Chemistry 2094 (Organic Chemistry I, 3 units) Fall, 2020

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Section 1: MWF 8:30-9:25 remote and meeting synchronously via zoom once per week 8/17 - 11/24Section 2: MWF 1:30-2:25 remote and meeting synchronously via zoom once per week 8/17 - 11/24

- **1. Course Description:** Study of organic compounds by functional group families with emphasis on structures, reactions, mechanisms, stereochemistry, and synthesis.
- 2. Course Learning Outcomes: The following outcomes are expected and will be assessed on exams and quizzes:
 - a) Apply the fundamental principles of polarity, acidity, resonance, and structure/stability relationships to relevant problems
 - b) Demonstrate fluency in the nomenclature of alkanes, alkenes, alkynes, alcohols, ethers, and alkyl halides, and an understanding of the basic mechanisms by which these compounds react.
 - c) Design synthetic strategies involving alkanes, alkenes, alkynes, alcohols, ethers, and alkyl halides
 - d) Propose reasonable reaction mechanisms in which alkanes, alkenes, alkynes, alcohols, ethers, and alkyl halides participate based on information discussed in class.
 - e) Infer molecular structure using instrumental techniques to include mass spectrometry, infrared spectroscopy, and nuclear magnetic resonance spectroscopy.

Program Learning Outcomes: PLO 1d and 2 are introduced and developed but not mastered in this course, so there are no course assignments used for assessment of our PLO's.

3. <u>**Texts:**</u> Janice Gorzynski Smith, **Organic Chemistry**, 5th edition, McGraw-Hill Publishing, 2017. You are expected to purchase a copy of this text.

CONNECT Allocation: This is a web based homework site. You are required to purchase access. If you bought a new book from the book store you already received access to CONNECT in your bundle. Our section web address is <u>https://connect.mheducation.com/class/m-perry-both-sections</u>. A stand alone copy of CONNECT can be purchased online, which includes the e-book.

Janice Gorzynski Smith, Study Guide / Solutions Manual to Accompany Organic Chemistry. You might want to purchase a copy of this book.

- 4. **Molecular Models:** You will find that a set of molecular models is very useful in this course.
- 5. Internet Resources and Communication: You will be required to access this course on Canvas. Since we are starting the semester remotely, everything you need will be placed in canvas and it will be organized by week. Also, you are expected to access the CONNECT online homework site.

- 6. Assigned Problems: Monday through Friday (most weeks) you will have a lecture video to watch going over a portion of the notes. You will also have a corresponding assignment to upload to canvas. These problems will be graded on effort rather than accuracy and will count for 10% of your course grade. In Addition, you will be assigned a set of homework for every chapter to be completed online at the CONNECT web site. The assignment for each chapter includes all of the possible questions and will be due by 11:59 pm on the day indicated in our course schedule. You will be graded out of 100 points per assignment, which correlates to 10 problems. These assignments are invaluable in preparing you for the incluses exams. I strongly encourage you to solve as many problems as possible as working problems is the only practical way for learning the material, and you should try your best to solve the problems before looking at the solutions. You will need to contact me if you feel like you need an extension due to life circumstances. The online homework will count for 10% of your overall course grade.
- 7. **Group Work:** You will be required to perform some in-class work in groups on the days that we meet synchronously and occasionally on other days of the week. These groups will consist of 3-4 students and will be assigned in the beginning of the semester. Group work will consist of short assignments and quizzes as well as exam review. Group work will count toward 10% of your overall course grade.
- 8. Christian Practice: There ought to be something different about a course taken at PLNU when compared to an institution that is not faith based. This difference, at least for Organic Chemistry, is not in content. It is, instead a difference in the class community. I desire for our class to be one in which the needs of others in the class are considered by the community. You will be assigned to a group at the beginning of the semester and you will be asked to pray for members of the group throughout the semester. You will meet as a group at least three times during the semester with the first meeting occurring in the first two weeks of class. You will be required to fill out a log that includes the times you met as a group, the times you have prayed for group members, as well as times that you have encouraged a classmate or helped them in some way. You will hand this log in at the end of the semester and will be required to have at least 10 entries in addition to the three group meetings. This log will count for 80 points. In addition, you will be required to write a brief reflection on the overall assignment. This will also be worth 20 points. This Christian practice, love of neighbor, assignment will be worth 5% of your overall course grade.
- **9. Office Hours:** Under our remote environment, office hours will be held via zoom. If the times listed below do not work for you or you find yourself needing more personalized help, then email me and we can schedule an appointment. In addition to the times listed below, I will be available during our regularly scheduled class time (MWF 8:30 9:25 and 1:30 2:25) on the days when we are not meeting synchronously. I am a decent tutor for this course, so take advantage and get help when you need it.

Office Hours Monday: 3-4, Thursday: 11-12

- **10. Help Sessions:** I will do my best to schedule a special zoom review prior to each exam for me to answer any questions that you might have.
- **11. Quizzes:** There will be thirteen chapter quizzes worth 10 points each given over the course of the semester. There will also be three post-exam quizzes throughout the semester worth 20 points each.

12. Examinations:

a) **Major Exams**: Exams will cover material in the text and the lecture material as well as any other assigned material. There will be 4 major exams worth 100 points each. These will count for 40% of your overall course grade. There will be no exam scores dropped. Exams will be comprehensive but material covered since the previous exam will be emphasized. Exams under the remote environment will not be synchronous and you will have a time window in which to complete them. If you are caught cheating, you can be given a zero on that exam, and may be subject to further action as stated in university policy. Because the exam is asynchronous, there will likely be little need for make-up times. However, if

you find yourself in a situation where you cannot take the exam in the window provided you must contact me to see what options are available. Email is a great way to communicate these needs, but a call or text would also suffice. If you find that there are errors in the grading of your exam, you should bring it to my attention as soon as possible. I will never take points away in the re-grading of your exam.

b) Final Exam: A mandatory final exam will be given on the day dictated by the University schedule. As with the other exams, it will be asynchronous and you will have a time window in which to complete it. The final will be cumulative with material from the entire semester represented. The final will count for 15% of your overall course grade.

c) **Exam Schedule**: A schedule for the 4 midterm exams and final exam is given below. Although it should not be necessary, changes in exam dates, if required, will be announced at least two days in advance. The date for the final exam is firm as set by University policy.

Exam #1	September 14 (Monday)
Exam #2	October 7 (Wednesday)
Exam #3	October 30 (Friday)
Exam #4	November 23 (Monday)
Final	December 4 (Friday)

- **13. Laboratory:** You are required to register and attend CHE2094L as a co-requisite for this course. If you drop the lab, you may be required to drop the course as well. This lab is worth 1 unit and will be graded independently. You will receive a separate lab syllabus.
- 14. **Course Grade:** Your overall course grade will be based on your performance in lecture. You will receive a separate grade for the laboratory. The weighting of each course activity is shown below.

Daily Problems	10%
Online Homework	10%
Group work	10%
Quizzes	10%
Christian Practice	5%
Hour exams	40%
Final	15%

Letter grades will be assigned at the end of the course based on your percentage of total possible points, according to the following APPROXIMATE scale:

(+) and (-) grades will be assigned within each bracket. (There is no A+ grade.)

- **15. Attendance:** Attendance will be taken during synchronous sessions and will be used for advising purposes. If your absence is not excused, then you will get a zero for any group work done on that day. If you miss more than 3 of the synchronous meetings (20%), you can be dropped from the course.
- 16. Academic Accommodations: While all students are expected to meet the minimum standards for

completion of this course as established by the instructor, students with disabilities may require academic adjustments, modifications or auxiliary aids/services. At Point Loma Nazarene University (PLNU), these students are requested to register with the Disability Resource Center (DRC), located in the Bond Academic Center. (DRC@pointloma.edu or 619-849-2486). The DRC's policies and procedures for assisting such students in the development of an appropriate academic adjustment plan (AP) allows PLNU to comply with Section 504 of the Rehabilitation Act and the Americans with Disabilities Act. Section 504 (a) prohibits discrimination against students with special needs and guarantees all qualified students equal access to and benefits of PLNU programs and activities. After the student files the required documentation, the DRC, in conjunction with the student, will develop an AP to meet that student's specific learning needs. The DRC will thereafter email the student's AP to all faculty who teach courses in which the student is enrolled each semester. The AP must be implemented in all such courses.

If students do not wish to avail themselves of some or all of the elements of their AP in a particular course, it is the responsibility of those students to notify their professor in that course. PLNU highly recommends that DRC students speak with their professors during the first two weeks of each semester about the applicability of their AP in that particular course and/or if they do not desire to take advantage of some or all of the elements of their AP in that course.

- 17. University Mission: Point Loma Nazarene University exists to provide higher education in a vital Christian community where minds are engaged and challenged, character is modeled and formed, and service is an expression of faith. Being of Wesleyan heritage, we strive to be a learning community where grace is foundational, truth is pursued, and holiness is a way of life.
- **18. Copyright:** Point Loma Nazarene University, as a non-profit educational institution, is entitled by law to use materials protected by the US Copyright Act for classroom education. Any use of those materials outside the class may violate the law.
- **19. Academic Honosty:** Students should demonstrate academic honesty by doing original work and by giving appropriate credit to the ideas of others. Academic <u>dishonesty</u> is the act of presenting information, ideas, and/or concepts as one's own when in reality they are the results of another person's creativity and effort. A faculty member who believes a situation involving academic dishonesty has been detected may assign a failing grade for that assignment or examination, or, depending on the seriousness of the offense, for the course. Faculty should follow and students may appeal using the procedure in the university Catalog. See Academic Policies for definitions of kinds of academic dishonesty and for further policy information.