**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
 |
|  |
| 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 |
|  |
|  |
| 12.Week | Carboxylic Anhydrides, Esters and Amides |
| * Carboxyl Derivatives
 |
| * Anhydrides
 |
| * Esters
 |
| * Amides
 |
| * Preparation of Amides
 |
| * Hydrolysis of Amides
 |
| * Reaction with Alcohols
 |
| * Reaction with Amines
 |