Protein Biochemistry (BIOL4800/6800)

PREREQUISITES: BIOL1108, BIOL3200, CHEM1212 or permission of the instructor

INSTRUCTOR: Dr. Theresa Grove

Office: BC 1099

Office hours: Tuesday 2:00-4:00 p.m. or by appointment

Email:

LECTURE CONDUCT:

- Arrive on time. If lateness becomes an issue, I will start locking the door at 8:05 a.m..
- Turn off cell phones during class and lab; there is no reason you should be texting or calling anyone.
- Don't talk during lecture; if you don't understand something or didn't hear something ask.
- Unless it's an emergency (and using your cell phone does not constitute an emergency) do not get up in

are required to make-up the exam within 2 days of the missed exam, except under extreme circumstances. The professor reserves the right to not approve a missed exam as well as to require documentation of the reason why the exam is missed. Only students with a University related excuse may take an exam early.

ASSESSMENT: Exams (3 exams + final) 500 points

Lab exams (2 exams; 50 points each)

Homework and other Assignments

(Graduate Student Paper)

100 points

~50 points

(50 points)

Total Points 650 (Graduate Students = 700)

GRADE SCALE: For all students, grades will be based on the above assessments. The grading scale I will use is:

A 90-100% B 80-89 C 70-

TENTATIVE LECTURE SCHEDULE

January

- 14 Introduction and Overview of course
- 16 Amino Acids
- 21 Amino Acid Structure
- 23 Noncovalent Interactions
- Noncovalent Interactions (cont'd)
- 30 Structural Organization of Proteins

February

- 4 Structural Organization of Proteins (cont'd)
- 6 Catch-Up and Review
- 11 **Exam 1**
- 13 Biosynthesis of Proteins Biosynthesis of Proteins
- 18 Biosynthesis of Proteins Biosynthesis of Proteins (cont'd)
- 20 Posttranslational Modifications Review
- 25 Protein Folding
- 27 Membranes

March

- 4 Intracellular Sorting of Proteins
- 6 Intracellular Sorting of Proteins (cont'd)
- 11 **Exam 2**
- 13 Chapter 8: Protein Turnover
- 18 No Class spring break
- 20 No Class spring break
- 25 Enzymes
- 27 Enzymes (cont'd)

April

- 1 Exam 3
- 3 Other classes of proteins
- 8 Other classes of proteins (cont'd)
- 10 Control of Protein function
- 15 Control of Protein Function (cont'd)
- 17 Methods to Study Proteins
- 22 Methods to Study Proteins (cont'd)
- 24 Protein Diseases due to misfolding, miscleavage and missequence
- 29 Peptides and Proteins as Drugs

May

1 Catch-Up and Review