

**Chem 447, "Organic Structural Analysis Laboratory", Spring 2003****Lecture: Tuesdays at 5 PM in OC 209****Tentative Lecture, Reading and Homework Schedule**

| <b>Date</b> | <b>Topic</b>  | <b>Reading Assignment</b>   | <b>Homework</b>            |
|-------------|---|---|----------------------------|
| January 21  | Overview<br>Lab Safety & Practices<br>Physical Characterization,<br>Separation and Purification<br>Techniques | Handout<br>PLK&E Introduction and Part 5<br><br>PLK&E Parts 1 & 8 |                            |
|             | Chemical Tests<br>Introduction to Spectroscopy  | PLK&E Part 5, Appendix 3; PLK Chapter 2<br>PLK Chapters 3-6       | Take-Home<br>Exam 1        |
| January 28  | Solving problems of compound<br>identification  | Same as above plus PLK&E Appendix 6,<br>PLK Chapters 7-8          | Take-Home<br>Exam 2        |
| February 11 | Solving problems of compound<br>identification  |   |                            |
| February 18 | Solving problems of compound<br>identification  |   |                            |
| February 25 | NMR Spectroscopy  | PLK Chapter 3 continued   |                            |
| March 4     | NMR Spectroscopy  | PLK Chapter 4 continued   | PLK Ch. 3 #14-16,<br>18-20 |
| March 11    | NMR Spectroscopy  | PLK Chapter 5 continued   | PLK Ch. 4 #3-6             |
| March 25    | Midterm Exam  |   |                            |
| April 1     | NMR Spectroscopy  | PLK Chapter 6 continued   | PLK Ch. 5 #13-15           |
| April 8     | UV/Vis Spectroscopy   | PLK Chapter 7 continued   | PLK Ch. 6 #13-16           |
| April 15    | Mass Spectrometry   | PLK Chapter 8 continued   | PLK Ch. 8 #10              |
| April 22    | NMR Spectroscopy<br>– Advanced Techniques   | PLK Chapter 10  | PLK Ch. 9 # 19-23          |
| April 29    | Review  |   |                            |
| May 6       | Final Exam  |   |                            |