Biochemistry II

Spring 2016
M,W,F 8-8:50 am, Chem 150

Instructor: Steven M. Berry Office: SSB 152C
smberry@d.umn.edu
Office Hours: MW 9-10 AM, T 8-9 AM

Text: *Required*: Berg, Tymoczko, Gatto, and Stryer, Biochemistry, 8th Ed., W.H. Freeman and Company, New York, 2015.
Required: Sapling Learning Access: https://www.saplinglearning.com/ibiscms/login/
Publisherôs Online Media Resources: www.macmillanhighered.com/launchpad/berg8e

Moodle Site: http://www.d.umn.edu/~smberry/Teaching/Chem4352/ *-or-*
https://ay15.moodle.umn.edu/course/view.php?id=6350

Course: This is the second semester of junior/senior level course in Biochemistry with a prerequisite of Biochemistry I, Chem 4351. The major topics focus on biochemical metabolism including the breakdown and synthesis of carbohydrates, fatty acids, sterols, amino acids, and nucleic acids. Common metabolic pathways of glycogen metabolism, glycolysis, gluconeogenesis, the citric acid cycle, photosynthesis, oxidative phosphorylation, fatty acid oxidation and synthesis, amino acid synthesis and breakdown, nucleotide base metabolism, and their relationships will be covered. The interconnected nature of these pathways and their cellular regulation will be discussed. We aim to cover topics in chapters 15-27 in the required text.

Textbook Usage: Assigned readings and assigned homework problems will appear on the course website on a weekly basis. These include textbook problems as well as problems from the online learning resource, Sapling Learning. It is strongly suggested that you read the assigned portions of the textbook before each lecture and complete any required Sapling learning assignments. In-depth reading of the chapters and additional homework assignments should be performed after each lecture.

Lecture format: Lecture will consist of powerpoint slides with chalkboard presentations. The instructor will post incomplete powerpoint slides on the course website that students are expected to print and bring to lecture to assist with notetaking. If you must miss a lecture, please get notes from a peer and consult the course website for the corresponding sections in the textbook to read.

Grading: The course grade will be largely based on the percentage earned out of exams. No exam make-ups are allowed, except with a signed note from the proper authority. Additional graded homeworks with contribute to the total course grade. The instructor reserves the right to assign quizzes, homeworks, or extra credit points at any time which may also count towards the final grade.

Tentative Exam Schedule:
Exam 1: Monday, February 15
Exam 2: Monday, March 21
Exam 3: Friday, April 15
Final Exam: Thursday, May 5, 2016, 4:00-5:55 pm, Chem 150

Honor Code: Each student is bound by the following specific provisions as part of the Code: Academic misconduct is any unauthorized act which may give a student an unfair advantage over other students, including but not limited to: falsification, plagiarism, misuse of test materials, receiving unauthorized assistance and giving unauthorized assistance. Each student will be asked to sign a cover sheet on tests that reaffirms the honor code as it applies to this course.

Access for Students with Disabilities: It is the policy and practice of UMD to create inclusive learning environments for all students, including students with disabilities. If there are aspects of this course that result in barriers to your inclusion or

your ability to meet course requirements, please notify the instructor as soon as possible. You are also encouraged to contact the Office of Disability Resources to discuss and arrange reasonable accommodations. Please call 218-726-6130 or visit the DR website at www.d.umn.edu/access for more information.