Additional useful books (not required):

Original papers will be posted on blackboard.

3. Protein Structure: Comprehending modern methods for analyzing macromolecular biological macromolecules.

Objectives: 1. To develop an understanding of the physical properties of protein structure.
2. To comprehend modern methods for analyzing macromolecular biological macromolecules.

Text:

Grading:

Exams 1-2 (20% each), Final Exam (30%), Presentation (20%).

Office hours: MWF 10:00 am - 1:00 pm in Olsen Hall 103

Class hours:

Tuesdays and Thursdays, 1:00 pm - 1:50 pm

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Office: SCM 253

Instructor: Dr. Marlin Marigliani
Macromolecular Structure and Dynamics

CHEM 3130-1: Chemical Systems III
<table>
<thead>
<tr>
<th>Chapter</th>
<th>Topics Covered</th>
<th>Dates</th>
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<tbody>
<tr>
<td>1</td>
<td>Macromolecules</td>
<td>03/30/09</td>
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<tr>
<td>2</td>
<td>Conformation and Behavior of Biological Proteins</td>
<td>03/25/09</td>
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<td>3</td>
<td>Molecular Interactions &amp; Conformational Transitions</td>
<td>03/20/09</td>
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<td>Probes</td>
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<td>5</td>
<td>Techniques for the Study of Biological Structure and Function</td>
<td>03/10/09</td>
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**Exam 3: Comprehensive**

- **9:00 am - 11:50 am**
  - 06/01/09
  - 06/29/09
  - 06/19/09
  - 06/05/09

**Exam 2: 04/15/09 - 05/04/09**

- **10:00 am - 12:50 pm**
  - Electron Paramagnetic Resonance Spectroscopy
  - Nuclear Magnetic Resonance Spectroscopy
  - Fluorescence Spectroscopy

**Exam 1: 03/23/09 - 04/13/09**

- **10:00 am - 12:50 pm**
  - CD Spectroscopy
  - Absorption Spectroscopy
  - Spectroscopy/Electromagnetic Radiation
  - Separation and Characterization of Macromolecules

**Note:** Memorial Day is on **06/25/09** and **07/02/09**.