

“Principles of Biochemistry”

Module	Topics	M&M Textbook Chapters
1	Foundations in Biochemistry	Chapter 1
	Bioenergetics, Water, Membranes	Chapter 2
2	Nucleotides and Nucleic Acids	Chapter 3
	Amino Acids and Protein Structure	Chapter 4
3	Protein Purification and Characterization	Chapter 5
	Protein Function: Hemoglobin and Transporters	Chapter 6
EXAM 1 Topics covered in Modules 1-3		
4	Enzyme Mechanisms and Kinetics	Chapter 7
	Structure and Function of Signaling Proteins	Chapter 8
5	Carbohydrates: Polysaccharides and Glycoproteins	Chapter 13
	Carbohydrates: PPP and Glycogen Metabolism	Chapter 14
6	Lipids: Fatty Acids and Triacylglycerols	Chapter 15
	Lipids: Fatty Acid Oxidation and Synthesis	Chapter 16
EXAM 2 Topics covered in Modules 4-6		
7	Metabolic Flux and Simple Sugars	Chapter 9
	Glycolytic Pathway: Reactions and Regulation	Chapter 9
8	Redox Reactions in Biochemistry	Chapter 10
	Citrate Cycle: Reactions and Regulation	Chapter 10
9	Oxidative Phosphorylation: Electron Transport System	Chapter 11
	Oxidative Phosphorylation: ATP Synthase Complex	Chapter 11
EXAM 3 Topics covered in Modules 7-9		
FINAL EXAM: Comprehensive (Modules 1-9)		