

| <i>Date</i> | <i>Lecture Topic</i>   | <i>Text Sections</i>    |
|-------------|--|-------------------------|
| Jan 18      | Electrophilic Aromatic Substitution  | 18.1 – 18.4             |
| Jan 20      | Friedel Crafts Alkylation / Acylation – Electron Donating & Withdrawing Groups | 18.5 – 18.8             |
|             | <b>*No Recitation or Quiz this week*</b>                                       |                         |
| Jan 23      | Directing Groups   | 18.10 – 18.12           |
| Jan 25      | Nucleophilic Aromatic Substitution   | 18.13                   |
| Jan 27      | Alcohols: Naming, Preparation and Reactivity                                   | 12.1, 12.3, 12.9 & 13.5 |
|             | <b>Recitation and Quiz #1</b>  |                         |
| Jan 30      | Oxidation State & Oxidation of Alcohols  | 12.10                   |
| Feb 1       | Oxidation Reagents & Mechanism   | 12.10                   |
| Feb 3       | Aldehydes & Ketones – Oxygen Nucleophiles                                      | 19.4 – 19.5             |
|             | <b>Recitation and Quiz #2</b>  |                         |
| Feb 6       | Nitrogen Nucleophiles  | 19.6 – 19.7             |
| Feb 8       | Hydrolysis & Hydrogen Nucleophiles   | 19.9 & 12.4             |
| Feb 10      | Carbon Nucleophiles & Grignards  | 19.10 & 12.6            |
|             | <b>Recitation and Quiz #3</b>  |                         |
| Feb 13      | Wittig Reaction  | 19.10                   |
| Feb 15      | Catch up / Exam Review   |                         |
| Feb 17      | <b>Exam 1</b>  |                         |
| Feb 20      | Carboxylic Acids & Their Derivatives - Mechanisms                              | 20.7                    |
| Feb 22      | Carboxylic Acids   | 20.4 – 20.5             |
| Feb 24      | Acid Chlorides   | 20.8                    |
|             | <b>Recitation and Quiz #4</b>  |                         |
| Feb 27      | Anhydrides & Esters  | 20.9 – 20.11            |
| Mar 1       | Amides & Weinreb Amides  | 20.12                   |
| Mar 3       | Catchup/Review/Extra Practice  |                         |
|             | <b>*No Recitation or Quiz this week*</b>                                       |                         |
| Mar 6-10    | <b>SPRING BREAK</b>  |                         |
| Mar 13      | Acid / Base Review   | 3.1 – 3.4               |
| Mar 15      | Ch. 21: Enols and Enolates – Mechanisms and $\alpha$ -Halogenation             | 21.1 – 21.2             |
| Mar 17      | Aldol Reaction   | 21.3                    |
|             | <b>Recitation and Quiz #5</b>  |                         |
| Mar 20      | Crossed Aldol & Aldol Condensation   | 21.3                    |
| Mar 22      | Claisen & Dieckmann Condensation   | 21.4                    |
| Mar 24      | Alkylations with Enolates  | 21.5                    |
|             | <b>Recitation and Quiz #6</b>  |                         |
| Mar 27      | Malonic Ester Synthesis  | 21.5                    |
| Mar 29      | Conjugate Addition   | 21.6                    |
| Mar 31      | <b>Exam 2</b>  |                         |
| Apr 3       | Diels-Alder Reaction: History & Mechanism                                      | 16.7                    |
| Apr 5       | Diels-Alder: Regiochemistry  | 16.7                    |
| Apr 7       | Diels-Alder: Stereochemistry   | 16.7                    |
|             | <b>Recitation and Quiz #7</b>  |                         |

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|--|---|--------------------|
| Apr 10                                   | <i>Ch. 24: Carbohydrates – Stereochem &amp; Classifications</i> | 24.1 – 24.3 & 24.5 |
| Apr 12                                   | Cyclic Carbohydrates  | 24.6               |
| Apr 14                                   | Reactivity of Monosaccharides                                   | 24.6               |
|  | <b>Recitation and Quiz #8</b>                                   |                    |
| Apr 17                                   | <i>Ch. 25: Amino Acids &amp; Proteins – General</i>             | 25.2, 25.4 & 25.6  |
| Apr 19                                   | Peptide Synthesis – Protecting Groups                           | 25.6               |
| Apr 21                                   | Protecting Groups cont. & Enzyme Catalysis Intro                | 25.6               |
|  | <b>Recitation and Quiz #9</b>                                   |                    |
| Apr 24                                   | Enzyme Catalysis  | 25.8               |
| Apr 26                                   | Course Evaluations and Review                                   |                    |
| Apr 28                                   | <b>Exam 3</b>   |                    |
| May 4 <sup>th</sup><br>9:30am<br>Park 25 | <b>Final Exam</b>   |                    |