

CHEMISTRY 109A

Winter 2018

Instructor: Armen Zakarian

Text: "Organic Chemistry", 8th edition (seventh, sixth) by P. Y. Bruice
"Solutions Manual and Study Guide", 8th edition by P. Y. Bruice

Meeting Info: MWF 1:00-1:50 pm, BUCHN 1910

Website: <https://labs.chem.ucsb.edu/zakarian/armen/courses.html>

Homework: Homework assignments are listed in the syllabus and/or will be distributed in class. They are not to be turned in.
The answers to all problems are in the Solutions Manual.
There are practice tests at the end of each chapter in the Solutions Manual that will be helpful. The answers are in the back of the Solutions Manual.

BRING A PICTURE ID TO ALL MIDTERMS AND EXAMS

Midterms: **Monday, February 5**
Wednesday, February 21
Wednesday, March 7

Final Exam: **Wednesday, March 21**, 4:00 – 7 pm, room BUCHN 1910 (same room)

One midterm with the lowest score will be dropped. If there is **any reason** that you are unable to take a midterm, that one will be your "drop." In cases where your attendance is **required** at a University-sponsored event (e.g., field trips, intercollegiate athletic events, etc.), your required absence on the day of the scheduled midterm must be verified by a letter from your professor or coach that include their contact information.

THERE WILL BE NO MAKEUP MIDTERMS OR FINALS

Grading:

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| Final | 300 points |
| Midterms | 100 points each |

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| Total max. | 500 |
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| A | 85-100% |
| B | 75-84.9% |
| C | 60-74.9% |
| D | 45-59.9% |

Office Hours: **Monday, Wednesday, 2-2:45 pm**

Office: Chemistry, Room 2217

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Phone: 893-3317

1. Homework Problems are not graded but are requisite for success. They are strongly recommended, some problems will appear in graded tests.
2. Complete answers to all the problems can be found in the Solutions Manual.
3. Each chapter contains at least one box labeled "Problem-Solving Strategy"; the problem that follows it outlines a strategy you can adopt yourselves. Pay close attention to these.

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| Chapter 1 | Electronic structure and bonding Sections 1.1 - 1.16 Problems 1 - 49 End of chapter problems |
| Chapter 2 | Organic Acids and Bases Sections 2.1 - 2.10, 2.12 Problems 1-48, 51-68, 70-72, 74, 76 End of chapter problems |
| Chapter 3 | Nomenclature and Structure of Alkanes Sections 3.1 - 3.15 Problems 1 - 87 End of chapter problems |
| Chapter 4 | Isomers: The Arrangement of Atoms in Space Sections 4.1 - 4.16 Problems 1 - 105 End of chapter problems |
| Chapter 5 | Alkenes and Introduction to Reactivity Sections 5.1 - 5.12 Problems 1 - 62 End of chapter problems |
| Chapter 6 | Reactions of Alkenes Sections 6.1 - 6.18 Problems 1 – 89, 94-100 End of chapter problems |
| Chapter 7 | Reactions of Alkynes and Multistep Synthesis Sections 7.1 - 7.12 Problems 1 – 60 End of chapter problems |
| Chapter 8 | Delocalized Electrons and Aromaticity Sections 8.1 – 8.20, 8.22 Problems 1 – 85, 87 – 112 End of chapter problems |
| Chapter 9 | Substitution and Elimination Reactions of Alkyl Halides Sections 9.1 - 9.9 Problems 1 – 131 End of chapter problems |