The University of Georgia-Griffin Campus

BCMB 3100 CRN 30912. 4 credit hours
INTRODUCTORY BIOCHEMISTRY and MOLECULAR BIOLOGY
Fall 2022, 12:45-2:30 PM In-Person Class, MW

Instructor: Dr. Margie M. Paz mpaz@uga.edu
128 Flynt Bldg. 770-229-3380

Office Hours: 10:45 – 11:45 AM Mon/Wed. Please e-mail me, so a meeting can be set up. To comply with the Family Educational Rights and Privacy Act (FERPA), all communication must be through a secure medium (UGAMail or eLC). Instructors are not allowed to respond to messages that refer to individual students or student progress in the course through non-UGA accounts.

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, metabolism, bioenergetics, and application of the knowledge to solve, analyze, interpret, and evaluate biochemical data. 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) and (BIOL 1107 or BIOL 2107H)

Textbook: Principles of Biochemistry, 5th edition. Moran, Horton, Scrimgeour, Perry (2012) Pearson
ISBN-10: 0321707338
ISBN-13: 978-0321707338

Attendance:
Students are expected to attend all lectures. Lecture slides will be available on the web via eLC to simplify note-taking. However, the lecture notes on eLC should not be regarded as a substitute for attending class. Students are responsible for having access to the eLC course content using a laptop computer/tablet or printing their own copies and should do so before class. Having the lecture slides with you will make note-taking easier, but additional material and examples are given in class. You should be prepared to take notes on blank sheets of paper (or slide handout or laptop) at any time. You will be responsible for all content and instructions given during the lecture and announcements made in class (including on days when you miss a class)**. Please turn off all cell phones and pagers during class.**

***e*-LearningCommons (*e*LC):**
We will be using *e*LC throughout the term. I often communicate via *e*LC, which you should check regularly. Class material including the syllabus, slides of lecture notes, and course announcements will be posted on the *e*LC course page. To get to the course page, go to https://uga.view.usg.edu
Login with your UGA MyID.

In-class Activities:
We will have in-class exercises to work on problems and review questions. The in-class activities are designed to apply the knowledge and concepts you have learned from the lecture to solve biochemical problems and analyze biochemical data. These will also help you prepare for exams.

Grading:
Grades will be based on 5 exams, a final exam, 6 quizzes/homework, and 6 assignments. **Late submissions will not be accepted**. Make-up exams will come from a test 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 and email 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 a grading error on your exam, questions about grading must be submitted in writing within one week of the return of the exam.

Grades:

5 Exams (100 pts each)	500 pts
Final Exam	150 pts
Assignments (3 pts each)	18 pts
HW/Quizzes	32 pts
Total	**700 pts**

If your pre-final grade is greater than or equal to 65%, and you are satisfied with your grade, you have the option to not take the final exam and your grade will be based on the points listed below. (Make sure you check your minimum grade requirement if this course counts toward your major.) If you missed an exam, you need to take the final exam.

Grade Distribution (if not taking the final exam)

5 Exams (100 pts each)	500 pts
Assignments (3 pts each)	18 pts
HW/Quizzes	32 pts
Total	**550 pts**

Grading Scale: This grading scale gives you a general idea to help you access your status in the class at any time.
A ≥93%, 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%.

Academic Honesty and the Honor Code: As a University of Georgia student, you have agreed to abide by the University's academic honesty policy, *UGA Student Honor Code: "I will be academically honest in all of my academic work and will not tolerate academic dishonesty of others."* A Culture of Honesty, the University's policy and procedures for handling cases of suspected dishonesty, can be found at *www.uga.edu/ovpi* . Students are responsible for informing themselves about those standards before performing any academic work. Academic work includes, but is not limited to, course assignments, quizzes, exams, in-class questions, and course evaluations.

Mental Health and Wellness Resources:

- If you or someone you know needs assistance, you are encouraged to contact Student Care and Outreach in the Division of Student Affairs at 706-542-7774 or visit https://sco.uga.edu. They will help you navigate any difficult circumstances you may be facing by connecting you with the appropriate resources or services.
- UGA has several resources for a student seeking mental health services (https://www.uhs.uga.edu/bewelluga/bewelluga) or crisis support (https://www.uhs.uga.edu/info/emergencies).
- If you need help managing stress anxiety, relationships, etc., please visit BeWellUGA (https://www.uhs.uga.edu/bewelluga/bewelluga) for a list of FREE workshops, classes, mentoring, and health coaching led by licensed clinicians and health educators in the University Health Center.
- Additional resources can be accessed through the UGA App.

UGA Griffin Campus Specific Resources

- If you or someone you know needs assistance, you are encouraged to contact Student Affairs at 770-412-4096. They will help you navigate any difficult circumstances you may be facing by connecting you with the appropriate resources or services.
- UGA Griffin Campus Counseling Services serves as a resource for a student seeking mental health services, and can be contacted at 706-612-8792 or via email at griffincounseling@uga.edu.
    - Students can schedule an appointment, here: https://bit.ly/3dAWO9d

Special Learning Needs

If you have a documented disability and require classroom accommodations, please see me at the end of the first class meeting or make an appointment during office hours. If you plan to request accommodations for a disability, please register with the Disability Resource Center online at https://drc.uga.edu . You must be registered with the Disability Resource Center to receive academic accommodations.

Approximate schedule of topics for Fall 2022 – In-Person Instruction

Date	Chapter
Unit 1 **Wed, Sept. 14**	1 Introduction to Biochemistry 2 Water 3 Amino Acids and the Primary Structures of Protein 4 Proteins: Three-Dimensional Structure and Function 5 Properties of Enzymes **EXAM 1**
Unit 2 **Wed. Oct. 5**	6 Mechanisms of Enzymes 7 Coenzymes and Vitamins 8 Carbohydrates 9 Lipids and Membranes 10 Introduction to Metabolism **EXAM 2**
Unit 3 **Wed. Oct. 26**	11 Glycolysis 12 Gluconeogenesis and Pentose Phosphate Pathway 13 Citric Acid Cycle 14 Electron Transport and Oxidative Phosphorylation **EXAM 3**
Unit 4 **Wed, Nov. 16**	15 Photosynthesis 16 Lipid Metabolism 17 Amino Acid Metabolism 18 Nucleotide Metabolism **EXAM 4**
Unit 5 **Wed, Nov. 30**	19 Nucleic Acids 20 DNA Replication, Repair and Recombination 21 Transcription and RNA Processing 22 Protein Synthesis **EXAM 5**
Mon, Dec. 12	**FINAL EXAM (Comprehensive) 12-3 pm**