working while in or transitioning from a military to an academic environment. Please contact the Veterans Resources Center, 907-474-2475, <https://uaf.edu/veterans/> in room 111 in the Eielson Building.



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Emergency Notification Plan

Students will receive emergency notifications via phone or email. Please check your uafonline account to confirm your emergency notification settings. For more information, please refer to the student handbook. In cases where you do not have access to your devices, as your instructor, I will take responsibility to relay any emergency notifications.

COVID-19

Students should keep up-to-date on the university's policies, practices, and mandates related to COVID-19 by regularly checking this website:

<https://sites.google.com/alaska.edu/coronavirus/uaf/uaf-students?authuser=0>

Further, students are expected to adhere to the university's policies, practices, and mandates and are subject to disciplinary actions if they do not comply.

Student protections statement

UAF embraces and grows a culture of respect, diversity, inclusion, and caring. Students at this university are protected against sexual harassment and discrimination (Title IX). Faculty members are designated as responsible employees which means they are required to report sexual misconduct. Graduate teaching assistants do not share the same reporting obligations. For more information on your rights

as a student and the resources available to you to resolve problems, please go to the following site:

<https://catalog.uaf.edu/academicsregulations/students-rights-responsibilities/>.