



## CHEM& 261 Organic Chemistry I Syllabus – Jennie Mayer, Fall 2021

### **Instructor Information**

Instructor: Prof. Jennie Kong Mayer (please call me Jennie)

E-mail: [jmayer@bellevuecollege.edu](mailto:jmayer@bellevuecollege.edu) (but please message me through Canvas mail if possible)

Office Phone: 425-564-2281 / Mobile Phone or Text: 206-465-1725 (when urgent; include name/course)

Office Location: S-340 C though I will probably not be there much this quarter!

Office hours: MWF, 10:30-11:30 and virtual appointments available: <https://calendly.com/jkmayerbc>

### **Course Format**

Scheduled Class Time (optional meeting in Zoom, will be recorded): TWTh 8:30-10:20 AM

We will use ZOOM for classroom meetings – the information to join will be provided in Canvas.

### **Learning during a pandemic**

This quarter the course will be taught remotely (lecture and lab) due to the COVID-19 Pandemic. This will be true not only at Bellevue College but at many institutions all across the country and the world. It will be challenging for students and faculty, and we will need to be patient with each other, but it will be done and there will be a lot of learning opportunities!

Professor Brandon Bayne from the University of North Carolina, Chapel Hill, created [the following principles](#) for learning in these times – I'd like to adopt the same principles for our course (slightly modified):

1. Nobody signed up for this: sickness, social distancing, end of campus life, online classes, learning from home with its challenges, and varied access to technology.
2. The humane option is the best option. We will prioritize supporting each other as humans, simple solutions that make sense for the most, sharing resources, and communicating clearly.
3. We cannot just do the same thing online that we've done on campus. Some assignments are no longer possible in the same way, some expectations are no longer reasonable, and some objectives need to be re-thought or re-designed.
4. We will foster intellectual nourishment, social connection, and personal accommodation: Accessible asynchronous content for diverse access, time zones, and contexts and optional synchronous discussion to learn together and combat isolation.
5. We will remain flexible and adjust to the situation. Nobody knows where this is going and what we'll need to adapt. We will recognize that everyone has their challenges, whether it's with children at home when they would be at school, loss of employment, anxiety about finances and the health of loved ones, and postponed plans. Everybody needs support and understanding in this unprecedented moment.

This may not be the ideal situation for us, but we will give each other the benefit of the doubt, understanding and patience, trust, and appreciate what we have: the opportunity to learn and grow together. Let's carry on the best we can. -Jennie

## **Course Description and Outcomes**

Chem& 261 is the first quarter of a year-long sequence of organic chemistry for science/engr/pre-professional students. Prerequisite: CHEM& 161/162/163 (gen chem) with a C or better.

The outcomes of the course are at <http://www.bellevuecollege.edu/classes/All/CHEM%26/261>

More specific course objectives will be provided in the Canvas site.

## **Grading**

There will be a total of about 650 points this quarter ( $\pm 10\%$ ) Please keep in mind assignments may be shifted and added or removed at the instructor's discretion – you will be given at least a week's notice in Canvas of these types of changes. I will keep grades updated in Canvas for what has been graded. If something is not graded yet your grade will show a ---. If something is graded and I don't have it yet, I will place a temporary 0 on it, and send a message letting you know if you can still submit it and by when.

Grades are based on the following criteria:

4 exams (incl. final exam), 100 pts each x 3 highest scores **(300 pts)**

10 Online Canvas Post-lecture Quizzes 10 x 10 pts **(100 pts)**

Online Pre-Lecture Quizzes 10 x 5 pts **(50 pts)**

Homework Problems **(50 pts)**

8 lab scores x 10 pt **(80 pts)** + Lab safety quiz **(5 pts)** + Lab final **(10 pts)**

Chapter Outlines/Mechanisms Portfolio **(10 pts)** + Reaction Map **(10 pts)**

Chem Draw Assignment **(10 pts)**

Canvas biography + Notifications **(10 pts)**

Course Evals **(5 pts)**

Isomers assignment **(10 pts)**

## **Percentage of points earned and corresponding letter grades:**

A = 95 +	A- = 90-94.9	B+ = 87-89.9	B = 83-86.9	B- = 80-82.9
C+ = 77-79.9	C = 73-76.9	C- = 70-72.9	D+ = 65-69.9 / D = 60-64.9	F = below 60

## **Canvas (Course Website):**

Course information will be posted in Canvas. Go to <http://bellevuecollege.edu/canvas>. It will be expected that you check your email announcements pertaining to the course. Use your Bellevue College network ID to sign in. Go to this site if you need to look up your username or reset your password:

<https://bellevuecollege.edu/netid/Default.aspx> If you cannot get access, contact me ASAP. Your first assignment is to post a short bio, profile photo and set notifications. (See Canvas course calendar for deadlines.) You will use Canvas to submit lab reports and other assignments.

## **Required Course Materials:**

❖CHEM&261 Organic Chemistry I Workbook, by Jennie Kong Mayer, version 3.1 (available as free PDF or at the BC bookstore)

❖Inclusive Access to Organic Chemistry by David Klein, 3rd edition – or any edition, or other org. chem. text (technically, required – but if you have financial hardship, I recommend getting the Organic Chemistry as a Second Language instead – see below under “recommended”)

❖Pavia, Intro to organic lab techniques: A microscale approach, 4th ed. (PAVIA ISBN:9780495016304)

**\*\*If you have a different edition, please see note in the lab section of this document.\*\*\***

❖ Chem Draw Software (free download for students with BC email address – instructions will be provided in Canvas)

**\*\*\*Since we are learning remotely this quarter, you need to access a stable internet connection and an electronic device to complete assignments. More info on technology help page in Canvas.\*\*\***

### **Recommended Materials, in this order:**

- ❖ Organic Chemistry as a Second Language (1<sup>st</sup> semester) by Klein, ISBN 9781118010402
- ❖ Student Solutions Manual for Klein textbook – The online text through Inclusive Access (Canvas) contains answer keys but if you opt out, then a solutions manual would be helpful.
- ❖ Model Kit - HGS Model Kit recommended, available from the bookstore. There could be some free resources as well, or simple models you can even make at home with gumdrops and toothpicks!

### **Use of Class Time / Lab Time**

I have designed my class mostly for synchronous modality which means it works best if you can come to class and follow the material with us. However, for those of you who are limited by your schedule, the course can be completed on your own (all lectures are pre-recorded and posted) as long as you meet the deadlines and exam dates.

❖ **Lecture times (TTh 8:30-10:20):** I will hold class sessions in Zoom during our usual lecture days (the link will be in Canvas, Welcome Module and is also posted at the beginning of this document with password “orgotime”). It will be expected you’ve previewed a little of the chapter ahead of time and taken a quiz by Tuesday’s lecture each week.

❖ **Lab time (W 8:30-10:20):** Most Wednesdays we will meet on Zoom to review and practice. Some lab days will be offered as optional on campus meetings, and in those cases there will not be a zoom class. On those days you may use the time to do the virtual labs or reserve a spot to meet me on campus during our scheduled lab meeting. Details are being worked out and will be posted on Canvas.

### **Description of Assignments**

- **Exams:** There will be 3 midterm exams this quarter. It will likely be an exam through Canvas which will likely incorporate a group component.
- **Final Exam:** There will be a comprehensive final exam as an “exam 4”. If you have done well on previous exams, you will not need to take this exam.
- **Canvas Quizzes:** There will be an online quiz (or two) due for homework each week based on the module/topics covered that week. Top ten scores will be factored into your grade (lowest score is dropped).
- **Mechanisms portfolio, Reaction Map, ChemDraw:** These are additional activities to stimulate your interest in organic chemistry, with classmates, or as study aids that you will assemble for yourself during the course and worth points. Descriptions will be provided in class.
- **Homework:** There will be problems assigned out of the textbook for practice, due on exam days. Ideally you should finish the homework before you start your exams!
- Information about Laboratory
- **Lab Safety and Hygiene:** Safety is always our primary concern. If you are doing labs on campus, you will be required to:
  - Bring and wear goggles for every lab period, unless stated otherwise
  - Wear appropriate clothing (no open toed shoes, minimal skin exposure) – No exceptions!!!
  - Keep all reagent bottles capped/closed to prevent oxidation and contamination

- Dispose of all waste properly
- Clean up after yourself and leave the lab in better shape than you found it!
- I must inspect and sign off on your station when you are ready to leave lab.
- You must wash your hands before you leave!

**Pre-Lab Work (Lab Notebooks):** Normally you would keep a lab notebook and write up all procedures in it. However, this quarter since labs are done differently, we will keep lab records in the assignments themselves. **(\*If you choose to do the lab on campus, you will need to prepare a lab notebook but you will not need to do a full report – you can do the questions at the end of the lab period and be done!)**

**Lab Experiments:** Normally we would follow experiments out of Pavia as written. However this quarter there will be modifications but I will refer to the Pavia text. If you have earlier or later editions, try to find the experiment pages from the title of the experiment (experiment numbers change from edition to edition). Let me know if you cannot find the pages you need from your edition!

**Lab Report:** A lab report will be due in Canvas for each experiment (unless you are meeting me on campus for that particular lab). You will be provided with a list of grading criteria (called a rubric). If you satisfactorily complete these requirements, you should be able to earn the full pts. More details will be provided during your first lab session.

### **General Policies**

**Late Policy:** Canvas quizzes, labs and other online assignments are due by the due date and time listed in Canvas. Exam due dates are the most strict but please talk to me if you run into problems. For all other assignments, there is a 48 hour grace period – turn in within 48 hours with no penalty, no questions asked. I request that you upload in canvas and leave me a submission note so I am aware of it. For items late more than 48 hours, I will accept them by the end of the quarter (day of final exam) with up to 50% late penalty.

**Academic Honesty:** You are expected to write and turn in your own work for everything. For exams I expect students to work on their own without help from others. But everything else can be done collaboratively as discussions – you may talk together about homework, Canvas quizzes, lecture quizzes, labs. But do not copy or use someone else's work and submit as your own. If I suspect plagiarism you (and any collaborators) will receive a zero.

Be respectful of others: [BC Affirmation of Inclusion](#)

### **Campus Resources**

**Technology Resources:** I can help with some things so please contact me. You can also try the BC Help Desk. Please contact the Bellevue College ITS Service Desk at (425) 564-4357 (HELP) if you have questions. There is access to Microsoft Office through BC, and Comcast is offering low cost internet. See Canvas Technology page under “Welcome” module for more information.

**Disability Resource Center (DRC):** The Disability Resource Center serves students with a wide array of learning challenges and disabilities. If you are a student who has a disability or learning challenge for

which you have documentation or have seen someone for treatment and if you feel you may need accommodations in order to be successful in college, please contact us as soon as possible. The DRC office is located in B 132 or you can call our reception desk at 425.564.2498. Deaf students can reach us by video phone at 425-440-2025 or by TTY at 425-564-4110. . . Please visit our website for application information into our program and other helpful links at [www.bellevuecollege.edu/drc](http://www.bellevuecollege.edu/drc)

**Science Study Center (SSC, Room S-114, 425-564-2196) – CLOSED FOR SPRING QUARTER:**

The Science Study Center is a multi-purpose room where science and math students gather to study, work with models and microscopes, view videos, take advantage of computer assisted learning and more. Faculty use the Study Center for scheduled demonstrations of course materials. They are currently closed.

**Academic Success Center (aka Tutoring Center) (ASC, Room D-204)- Online tutoring is available!!!**

The ASC is closed but there is online tutoring available! <http://www.bellevuecollege.edu/asc/tutoring/>

**Religious Accommodations**

Students who expect to miss assignments because of their religious observance should be provided with a reasonable alternative opportunity to complete such academic responsibilities. The Request for Accommodations for Reasons of Faith or Conscience Form provides more information about and the steps to request this accommodation. Policy 2950 Accommodations for Reasons of Faith or Conscience <http://www.bellevuecollege.edu/policies/id-2950p-2/>

**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.

**Other Offices and Resources:**

[Financial Aid](#) | [United Way Benefits Hub](#) | [The Womens Center and Center for Career Connections](#)  
[Academic Advising](#) | [Flu Team: COVID-19 resource page](#)

For all other concerns and questions that are not addressed in this document, please know I am here to support you and refer you to resources we may have access through Bellevue College. -Jennie

### Tentative Schedule for Fall 2021 –

Check Canvas Announcements for updates and Canvas Calendar for due dates! Announcements are generally sent every Thursday or Friday on what to work on for the upcoming week.

As mentioned, the labs will need to be worked out and there could be a shifting of dates.

All changes will be updated in the Canvas syllabus and highlighted as we go – please refer to Canvas!

<b>Week (TWTh)</b>	<b>Lecture Topics (Videos posted in Canvas, Notes in the CHEM&amp; 261 Workbook)</b>	<b>Sections in Klein text (Reference)</b>	<b>Laboratory (lab on Wednesdays)</b>	<b>Notes</b>
Sep 28 (Start Tue)	Molecular structure, functional groups, polarity (TWTh)	1.1-1.13	Workbook: Organic Functional Groups/IR spectroscopy, p.3-10.	Do Chapter HW and Canvas quizzes!
Oct 5	Resonance/electron flow (T)	2.1-2.13	Exp 2: Solubility -sample data will be provided	100% refund by 10/1
Oct 12	Acids and bases (T/W/Th)	3.1-3.8	Exp 3A: Crystallization <b>Optional in-person lab* 10/13– see note!</b>	Drop w/o W by 10/8, 50% refund by 10/16
Oct 19	Tues 10/19 – No classes (PD Day) Naming Alkanes; Review (W) <b>Exam 1 (Ch1-3) on Thursday</b>		Chromatography of ink or food coloring Exp 4 (Pavia): Extraction	
Oct 26	Finish Alkanes and start Cycloalkanes (T/W/Th)	4.1-4.14	Exp 4D: Extraction <b>Optional in-person lab*10/27</b>	
Nov 2	Stereochemistry (T/W/Th)	5.1-5.9, 5.11 6.1-6.12		
Nov 9	Naming alcohols, etc. (T) Start Ch7 Thermo, carbocations (W) Nov 11 – HOLIDAY	7.1-7.13	Exp 12A: Isolation of Caffeine <b>Optional in-person lab*11/10</b>	
Nov 16	<b>Exam 2 (Ch 4-5) on Tuesday</b> Substitution reactions, S <sub>N</sub> 1/S <sub>N</sub> 2 Start Elimination reactions	8.1-8.7, 8.9		
Nov 23	S <sub>N</sub> 1/S <sub>N</sub> 2/E1/E2 Competition (T) Start Electrophilic addition (Th) NOV 25-26 HOLIDAY	8.8, 8.10-8.14	Exp 20 (modified): Reactivity of alkyl halides	
Nov 30	Electrophilic addition cont. (T) Review on W <b>Exam 3 (Ch 6-7) on Thursday</b>	Finish 8.13-8.14	Exp 25A (modified): Dehydration of methylcyclohexanol <b>Optional in-person lab* 12/1</b>	
12/7	Redox (T) Multistep synthesis (WTh)		Practice final exam will be posted.	Drop with W by 12/12
12/14	12/13 – NO CLASSES <b>Final Exam (Ch 8) on Thursday 12/16 at 7:30-9:20</b>			Grades posted by 12/21

\*Note: Optional in-person labs are by reservation only, and are subject to change at any moment.