CHEM 3811: Biochemistry – Proteins

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Week 1
1.1-1.3 Chemical/Physical foundations
2.1 Weak interactions
2.2 Weak acids and Weak bases

Week 2
2.4 Water

Week 3
3.1 Amino acids
3.2 Peptides and Proteins
3.3 Working with proteins

Week 4
3.4 Primary Structure/Sequence analysis

Week 5
4.1 Overview of protein structure
4.2 Secondary Structure
4.3 Tertiary Structure

Week 6
4.3 Quaternary Structure
4.4 Protein Denaturation/Folding

Week 7
5.1 Protein Ligand interaction

Week 8
5.2 Protein Ligand interaction
5.3 Actin, Myosin, and Molecular motors

Week 9
6.1 Enzymes/Intro
6.2 How enzymes work
6.3 Enzyme Kinetics

Week 10
6.4 Catalytic Strategies
6.5 Enzyme regulation

Calculator - A calculator with the following capabilities is required: square roots, logarithms, and exponential (scientific) notation operations.

Readings - You have been provided a tentative lecture schedule. You should read the material and do any associated online components prior to class.
Exams - There will be three (3) exams given during the quarter. The final exam is the 3rd exam it is not cumulative. Dates for these exams are posted below.

Grades - Final grades will be determined according to your performance on the exams, online homework, and any other assignments. Your final grade will be determined on a maximum of 420 points with the following components:

3 in-class assignments: The total value of these exercises is 120 points.
Hour Exams: Three hour exams, each worth 100 points

Exam I: Friday, October 7, 2022
Exam II: Friday, November 4, 2022
Exam III: Friday, November 22, 2022
Total Points = 420 points