CHEM 352-01 – Biochemistry II – Spring 2020
MWF 12:00 - 12:50 PM, SSMB 127

Instructor:
Dr. Fox
foxjl@cofc.edu, SSMB 304, 843-953-8094
Office Hours: Mon., Fri. 1-2 PM and at other times by appointment

Course Description:
This course builds on the chemistry of biological molecules introduced in the pre-requisite Biochemistry I (CHEM 351). In Biochemistry II, you will learn how these cellular components are assimilated, transformed, synthesized, and degraded through the processes of metabolism.

Student Learning Outcomes:
- Illustrate the chemical logic inherent in metabolism
- Compare and contrast the types of organic reactions that facilitate the breakdown and building of biological molecules
- Evaluate how errors in metabolism lead to human disease
- Recognize how metabolic pathways are regulated

Required Materials:
Principles of Biochemistry, 5th Ed. by Moran, Horton, Scrimgeour, and Perry
Scientific calculator

Chapters and Topics:
7 Cofactors
10 Intro to Metabolism
11 Glycolysis
12 Gluconeogenesis, Pentose Phosphate Pathway, and Glycogen Metabolism
13 Citric Acid Cycle
14 Electron Transport and ATP Synthesis
15 Photosynthesis
16 Lipid Metabolism
17 Amino Acid Metabolism
18 Nucleotide Metabolism

Learning Assessment:
Exams: There will be four exams during the term. All exams are cumulative. Exam dates (which may be subject to change): Fri. Feb. 7, Fri. Mar. 6, Mon. Apr. 6, and Wed. Apr. 22

Final Exam: Wednesday, April 29 at 4 PM

Homework: Assignments are due at the beginning of class on the announced due date. No late homework assignments will be accepted.
Grading Policy and Scale:

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Attendance Policy:

Attendance in class is highly beneficial to your grade. If you miss class, it is your responsibility to obtain a copy of the notes from a classmate. Attendance at the four regular exams and the final exam is mandatory. There are no make-up exams.

If you foresee that you will miss an exam for a school-sponsored event or for a religious observance, contact me ASAP to arrange to take the exam early. If you miss an exam for unforeseeable reasons (e.g., illness or a family emergency), you must both talk to me and arrange for an absence memo; the exam portion of your grade will then be an average of your remaining exam scores. Missing more than one exam constitutes excessive absence and will result in a grade of WA, which is numerically equivalent to an F.

Withdrawal Deadline: March 13

Honor Code and Academic Dishonesty:

It is your responsibility to conform to the College of Charleston Honor Code and Code of Conduct. Dishonesty and other violations of the Codes will not be tolerated.

In this course, collaborative studying is encouraged, but all exams are to be completed individually, without the use of notes, unauthorized electronic devices, or the work of other people. You may not use your cell phone during an exam; it should be put away throughout the exam. You may not store any information in your calculator to be used during an exam.

You may discuss homework assignments with other classmates, but you must answer each question in your own words and by performing your own work. You may not copy from another student's homework or from internet resources.

SNAP (Students Needing Access Parity):

If you have a letter from the SNAP office and need academic adjustments or accommodations because of a disability, please contact me in a timely manner. If you need accommodations and do not have a SNAP letter, please contact the SNAP office (http://disabilityservices.cofc.edu/).