CHEM 431 Macromolecular Structure and Metabolism
11:00 am - 12:15 pm, Chapman 211

Textbook: Biochemistry, Voet & Voet, 3rd/4th Ed.

First third of semester. Eric Brustad, instructor

Professor Brustad Office Hours: GSB 3260 Wed. 10AM - 11AM, Fri. 3PM - 4PM

August 08-20 Protein Structure Chpt. 4, 6.1-6.5, 7.1
08-22 Protein Structure Chpt. 7.1, 7.5, 8.
08-27 Protein Stability Chpt. 8
08-29 Protein Folding Chpt. 9
* Friday 08-30 Problem set 1 due by 5 pm, Dr. Brustad’s office

September 09-03 Enzymes I Chpt. 13,14
09-05 Enzymes II Chpt. 14,15
* Friday 09-06 Problem set 2 due by 5 pm, Dr. Brustad’s office
09-10 Enzymes III Chpt. 14,15
09-12 Nucleic Acids Chpt. 5-1, 29
* Friday 09-13 Problem set 3 due by 5 pm, Dr. Brustad’s office
09-17 *FIRST EXAM (15% of grade) - covers up to Enzymes III
09-19 Nucleic Acids/Bioinformatics Chpt. 7, 29

* Problem sets for Dr. Brustad’s portion of class will be posted on Sakai on Friday of each week. They must be turned into the box outside Dr. Brustad’s Office by 5 pm the following Friday. These due dates are marked on the calendar above/below. There will be 4 problem sets total.

Last two-thirds of semester. Dorothy A. Erie, instructor

Professor Erie Office Hours: GSB 4360 Tuesdays 12:30 - 1:30 am

September 9-24 DNA Replication Chpt. 30
9-26 DNA Replication Chpt. 30
* Friday 9-27 Problem set 4 due by 5 pm Dr. Brustad’s office

October 10-1 DNA Repair Chpt. 30
10-3 DNA Repair/Recombination Chpt. 30
10-8 Transcription Chpt. 31
10-10 Transcription Chpt. 31
10-15 Transcription Chpt. 31
10-17 NO CLASS-Fall Break
10-22 Transcription Chpt. 31
10-24 *SECOND EXAM -- in class
10-29 mRNA Capping,Adenylation Chpt. 31.4
November 10-31  RNA Splicing  Chpt. 31.4
11-5     RNA Splicing
11-7     Genetic Code, tRNA Structure  Chpt. 31.4
11-12    Genetic Code, tRNA Structure
11-14    Ribosome Structure  Chpt. 31.1-32.2
11-19    Ribosome Action
11-21    THIRD EXAM
11-26    Protein Biosynthesis  Chpt. 32.3-32.4
11-28    No Class: Thanksgiving

December 12-3  Protein Biosynthesis

[FINAL EXAM: Thursday 12-12 12:00 PM, Chapman 211]

Grading
Amino acid Quiz  Tuesday, August 27, in class  5%
Problem Sets  See Calendar  5%
First Exam:  Tuesday, September 19  15%
Second Exam:  Thursday, October 24  25%
Third Exam:  Tuesday, November 21  20%
Final:  Thursday, December 12, 12:00-3:00 PM  30% = 20% DE & 10% EB

There are no make-up or early examinations.

Letter grades are assigned as described below.
undergraduates
A  >[average (av) + 1.75 x standard deviation (sd)]
A-  >[av + (1.50 x sd)]
B+  >[av + (1.25 x sd)]
B  >[av + (0.75 x sd)]
B-  >[av + (0.50 x sd)]
C+  >[av + (0.25 x sd)]
C  >[av - (0.50 x sd)]
D  >[av - (1.50 x sd)]
F  <[av - (1.50 x sd)]

graduate students
H  >[av + (1.75 x sd)]
P+  >[av + (1.50 x sd)]
P  >[av - (0.50 x sd)]
L  >[av - (1.50 x sd)]
F  <[av - (1.50 x sd)]

Policy adopted by the faculty of the Department of Chemistry on September 9, 1977:

"Since all graded work (including homework to be collected, quizzes,
papers, mid-term examinations, final examinations, research proposals, laboratory results and reports, etc.) may be used in the determination of academic progress, no collaboration on this work is permitted unless the instructor explicitly indicates that some specific degree of collaboration is allowed. This statement is not intended to discourage students from studying together or working together on assignments which are not to be collected."