**Ankara University**

**Library and Documentation Department**

**OPEN COURSEWARE**

### Study Plan (Working Schedule)

| **Weeks** | **Weekly Topics** |
| --- | --- |
| 1.Week | Introduction to Organic Chemistry |
| * Atomic Theory |
| * Electronegativity |
| * Bonding |
| * Classification of Organic Compounds |
| 2.Week | Molecular Geometry and Naming of Organic Compunds |
| * Representation of Structures in Organic Chemistry |
| * Nomenclature |
| * Conformations |
| * Stereoisomerism |
| 3.Week | Alkanes |
| * Physical Properties of Alkanes |
| * Preparation of Alkanes |
| * Reactions of Alkanes |
| * Reactions of Cycloalkanes |
| 4.Week | Alkenes |
| * Nomenclature |
| * Physical Properties of Alkenes |
| * Preparation of Alkenes |
| * Reactions of Alkenes |
| 5.Week | Alkynes |
| * Nomenclature |
| * Physical Properties of Alkynes |
| * Preparation of Alkanes |
| * Reactions of Alkynes |
| * Aromatic Hydrocarbons |
| * Nomenclature of Benzene |
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| 6.Week | Alcohols |
| * Nomenclature |
| * Physical Properties of Alcohols |
| * Primary, Secondary and Tertiary Alcohols |
| * Preparation of Alcohols |
| * Reactions of Alcohols |
| **Ethers** |
| * Nomenclature |
| * Physical Properties of Ethers |
| * Preparation of Ethers |
| 7.Week | Aldehydes and Ketones |
| * Nomenclature of Aldehydes and Ketones |
| * Preparation of Aldehydes and Ketones |
| * Keto-enol tautemerism of aldehydes and ketones |
| 8.Week | Solutions and Colloids |
| * Types of Solutions |
| * Osmotic Pressure |
| * Dialysis |
| 9.Week | **Atomic Theory and Radioactive Decay** |
| * Electromagnetic Radiation |
| * Isotopes |
| * Radiocative Decay |
| 10.Week | Minerals and Their Significance |
| * Principal Elements |
| * Trace Elements |
| 11.Week | Midterm Exam |
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| 12.Week | Carboxylic Anhydrides, Esters and Amides |
| * Carboxyl Derivatives |
| * Anhydrides |
| * Esters |
| * Amides |
| * Preparation of Amides |
| * Hydrolysis of Amides |
| * Reaction with Alcohols |
| * Reaction with Amines |