

Chap.	TOPIC	Page # Lehninger 7 th ed	Page # Lehninger 6 th ed	Page # Lehninger 5 th ed
3 & 4	Revision: Protein Structure Denaturation and Folding	Not curriculum, useful reading in preparation for the course		
5	Protein Function Hemoglobin and Oxygen Binding Antibodies and Molecular Engines	157–183	157–184	153-179
6	Enzyme Reactions – Examples Regulatory Enzymes, Covalent Modifications	213-236	214-236	205-228
7	Carbohydrates, polysaccharides, glycoconjugates & the sugar code	252-272	254-276	244-265
10	Lipids; storage, in membranes, as signals cofactors and pigments	361-381	357-377	343-367
11	Biological Membranes & Transport	387-430	385-427	372-413
12	Biosignaling; General, G protein, GPCRs, Receptor Tyrosine kinases. Sensory Transduction Nuclear receptors	437-466, 473-474	433-458, 471-472, 477-484	419-444, 456-457, 461-468
13	Bioenergetics and Metabolism	491-501	501-511	485-495
14	Overview Glycolysis; Glycolysis, Gluconeogenesis, Pentose Phosphate Pathway	533-570	543-580	527-563
15	Metabolic Regulation Glucose and Glycogen	575-614	587-627	569-609
16	Citric Acid Cycle	619-642	633-656	615-638
17	Fatty Acids: Uptake, Storage, Transport and Catabolism	649-670	667-688	647-667
18	Amino Acid Oxidation, Urea,	675-690	695-710	673-687
19	Oxidative Phosphorylation	711-750	731-768	707-738

24	Genes and Chromosomes	957-982	979-1001	947-970
25	DNA Metabolism; DNA Replication & Repair	987-1030	1009-1052	975-1016
26	RNA Metabolism; Transcription & Processing	1035-1060	1057-1082	1021-1045
27	Protein Synthesis	1077-1113	1103-1139	1065-1099

Textbook:

Nelson & Cox: Lehninger, Principles of Biochemistry, 7th ed., W.H. Freeman and Company, New York. 2017.

6th ed or 5th ed may also be used!

Syllabus:

All the lectures define the syllabus. Altogether these cover about 400 pages from the textbook. Text in boxes covered by the textbook is not included in the syllabus.