

Chemistry 352
Biochemistry II
Fall 2011
MWF 12:00-12:50, NSC 300
Dr. Forconi
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Office Hours
Monday, 2:00-3:00
Wednesday, 1:00-2:00
or by appointment

Textbook: Garrett and Grisham "Biochemistry", Fourth Edition

Topics and tentative schedule:

08/24-09/14	Energetics and Intro to Metabolism, Chapter 17 (also 3&20) Glycolysis, Chapter 18 Citric Acid Cycle, Chapter 19
09/19-10/05	Gluconeogenesis, Glycogen metabolism, Chapter 22 Oxidative Phosphorylation, Chapter 20
10/10-10/28	Photosynthesis, Chapter 21 Lipid Catabolism, Chapter 23
11/02-12/02	Lipid Synthesis and Cholesterol, Chapter 24 Nitrogen/Amino Acid Metabolism/Urea Cycle, Chapter 25 Nucleotide Biochemistry, Chapter 26

Course Goals:

- To learn the chemical logic inherent in metabolism.
- To learn the types of organic reactions that facilitate the breakdown and building of biological molecules
- To learn how errors in metabolism lead to human disease
- To understand how metabolic pathways are regulated

Grading:

Three Exams worth 15% each: 09/16; 10/07; 10/31

Tentative Dates subject to change

Three homework assignments are worth 30% (10% each)

Final Exam worth 25% on Wednesday, December 7 12-3pm

Grades will be assigned according to the following MINIMUM scale

Letter	%	GP
A	93-100	4.0
A-	90-92	3.7
B+	87-89	3.3
B	83-86	3.0
B-	80-82	2.7
C+	77-79	2.3
C	73-76	2.0
C-	70-72	1.7
D+	67-69	1.3
D	63-66	1.0
D-	60-62	0.7
F	Below 60	0.0

Final Exam

Wednesday, December 7 12-3pm

This is a cumulative final for material in 352 only.

Homework:

There will be several homework assignments. The purpose of the homework is to give you practice doing problems and mechanisms relevant to the exams AND to expand the material covered in the course by covering relevant topics in the primary literature. The assignments will include end-of-chapter questions, literature assignments, and computer assignments. *Only a portion of my choosing of each assignment you turn in will be graded.* Late homework is penalized. The maximum grade you can receive on homework that is handed in late is the lowest score of the assignments that were passed in on time. You are allowed to *discuss* the homework with one another, but you are to write out the answers/calculations in your own words. Identically worded homework assignments are an indication of cheating (see below).

Homework is to be typed, with the exception of mechanisms or calculations, which can be neatly printed. Homework assignments are to be stapled and the problems must be in numerical order. At this point in your chemistry careers, I expect you to be familiar with the superscript and subscript commands in your word processing program (for example, type H₂O, not H2O). I reserve the right to penalize your homework score if these guidelines are not met and if your work is not legible.

Attendance:

Attendance at lectures is usually proportional to your grade. Some of the material covered in this course cannot be found in your book. If you choose to miss lecture, find another student in the class who will share their notes with you. You are responsible for obtaining the material and assignments you missed. I will not give you a private makeup lecture in my office. Attendance at exams is mandatory. There are **NO** makeup exams. Exam dates are announced in advance. If you have an excused absence from the Dean of Undergraduate Studies for missing an exam for health reasons or for a family emergency, then you will be graded on your remaining scores. Missing more than one exam will be interpreted as excessive absence and you will be dropped from the class roster.

Academic Dishonesty:

Cheating will not be tolerated in this course. The following description of cheating is from the student handbook:

“the actual giving or receiving of unauthorized, dishonest assistance that might give one student an unfair advantage over another in the performance of any assigned, graded academic work, inside or outside of the classroom, and by any means whatsoever, including but not limited to fraud, duress, deception, theft, talking, making signs, gestures, copying, electronic messaging, photography, unauthorized reuse of previously graded work, and unauthorized use or possession of study aids, memoranda, books, data, or other information. The term cheating includes engaging in any behavior specifically prohibited by a faculty member in the course syllabus or class discussion.”

For this course, entering formulas into a calculator to be used during an exam will be considered as an act of premeditated cheating. Homework assignments that appear to be prepared as a joint effort will receive a joint grade (i.e. the points earned will be divided by two). The physical act of preparing your homework for submission should be done on your own.

Disabilities: If there is a student in this class who has a documented disability and has been approved to receive accommodations through SNAP Services, please feel free to come and discuss this with me during my office hours.