

Ankara Üniversitesi
Kütüphane ve Dokümantasyon Daire Başkanlığı
Açık Ders Malzemeleri

Schedule
Weekly Topics (Content)

Week	Topics
1. week	Functional Groups: Introduction to biochemistry, chemical bonds, disulfate bridge, hydrophilic and hydrophobic interactions functional groups etc
2. week	Introduction to amino acids, peptide and proteins; formulas of amino acid, pKa values, isoelectric points and its importance etc
3. week	Secondary structures of proteins; the structure and feature of peptide bond, Ramachandran graphs, α -helix β -turn and β -twisted structure
4. week	Tertiary structure of proteins; fibrous proteins, α -keratine, silk fibrion and collagen
5. week	Functions of proteins; some examples of globular proteins such as myoglobin and hemoglobine
6. week	Carbohydrate and glycobiology; monosaccharides, structures of aldoses and ketoses, enantiomers, diastereomers, epimers, hemiasetal and hemiketal
7. week	Polysaccharides, glucoconjugates, extracellular matrix heteropolysaccharides and their biochemical structures
8. week	MIDTERM
9. week	Glycolysis: carbohydrate oxidation, all step of biochemical reactions and the functions of related enzymes
10. week	Glycolysis (Continue)
11. week	Fates of pyruvate, gluconeogenesis
12. week	Pentose phosphate pathway of gulcose oxidation (oxidative and nonoxidative phase)
13. week	Principles of metabolic regulations: glucose and glycogen
14. week	Principles of metabolic regulations: glucose and glycogen (continue)