Chemistry 163A
Quantum Mechanics & Basic Spectroscopy

Department of Chemistry and Biochemistry
University of California, Santa Cruz

Yat Li
Instructor

Yat Li
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Office hours: Fridays 11am-1pm (PSB 357)
Textbook

*Quantum Chemistry*, 2nd Edition by Donald A. McQuarrie
Quantum Chemistry (Donald A. McQuarrie)

Chapter 1: 1.1-1.14
Chapter 2: 2.1 - 2.4
Chapter 3: 3.1-3.9
Chapter 4: 4.1 - 4.8
Chapter 5: 5.1-5.10, 5.12
Chapter 6: 6.1-6.8

Chapter 7: 7.1-7.9
Chapter 8: 8.1-8.3
Chapter 10: 10.1-10.4
Chapter 11: 11.1-11.7
Supplementary Book

Quantum Chemistry and Spectroscopy
3rd Edition by Thomas Engel
Course Grade

Midterm: 28%
Final: 40%
Problem Sets: 16%
Quizzes: 16%

Total: 100%

Passing score: 50 (out of 100) or 1 standard deviation below the class average
Homework, Quizzes & Exams

- Homework assignments (4 in total) are due in Monday class.
- Weekly quizzes (4 in total) will be scheduled and taken in Wednesday class.
- Each quiz will have 2 questions (10-15 min).
- Mid term will have 4 questions (1.5 hours).
- Final exam is accumulative, 8 questions (3 hours).
General Policies

1. Academic Misconduct Policy for Undergraduates
   https://www.ue.ucsc.edu/academic_misconduct

2. Weekly quizzes will be scheduled and taken in class. If you missed a quiz, you will get zero mark for that quiz. In case of emergency, please get approval from the instructor before the lecture.

3. No late homework assignment (zero mark for that assignment).

4. Graphical calculators are not allowed to be used in exams/quizzes.
Communication

- Instructor is happy to take your questions via email and can usually get back to you within a day

- Instructor will NOT answer any quiz- and exam- related questions outside the classroom

- Homework sets, answers, grades, supplementary materials and important announcements will be posted on UCSC Canvas

- Graded homework assignments and quiz will be returned in class
UC Santa Cruz is committed to creating an academic environment that supports its diverse student body. If you are a student with a disability who requires accommodations to achieve equal access in this course, please submit your Accommodation Authorization Letter from the Disability Resource Center (DRC) to me privately during my office hours or by appointment, preferably within the first two weeks of the quarter. At this time, we would also like us to discuss ways we can ensure your full participation in the course. We encourage all students who may benefit from learning more about DRC services to contact DRC by phone at 831-459-2089 or by email at drc@ucsc.edu.
## Class Schedule

<table>
<thead>
<tr>
<th>Month/dates</th>
<th>Monday</th>
<th>Wednesday</th>
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<tbody>
<tr>
<td>June</td>
<td>26 (chapter 1 &amp; 2)</td>
<td>28 (chapter 3 &amp; 4) + Quiz 1</td>
</tr>
<tr>
<td>July</td>
<td>3 (chapter 4 &amp; 5) + HW1</td>
<td>5 (chapter 5 &amp; 6) + Quiz 2</td>
</tr>
<tr>
<td>July</td>
<td>10 (Midterm + chapter 7) + HW2</td>
<td>12 (chapter 7 &amp; 8) + Quiz 3</td>
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<tr>
<td>July</td>
<td>17 (chapter 9) + HW3</td>
<td>19 (chapter 10 &amp; 11) + Quiz 4</td>
</tr>
<tr>
<td>July</td>
<td>24 (chapter 11 + review) + HW 4</td>
<td>26 (Final)</td>
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</tbody>
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- June 26 (chapter 1 & 2)
- June 28 (chapter 3 & 4) + Quiz 1
- July 3 (chapter 4 & 5) + HW1
- July 5 (chapter 5 & 6) + Quiz 2
- July 10 (Midterm + chapter 7) + HW2
- July 12 (chapter 7 & 8) + Quiz 3
- July 17 (chapter 9) + HW3
- July 19 (chapter 10 & 11) + Quiz 4
- July 24 (chapter 11 + review) + HW 4
- July 26 (Final)
Keys to Success in This Class

- U can do it! Be confident.
- Come prepared
- Start earlier
- Cooperation
Questions?