The University of Georgia-Griffin Campus
BIOL (BCMB) 3100; 4 credit hours
INTRODUCTORY BIOCHEMISTRY and MOLECULAR BIOLOGY
Spring 2014
12:10-1:55 PM, Mon. & Wed. Room 215 – Student Learning Center

Instructor: Dr. William Anong
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Office Hours: MW 11:00 AM – 12:00 PM or by appointment

Course Overview: The objective of this course is to introduce you to the chemistry of life and provide a basis for further studies in biological sciences. The course material includes the structure and function of biological molecules, enzymology and metabolism and bioenergetics. The course syllabus is a general plan for the course; deviations announced to the class by the instructor may be necessary.

Prerequisites: (CHEM 2211 or CHEM 2311H or CHEM 2411) and (CHEM 2211L or CHEM 2311L or CHEM 2411L).

Textbook:
Principles of Biochemistry, Fifth Edition, Horton, H.R., Moran, L.A., Scrimgeour, K.G., Perry, M.D. (2012) Pearson Prentice Hall, Pearson Education, Inc., Upper Saddle River, NJ ISBN 0-13-978-0-321-70733-8
*There is also a textbook website: http://wps.prenhall.com/esm_horton_biochemistry_4/

Attendance:
Attendance is mandatory. Exam questions will be taken from information covered during lecture as well as the assigned reading material. It is very important that you attend lecture and take good notes. Each lecture will be easier for you to understand if the section we are discussing is read prior to class. You will be responsible for all announcements made in class. Arrive on time and avoid leaving early. **Please turn off all cell phones and other electronic devices.**

e-LearningCommons (eLC):
We will be using eLC throughout the semester. The syllabus, lecture notes, and course announcements will be posted on the eLC course page. To get to the course page, go to http://www.elc.uga.edu. Log on with your UGA MyID.

Grading:
Grades will be based on four exams, a project and on the top 3 out of 4 assignments/quizzes that will be periodically given during the semester. Each exam will primarily cover the material discussed since the prior exam, although you may be tested on basic concepts on any exam. Make-up exams will come from an exam bank and may not reflect the material emphasized in lecture. A WRITTEN EXCUSE is REQUIRED for all make-up exams. In the case of severe illness or family emergency, you must inform the instructor prior to the exam. In addition, presentation of a signed letter from your doctor, etc., will be required. An unexcused absence will result in a grade of zero. An absence will be counted as unexcused if the instructor is not notified before the exam is given. If you believe there has been grading error on your exam, questions about grading must be submitted in writing within one week of the return of the exam.

Grades:

3 Exams (100 pts each)	300 pts
Comprehensive Final Exam (150 pts)	150 pts
Project	100 pts
Assignment/Quizzes (15 pts)	45 pts
Total	**595 pts**

Grading Scale:

A	93 to 100%
A-	90 to 92%
B+	86 to 89%
B	83 to 85%
B-	80 to 82%
C+	76 to 79%
C	70 to 75%
C-	65 to 69%
D	50 to 64%
F	below 50%

This grading scale gives you a general idea to help you access your status in the class.

Project: **Project will be assigned on the first week of the semester.** The purpose of this project is to help you gain experience in researching on a biochemistry topic (to be approved by the instructor) using available library/Internet resources. You will then present your project to me in a clear, organized and concise manner in the form of a written report using available computer word processing software on the first class meeting after Spring break **(March 17).** Subsequently, each student will be given about 10 minutes to present their project and response to questions from the class. Grading would reflect the depth of your research, scientific writing/formatting including references (at least five from credible recent (within the last 5 years) sources, (**not Wikipedia**), grammar, oral presentation and response to questions. Please check with me for further clarification if need be.

Academic Honesty: All academic work must meet the standards contained in "*A Culture of Honesty*." Students are responsible for informing themselves about those standards before performing any academic work. The policy can be found at www.uga.edu/honesty.

Documented Disability Statement for Griffin Campus: If you are a student with a documented disability, you must inform the instructor of this fact at the close of the first class meeting. You will be referred to the Office of Academic Affairs in Room 105 in the Flynt Building for consultation regarding evaluation, documentation of your disability, and a recommendation as to the accommodation, if any, to be provided. Students must provide instructors with an accommodation form from the Office of Academic Affairs listing reasonable accommodation(s). Instructors will sign the form and return it to the Office of Academic Affairs. Students who do not wish to receive services are still strongly encouraged to register with the Office of Academic Affairs.

Tentative Course Schedule

Meeting Date	**Chapter**
Mon, Jan. 6	1. Introduction to Biochemistry 2 Water
Wed, Jan. 8	3 Amino Acids and the Primary Structures of Protein
Mon, Jan. 13	3 Amino Acids and the Primary Structures of Protein
Wed, Jan. 15	4 Proteins: Three-Dimensional Structure and Function
Mon, Jan. 20	MLK Holiday
Wed, Jan. 22	4 Proteins: Three-Dimensional Structure and Function
Mon, Jan. 27	5 Properties of Enzymes
Wed, Jan. 29	6 Mechanisms of Enzymes
Mon, Feb. 3	**EXAM 1**
Wed, Feb. 5	7 Coenzymes and Vitamins
Mon, Feb. 10	8 Carbohydrates

Wed, Feb. 12	9 Lipids and Membranes
Mon, Feb. 17	9 Lipids and Membranes
Wed. Feb. 19	10 Introduction to Metabolism
Mon, Feb. 24	11 Glycolysis
Wed, Feb. 26	12 Gluconeogenesis and Pentose Phosphate Pathway
Mon, Mar. 3	**EXAM 2**
Wed, Mar. 5	13 The Citric Acid Cycle
Mon, Mar. 17	14 Electron Transport and Oxidative Phosphorylation
Wed, Mar. 19	14 Electron Transport and Oxidative Phosphorylation
Mon, Mar. 24	15 Photosynthesis
Wed, Mar. 26	16 Lipid Metabolism
Mon, Mar. 31	17 Amino Acid Metabolism
Wed, April. 2	18 Nucleotide Metabolism
Mon, April. 7	**EXAM 3**
Wed, April. 9	19 Nucleic Acids
Mon, April. 14	20 DNA Replication, Repair and Recombination
Wed, April. 16	20 DNA Replication, Repair and Recombination
Mon, April. 21	21 Transcription and RNA Processing
Wed, April. 23	22 Protein Synthesis
Mon, April. 28	Review Session
Fri., May 2	**COMPREHENSIVE FINAL EXAM 12 noon – 3:00 PM**