

## CHEM& 263

### Organic Chemistry III - Intensive

Summer Quarter 2025

**Instructor:** Dr. Daniel Mitchell

**Office:** S340K

**Office Hours:** MW after 5:00PM, TTh before lecture, F after lecture

**Meeting times**

**Lecture:** All: MTWThF 10:30AM-2:00PM in S324

**Lab:** Section A: TWThF 7:30AM-10:20AM in S314

Section B: MTWTh 2:10PM-5:00PM in S314

**Cell Phone:** 206-660-2484

**Office Phone:** 425-564-2474

**Email:** [dmitchel@bellevuecollege.edu](mailto:dmitchel@bellevuecollege.edu)

**Textbooks and Equipment:**

Required: McMurry, J. "Organic Chemistry" 10<sup>th</sup> edition, OpenStax, 2023

Required: Pavia, Lampman, Kriz, Engel. "Organic Laboratory Techniques" 6<sup>th</sup> Edition, Thomson Brooks/Cole, 2018

Required: Soft-side safety goggles with splash guards (*available at bookstore*)

*Optional but highly recommended:* A notebook that is divided into clearly marked sections for lecture note-taking, text note-taking, workspace for problem solving, and questions to be asked in class, in group study, or during office hours.

*Optional but very highly recommended:* The old BC Organic chemistry exams, available at the bookstore.

**Holidays:** None ☹

**Quarter:** Our intensive 3<sup>rd</sup> block summer class runs from August 6<sup>th</sup> through August 22<sup>nd</sup>

**Course Objectives:** The first half of this class will cover reactions, nomenclature, and characterization of more functional groups: aldehydes, ketones, carboxylic acid derivatives, amines, etc. The second half of the quarter will be devoted to biochemistry: carbohydrates, amino acids/proteins, lipids, DNA/RNA.

Assigned Points (subject to change):

Daily Quizzes – 10 @ 30 points	300 points
Laboratory Reports	80 points
Final Exam (Cumulative, written)	100 points
Final Exam (ACS, multiple choice)	45 points
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Total	525 points
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Other	points
New Total	points

The grading scale will be a modified curve, if appropriate. You cannot do worse than the values given in the table above for a particular percentage of total points. I **will not** apply a grading adjustment if the class average is higher than 75%.

**Grade Point Based  
on a Percentage of  
Total Assigned Points**

A	95-100
A-	90-94
B+	87-89
B	83-86
B-	80-82
C+	77-79
C	73-76
C-	70-72
D	60-69
F	≤ 59%

## Tentative Course Outline and Test Schedule

Day	Chapter Reading Assignments in Text
Aug 6, 7, 8	Ch. 20 – Carboxylic Acid Derivatives
Aug 8, 11, 12	Ch. 19 – Reactions of aldehydes and ketones
Aug 12, 13	Ch. 21 – Carbonyl III, adjacent reactions
Aug 13, 14	Ch. 22 – Amines
Aug 14, 15, 18	Ch. 24 – Carbohydrates <span style="float: right; color: red;"><b>Monday, August 18 - Last Day to Withdraw (W)</b></span>
Aug 19, 20	Ch. 25 – Amino Acids and Proteins
Aug 21	Ch. 26 – Lipids and DNA/RNA
Aug 22	<b>Final Exam Friday, August 22<sup>nd</sup>, 10:30AM-11:50AM</b>

**The final exam is cumulative, and will be given on Friday, August 22<sup>nd</sup>, at 10:30AM – 11:50AM.**

*Last day to drop with 100% refund is 8/6. 50% refund is 8/10. W ends on 8/18.*

### Schedule of Laboratory Sessions for CHE 263

#### Lab Reports:

All of the labs this quarter are done in pairs. All labs require the following lab reports: no procedure is required, a table for **results and data**, an **analysis** of the results. Analyze what happened during the lab, including an analysis of error. Your explanations should have **valid scientific basis**, and be **relatively in depth**. **Full credit** this quarter will require analysis of sources of error from a **chemical reaction** standpoint. Look at the reaction and its mechanism... **even without data** you should be able to identify the inherent sources of error in this experiment if you were to run it thousands of times.

You will be graded this quarter on the **quality** of your analysis, not simply the quantity of points brought forth. Analyze the chemical meaning of the results in addition to a reasoned discussion of data and error. Look at the **chemical reactions** that are happening and identify sources of error from those.

These reports are worth 10 points each. A (preferably typed) lab report is **due two (school) days** after the conclusion of each lab. Late assignments will be penalized 15% per day past up to a maximum deduction of 50%.

#### Pre-Lab Work:

You will not be allowed to use the lab textbook during lab. Any information from the textbook that you think you may need should be in your lab notebook (this is my version of you writing a procedure). Not having a procedure in your notebook will be a deduction of 3 points from the lab report (I do check every lab)! Occasionally, the wording of the text can be esoteric or vague. Feel free to come by my office and ask me anything about the lab you wish, even if you are worried it is a rudimentary question. But please ask me *before* lab begins.

**A typed lab report is due two (school) days after the conclusion of each lab.**

Section A – 7:30 Lab	Section B – 2:10 Lab	Experiment	Questions
Aug 8	Aug 7	Acetaminophen (11A)	1, 3, 4, 5
Aug 12	Aug 11	Separation Scheme (5)	None
Aug 13	Aug 12	Banana Oil (14A)	
Aug 14	Aug 13	Banana Oil continued (14A)	1-7, 9, 10
Aug 15	Aug 14	Aldol Condensation (39)	1, 2, 4, 5
Aug 19	Aug 18	Unknown ID (57)	
Aug 20	Aug 19	Unknown ID continued	
Aug 21	Aug 20	Unknown ID continued	
Aug 22	Aug 21	ACS Exam (2 Hours in S324)	

The final lab report is due Friday, August 22<sup>nd</sup> for both sections.

**Lab Safety:** We will be using dangerous chemicals this quarter, and safety should be your primary concern. You are required to bring and wear goggles (I have none to lend) for each and every lab even if the chemicals we are dealing with do not appear harmful, and to dress appropriately (no open toed shoes, shorts, or skirts). You will not be allowed into the lab if you do not bring goggles, or if you show up late for lab. There are no makeup labs.

**Lab Grade:** The first four labs are “normal” labs that require the usual lab report and are worth 10 points each. There are also two unknown lab reports which are worth 20 points each. The Separation Scheme lab requires you to write your own procedure. This procedure will be the major part of your lab report (be warned, I will be very picky grading this), so be sure to include all the necessary detail in an easy-to-follow format.

**The Unknown:** Towards the end of the quarter, you will be given two unknown compounds, one liquid and one solid. Your mission: to identify them. Reading part five of your textbook will be helpful here. This is an individual lab, and is to a large extent the culmination of all our labs so far. You are free to use any of the suggested experiments in the book (that we have chemicals for). There are three lab periods set aside for this, but you do not have to use all that time if you do not feel you need to (but no additional time is available). The lab reports (write one for each unknown separately) for this are due **Friday, August 22<sup>nd</sup> at the beginning of class**. All that is required of the lab report is that you give your name, the unknown ID number, and what compound you think it is. If you would like to add a detailed justification, you may do so, but this is optional. The justification will only be read in the event that your answer is incorrect, for the purposes of determining partial credit. For this lab only, you may use your textbook during lab.

### **Chem 263 Course website—CANVAS:**

I use an online course management system called CANVAS to post PowerPoint slides, online quizzes, handouts, answer keys, grades, discussion forums, etc... It is **required** that you log into CANVAS. All quizzes will be given on Canvas.

1) Go to <http://bc.instructure.com>

2) Log in with your Bellevue College account information (be sure to check your BC email FREQUENTLY).

**3) Complete and submit the notifications assignment (this is worth points).**

4) Browse around. Maybe setup an avatar or put something about yourself in your profile.

### **Evaluation and Grading:**

Tests and Final Exam: There will be 11 (possibly 10) daily 20 minute in-class quizzes (every day except for the first and last day). All new material from before the day of a quiz is subject to examination. As organic chemistry is cumulative, older material will appear as well (this includes material from first and second quarter!!) The final exam is cumulative. The final exam will not be returned.

- ❖ You will have a 110 minute ACS Organic Chemistry Exam one on of the last days of class. This exam is an assessment of your organic chemistry skills, and is **cumulative for the entire year** of organic chemistry. It is multiple choice, it will be given in the lab, and it will count as ~50 points of your final grade. All Bellevue College students must take this exam at the end of chemistry 263. Instructors have not seen the exam.

Homework: If you wish to fully develop your problem solving skills to be evaluated on tests and quizzes, you should spend a **minimum** of 2 hours study outside of class for each hour of lecture. You should not expect all problems on tests to be similar to those that you do for homework or to those covered in lecture – much of organic chem 2 and 3 involves critical thinking. Your preparation for a test should include working problems that go beyond a given assignment.

I cannot stress enough that in organic chemistry practice is required. Memorization is only the beginning. There are 10 years' worth of old-exams to practice from available for purchase at the BC bookstore. **GET THESE EXAMS!!** Use these for your studying purposes. For learning synthesis, there is no substitute for practice. (Although mechanisms are somewhat brute force.)

### **Course Policies:**

Tests, Quizzes and Exams: Please be sure that you have no conflicts with the scheduled test/quiz dates as **NO** make-up tests/quizzes will be given, except in cases of documented illness or family emergency. If you know on the first day of class that you will not be here for a given test/quiz date, it is your responsibility to immediately inform me. If you inform me of a conflict less than two days in advance of a given test/quiz date I will not accommodate you. Students must notify me of an illness/emergency that will cause you to miss a test/quiz by leaving a message on my phone (206-660-2484) or by email ([dmitchel@bellevuecollege.edu](mailto:dmitchel@bellevuecollege.edu)) prior to the start of a test/quiz. The final exam is not optional! If you do not take the final, you will fail!

Attendance: There are no points assigned for attendance – although there will be a daily exam. It is very important you attend class, as I base all my exams (and the final) on the material we discuss in lecture. If you miss a class, it is your responsibility to obtain lecture notes, handouts, assignments, announcements, etc. from other classmates, the library, the web, or the Canvas site. Please do not email me to ask what you missed.

**Conduct:** Rudeness, tardiness, chatter during lecture, and disrespect make learning difficult for everyone around you, and will not be tolerated. This also applies to cellular phones and beepers; turn these devices off during our class. If you must leave before class ends take your seat towards the back of the lecture room. You are responsible for all announcements, lecture notes, assignments, and handouts. Drinks with lids are permitted. Food is permitted if you are careful to keep it non-distracting.

\*\*\* **The course outcomes** for Chemistry 263 may be found at <https://www.bellevuecollege.edu/chemistry/courses/chem263/>

**BC Academic Success Center:** <http://bellevuecollege.edu/asc> The ASC offers free tutoring, and paid positions for student tutors.

**Science Division Policy on Cheating:** You, the student, are expected to conduct yourself with integrity. If you cheat, or aid someone else in cheating, you violate a trust. Cheating includes, but is not limited to, copying answers on tests or assignments, glancing at nearby test papers, swapping papers, stealing, plagiarizing, and illicitly giving or receiving help on exams. If you cheat, the following actions will be taken:

- 1) You will receive a grade of zero on the work where the cheating occurred. This grade cannot be dropped.
- 2) A report of the incident will be sent to the Dean of Students. He/she may file a report in your permanent record of take further disciplinary action such as suspension or expulsion from the college.
- 3) If you feel you have been unfairly accused of cheating, you may appeal. For a description of the due process see WAC 132H-120.

### **Counseling Services**

These are tough times for many of us, financially, personally, emotionally. The BC Counseling Center is using a free and secure web-based program called Doxy.Me. This allows you to meet with a BC mental health counselor via video conferencing. Appointments are available Monday-Friday 8:00am – 5:00pm. Go to: <https://bellevuecollege.edu/counseling> or call them at 425-564-5747.

**Note that the college is constantly changing the grammar and phrasing of these following policies. The provided links should link to any updated language if it has changed since the quarter began.**

### **DRC Statement**

The Disability Resource Center serves students with disabilities. Common disabilities include physical, neurological (e.g., Autism, ADD/ADHD), and mental health (e.g., depression, anxiety). If you are a student who has a disability or if you think you may need accommodation in order to have equal access to your classes, programs, activities, and any other services, please contact the DRC.

If you require assistance in an emergency, please meet with your individual instructors to develop a safety plan for while in class and contact the DRC to develop a safety plan for while you are elsewhere on campus.

The DRC office is in building U Room 001. You can contact the DRC by stopping by the office at U001, calling our front desk phone number (425) 564-2498, emailing [drc@bellevuecollege.edu](mailto:drc@bellevuecollege.edu). For more information about the services we offer, including our Initial Access Application, visit our website at Disability Resource Center (<http://www.bellevuecollege.edu/drc>).

Service Animals are allowed in this classroom. Emotional Support Animals need to be approved through the DRC. All other animals will be asked to leave. If you believe you need your animal with you, please contact the DRC and refrain from bringing your animal until a decision has been made.

### **Affirmation of Inclusion**

Bellevue College affirms the diversity of human identities and experiences and is committed to creating spaces free from harassment and discrimination.

See Affirmation of Inclusion (<https://www.bellevuecollege.edu/inclusion/>).

### **Reasons of Faith and Conscience**

Reasonable Accommodations for Reasons of Faith and Conscience: Students who will be absent from course activities due to reasons of faith or conscience may seek reasonable accommodation so that grades are not impacted. Such requests must be made within the first two weeks of the course to the office of the Vice President of Student Affairs (see Bellevue College Policy 2950 (<https://www.bellevuecollege.edu/policies/id2950/>)). In the event you feel you are being discriminated against based on faith or conscience, you may refer to the procedures outlined in the college's Discrimination, Harassment and Retaliation Policy 1440P (<https://www.bellevuecollege.edu/policies/id-1440p/>)). Complete the request for reasonable accommodation for reasons of faith and conscience ([https://cm.maxient.com/reportingform.php?BellevueCollege&layout\\_id=30](https://cm.maxient.com/reportingform.php?BellevueCollege&layout_id=30)) in the first 2 weeks of the quarter.

## **Annual Notice Non-Discrimination**

Bellevue College does not discriminate on the basis of race or ethnicity; creed; color; national origin; sex; marital status; sexual orientation; age; religion; genetic information; the presence of any sensory, mental, or physical disability; or veteran status in educational programs and activities which it operates. Bellevue College is prohibited from discriminating in such a manner by college policy and by state and federal law. All college personnel and persons, vendors, and organizations with whom the college does business are required to comply with applicable federal and state statutes and regulations designed to promote affirmative action and equal opportunity.

Equal Opportunity - Bellevue College (<https://www.bellevuecollege.edu/equal-opportunity/>)

Reports of gender and sex-based based discrimination, sexual misconduct, or retaliation by a student should be raised with the Title IX office (see 1440P2 for contact information). In cases where the impacted party is a student and the responding party is a college employee, the Title IX coordinator will direct the matter to the Office of Human Resources (HR). All other reports, including all reports where the impacted party is an employee, should be raised with the HR. If a report is against personnel in the Title IX office or HR, it should be submitted to the president's office for referral to an alternate designee.

Discrimination, Harassment, Retaliation 1440P (<https://www.bellevuecollege.edu/policies/id-1440p/>)

## **International Access to Canvas**

CHINA: A note about accessing Canvas from the People's Republic of China. Some users have reported that they do not have full access to all Canvas functionality from within the People's Republic of China. This appears to be due to Canvas' parent company, Instructure, not fully committing to Chinese government requirements regarding internet operations within the country. The Chinese government does not inform foreign entities of their policy updates; therefore, Bellevue College cannot anticipate access to Canvas. If you will be in China during the quarter, you should prepare for intermittent and uncertain access to Canvas. Students can find help with Canvas by following the link here: Student Canvas Help Source: Access to Canvas in China (<https://support.canvas.fsu.edu/kb/article/1157-access-to-canvas-in-china/>)

## **Confidentiality, Mandatory Reporting, and Title IX**

As an instructor, I am required to share with the Title IX Coordinator all information regarding sexual assault and other forms of sexual misconduct (e.g., relationship violence, stalking) that may have occurred on campus or that impacts someone on campus. Students may speak to someone confidentially by contacting the BC Counseling Center at (425) 564-2212. The Title IX Office can be contacted at 425-564-2641 and more information can be found at Title IX (<https://www.bellevuecollege.edu/about-us/values/title-ix/>). If you have any concerns, you may report to: Report Concerns (<https://www.bellevuecollege.edu/reportconcerns/>).

## **Student Conduct Code and Academic Integrity**

Any act of academic dishonesty, including cheating, plagiarism (using the ideas or words of another as one's own without crediting the source), using AI outside what is outlined as allowed in the syllabus, fabrication, and inappropriate or disruptive classroom behavior are violations of the Student Conduct Code of Bellevue College. Examples of disruptive behavior include, but are not limited to, repeatedly talking out of turn, arriving late or leaving early without a valid reason, allowing cell phones to ring, and inappropriate behavior toward the instructor or classmates. The instructor can refer any violation of the Student Conduct Code to the Student Care and Community Standards for investigation. Specific student rights, responsibilities, and appeal procedures are listed in the Student Conduct Code at: [Student Code](#)

## **AI Use Policy**

The use of generative AI in this course is allowed unless expressly prohibited or restricted by a specific assignment. You may choose to use generative AI to gain insights, receive feedback or generate ideas, however, remember to give credit and ensure the work reflects your originality. Whenever generative AI is used, it needs to be properly cited to include a description of what part of the assignment was AI generated, how AI was used in completing the assignment and the prompts that were used to generate content. The use of AI without proper citation in this course or on assignment for which it is explicated not allowed, will be investigated and, if founded by the instructor, will be considered academic dishonesty, and addressed via the course cheating policy and colleges academic dishonesty policy.