

Chemistry F104X (online): A Survey of Organic Chemistry and Biochemistry Spring 2022 Course Syllabus

Instructor: Dr. Maegan Weltzin
Office: Murie 113E Phone: (907) 474-6527
Email: mmweltzin@alaska.edu Office Hours: F 10:00 am . 12:00 pm or by
appointment (va Zoom/Slack)

Course information: Chemistry F104X UX1 -- Intro Organic Chem & Biochem (3 credits) and lab (1 credit) (CRN 36566 & 36565) online course. The lab content can be found on the lecture Canvas page.

Course materials

The following materials are *required* for the course and can be purchased in the UAF bookstore or elsewhere:

Book: Introduction to General, Organic, and Biochemistry 11th Ed. by Bettelheim, Brown, Campbell, Farrell and Torres (ISBN-13: 978-1-285-86975-9)

The book 10th and 12th ed will work as well but the student is responsible for finding the corresponding sections.

Discussion Board: Packback license (<https://questions.Packback.co/sign-up/create->

consumers and be better prepared to contemplate the relationship between public science policy and human health.

Prerequisites: Chem F103X, placement in ENGL F111X of higher, placement in DEVM F105 or higher, or permission of instructor.

Course expectations and outcomes

Students are expected to read the course material, watch the videos, review lecture notes, and perform the simulations each week. Weekly homework sets are assigned. These are not graded but will help you prepare for the weekly quizzes. Graded weekly quizzes will consist of about 5 questions and you will have 1hr to complete each quiz. It is highly recommended that you read the material before

Packback Discussion Board Responses: We will use **Packback** as our class discussion board to connect course content to the everyday life. Students are expected to participate actively in the course via responses to discussion questions. Each week Dr. Weltzin will post a question pertaining to an existing application of the course material. Students are expected to provide a response to the question and respond at least once to a peer's response. To earn full points, you also need to ask **one** question to the original posted question. Responses will be grade on the quality and detail of the response and sources cited. To earn full points, you must achieve a score of 40 (or great) curiosity points (CP). You can see your score when you post. Any time before the deadline, you can improve upon your post to increase your CP score. Additionally, student responses will be checked for plagiarism and originality. If your response has been plagiarized or is very similar to an already posted response, your response will be sent back to you and you will have the opportunity to revise your response so you can earn full points. Students should feel free and are encouraged to ask questions to each other about responses. Students will need to purchase a license (

Students must also adhere to UAF policies, the student code of conduct as well as the University of Alaska *Honor Code*, which states:

Students will not collaborate on any quizzes, in-class exams, or take-home exams that will contribute to their grade in a course, unless permission is granted by the instructor of the course. Only those materials permitted by the instructor may be used to assist in quizzes and examinations. Students will not represent the work of others as their own. A student will attribute the source of information not original with himself or herself (direct quotes or paraphrases) in compositions, theses, and other reports. No work submitted for one course may be submitted for credit in another course without the explicit approval of both instructors. Violations of the Honor Code will result in a failing grade for the assignment and, ordinarily, for the course in which the violation occurred. Moreover, violation of the Honor Code may result in suspension or expulsion.

Plagiarism is defined as the use of someone else's work without their permission or without giving credit to the original author. Intellectual property includes all electronic, spoken or print media **thus any information taken of the web is included under this statement**. Students are expected to cite all sources used in oral and written presentations. Cases of plagiarism will be taken seriously with a grade 0 for the particular assignment. Severe cases may be referred to the Department Chair or Dean or class failing considered.

Student success

There are a large number of resources to help students who would like to perform at their best. The student may make an appointment to see the instructor for help. (The instructor will attempt to reply to email questions within 24 hours during the school week.)

Disabilities

Students with a physical or learning disability are required to identify themselves to the Disability Services office, 474-7043, located in the Center for Health and Counseling. The student must provide documentation of the disability. Disability Services will then notify the instructor of special arrangements for taking tests, working homework assignments, and doing lab work.

Computer Access: Currently Department of Computing and Communications (DCC) maintains two open labs on cam

should be familiar with the Code as you will be held accountable to maintain the standards stated within. The Code includes the following statements:

P09.02.020.A As with all members of the university community, the university requires students to conduct themselves honestly and responsibly and to respect the rights of others. Students may not engage in behavior that disrupts the learning environment, violates the rights of others or otherwise violates the Student Code of Conduct (Code), university rules,

Tips for Success in Chem 104X

Class Schedule

| Week (Chapter) [Monday date] | Topic and Activities | Assignment Due Date |
|---|-----------------------------|----------------------------|
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1
(Ch 10)

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| | <ul style="list-style-type: none">• Video 2.3: Conformations of cycloalkanes, identifying substituent positions, and naming of isomers• Video 2.4: Identifying and naming alkenes• Video: 2.5: Identifying and naming alkynes• Lab Investigation:<ul style="list-style-type: none">• Getting Started and Safety lab | |
| 3 (Ch 15) [1/24] | <p>Chirality: The Handedness of Molecules</p> <ul style="list-style-type: none">• Reading:<ul style="list-style-type: none">○ Ch. 15○ Lecture Notes• Watch:<ul style="list-style-type: none">• Video 3.1: Learn to identify stereoisomers• Video 3.2 Racemic mixtures• Video 3.3: How to name enantiomers• Video 3.4: Determining number of stereoisomers and identifying diastereomers• Lab Investigation:<ul style="list-style-type: none">• Drawing Organic Compounds | <ul style="list-style-type: none">• Quiz #2 (Tuesday, 1/25) |

**Specific Catabolic Pathways: Carbohydrate, Lipid,
and Protein Metabolism**

13
(Ch 28.1-
28.3, 28.7)
[4/11]