## **Chemistry 206: Organic Chemistry I (Online)**

Summer 2020, Blackboard Course ID: CHEM206-01A-SU20

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Materials: 1) Klein, Organic Chemistry, 3<sup>rd</sup> Edition

2) Klein, Organic Chemistry as a Second Language: First Semester Topics, 4th

Edition

3) Darling Organic Model Set

**Grading:** 150 Pts – Exam 1 (Due Sunday, July 12<sup>th</sup>)

150 Pts – Exam 2 (Due Sunday, July 19<sup>th</sup>) 150 Pts – Exam 3 (Due Sunday, July 26<sup>th</sup>) 150 Pts – Exam 4 (Due Sunday, August 2<sup>nd</sup>)

250 Pts – Final Exam (Due Sunday, August 9<sup>th</sup>)

150 Pts – Problem Sets

1000 Pts Total

## **Important Dates**

July 9<sup>th</sup> – Add/Drop Deadline July 24<sup>th</sup> – Withdraw Deadline

## Weekly Overview – Each week will consist of the following:

- 1) Four days of content (Monday-Thursday). You do not have to complete the materials on the listed days. In fact, I encourage you to work ahead whenever possible. Each day will consist of:
  - a. A reading assignment (optional, but sometimes helpful for clarification)
  - b. Lecture videos which fill in a posted lecture outline.
  - c. Practice problems. These problems are ungraded, but are also the most important ways to spend your time as your achieve mastery over our learning objectives.
- 2) Graded problem sets that are due on Wednesday (covering Monday and Tuesday's content) and Friday (covering Wednesday and Thursday's content), both due at 5 PM.
- 3) A weekly open-note midterm made available via Blackboard on Friday morning. It is due before I wake up on Monday morning. You have <u>3 hours</u> to complete the midterm and upload it to Gradescope (though it should not take you that long). The three hour clock begins as soon as you view the exam.

**Graded Problem Sets** – Can be found at the following link:

https://www.saplinglearning.com/ibiscms/login/

**Problem Sets** – There will be ten problem sets this semester. You are responsible for all ten problem sets. You have unlimited chances to solve each problem; however, each incorrect answer results in a 10% decrease in the credit received for that problem. The due date is soft, but you will receive a 20% deduction per day on each problem that is solved late.

**Grading Scale** – This course uses a sliding grading scale. It is often very difficult to design exams with a specific average in mind. A sliding grading scale gives me the flexibility to make sure that you are earning the grade you deserve. I will be crystal clear about your performances on exams and how that will translate to a final grade.

**Missed Exam Policy** – With prior notice, students that have school related excuses may reschedule a midterm exam. That said, due to the rapid pace of the course, I *strongly* encourage you to do whatever is necessary to avoid rescheduling any exams. The content-rich nature of the course material coupled with the rapid pace of a summer course make it very difficult to keep make up time missed.

Students that are sick may be excused from an exam; however, make-up exams will not be offered and the mean-adjusted final exam score will replace that midterm exam.

**Introduction Bonus** – I'm offering you an opportunity to replace your lowest problem set score with full credit. To receive this opportunity, you must introduce yourself on Piazza (see Blackboard, Start Here) This must be completed by Friday, July 8<sup>th</sup> to receive credit.

**Piazza** – Piazza is a message board designed specifically for academic coursework. Instead of asking me questions via email, please sign up on Piazza and ask your questions there. Answers can come either from myself or from your fellow students (and I can endorse those answers). This is a fantastic way to make sure that all course-related questions are answered as efficiently as possible.

Answering a question on Piazza will allow you to drop an additional problem set score.

## Overall Course Objectives – At the completion of this course, students should be able to:

- 1) Recall and recognize general chemistry topics as they apply to organic molecules
- 2) Apply molecular representations to describe the structure and nature of organic molecules
- 3) Evaluate and predict acid/base reactions in the context of organic chemistry
- 4) Analyze the various shapes (conformations) that organic molecules can adopt
- 5) Recognize how symmetry affects molecular structure and identify the various relationships between molecules
- 6) Apply thermodynamic and kinetic concepts to predict the behavior of chemical reactions
- 7) Explain why organic reactions occur and evaluate various reaction conditions to predict the results
- 8) Propose mechanistic pathways that explain the outcome of organic reactions
- 9) Elucidate organic structure based on the fundamentals of organic spectroscopy