University of Georgia-Griffin Campus

CBIO 3400 CELL BIOLOGY (CRN 36796) 4 credit hours Spring 2021, 12:45 - 2:30 pm, Tue & Thu

Instructor: Dr. Margie M. Paz

mpaz@uga.edu

128 Flynt Bldg. 770-229-3380

Office Hours: 2:30 – 3:30 PM 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 learn the structure and function of eukaryotic cells. The course material includes cell organization, cell cycle, membrane structure and function, organelle structure and function, cellular trafficking, and cellular control mechanisms. The course syllabus is a general plan for the course; changes may be necessary and will be announced to the class by the instructor.

Prerequisites: BCMB 3100 or BCMB 3100E or BCMB 4010/6010

Pre or Corequisites: GENE 3200-3200D or GENE 3200H

Textbook:

Molecular Biology of the Cell, 6th edition, by Alberts, Johnson, Lewis, Morgan, Raff, Roberts, & Walter (2014) Garland Science Pub. ISBN 978-0-8153-4464-3

Attendance:

All students are expected to attend all course lectures and take good notes. While attendance is not mandatory, there is a participation grade. Outlines of lectures will be available on the web via eLC to simplify note-taking. However, the lecture notes on the eLC course page should not be regarded as a substitute for coming to class. Having my slides with you in class will make note-taking much easier, but additional material and examples are given in class. Each lecture will be easier for you to understand if the section we are discussing is read prior to 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). Arrive on time and avoid leaving early. **Please turn off all cell phones and pagers.**

e-LearningCommons (eLC):

We will be using eLC throughout the semester. Class materials including the syllabus, slides of lecture notes, course announcements, etc. will be posted on the eLC course page. Students are responsible for printing their own copies of class materials, and should do so in advance of needing them. Having a problem downloading and printing class materials is usually not a good reason to be unprepared for class. To get to the course page, go to https://uga.view.usg.edu Logon with your UGA MyID.

Grading:

Your grade will be based on four exams, a comprehensive final exam, journal article summaries, class presentations/discussions, and assignments/quizzes. Exam material will consist of lecture notes and discussions, reading assignments (e.g., journal articles). Late submissions will not be accepted. All due dates and times are final – journal article summaries, class presentations/discussions, assignments/quizzes, or exams turned in after due date/time will be scored a zero. 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, present/show documentation from a medical facility that indicates you could not take the exam on the date in question. 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. To request a regrade, email the instructor a Word or pdf document that gives the question number and the answer with supporting evidence from textbook or lecture notes that proves your answer is correct. Be sure to include the exam number and your name in the file name.

Grade Distribution

Total	650 pts
Assignment/Quizzes	50 pts
Paper Summaries/Participation/Presentation	50 pts
Comprehensive Final Exam	150 pts
4 Exams (100 pts each)	400 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.

Total	500 pts
Assignment/Quizzes	50 pts
Paper Summaries/Participation/Presentation	50 pts
4 Exams (100 pts each)	400 pts
Grade Distribution (if not taking the final exam)

Grading Scale: This grading scale gives you a general idea to help you access your status in the class at any time $A \ge 93\%$, A-90 to 92%, B+86 to 89%, B-80 to 85%, B-80 to 82%, C+76 to 79%, C-70 to 75%, C-65 to 69%, D-60 to 64%, E-60 below 60%

Academic Honesty and the Honor Code: As a University of Georgia student, you have agreed to abide by the University's academic honesty policy, "A Culture of Honesty," and the Student Honor Code. All academic work must meet the standards described in "A Culture of Honesty" at www.uga.edu/honesty. 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

Mental Health and Wellness 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.
 - o Students can schedule an appointment, here: https://bit.ly/3dAWO9d
- If you need help managing stress anxiety, relationships, etc., you can also contact 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.

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 Student Affairs in Room 105, Flynt Building, 770-412-4096, for consultation regarding evaluation, documentation of your disability, and a recommendation as to the accommodation to be provided.

Coronavirus Information for Students

Face Coverings:

Effective July 15, 2020, the University of Georgia—along with all University System of Georgia (USG) institutions—requires all faculty, staff, students and visitors to wear an appropriate face covering while inside campus facilities/buildings where six feet social distancing may not always be possible. Face covering use is in addition to and is not a substitute for social distancing. Anyone not using a face covering when required will be asked to wear one or must leave the area. Reasonable accommodations may be made for those who are unable to wear a face covering for documented health reasons. Students seeking an accommodation related to face coverings should contact Disability Services at https://drc.uga.edu/.

DawgCheck:

Please perform a quick symptom check each weekday on DawgCheck—on the UGA app or website—whether you feel sick or not. It will help health providers monitor the health situation on campus: https://dawgcheck.uga.edu/

What do I do if I am notified that I have been exposed?

Effective January 4, 2021, students who learn they have been directly exposed to COVID-19 but are not showing symptoms should self-quarantine for 10 days consistent with the updated Department of Public Health (DPH) and Centers for Disease Control and Prevention (CDC) guidelines. Please correspond with your instructor via email, with a cc: to Student Care & Outreach at sco@uga.edu, to coordinate continuing your coursework while self-quarantined. If you develop symptoms, you should contact the University Health Center to make an appointment to be tested. You should continue to monitor your symptoms daily on DawgCheck.

We strongly encourage students to voluntarily take a COVID-19 test within 48 hours of the end of the 10-day quarantine period (test to be administered between days 8 and 10).

If the test is negative, the individual may return to campus, but MUST continue to closely monitor for any new COVID-19 symptoms through 14 days. DawgCheck is the best method for monitoring these symptoms. If new symptoms occur, the individual must not come to campus and must seek further testing/evaluation.

If the test is positive at the end of the 10-day period, the individual must begin a 10-day isolation period from the date of the test.

What do I do if I test positive?

Any student with a positive COVID-19 test is <u>required</u> to report the test in <u>DawgCheck</u> and should self-isolate immediately. Students should not attend classes in-person until the isolation period is completed. Once you report the positive test through <u>DawgCheck</u>, UGA Student Care and Outreach will follow up with you.



Clean your hands often.



Avoid touching your eyes, nose and mouth.



Stay at home if you are sick.



Wear a cloth face covering to help slow the spread of COVID-19.



Clean and disinfect frequently touched surfaces daily.

STUDENTS: If you need healthcare assistance, the following community partner can help:
McIntosh Family Practice/McMed Urgent Care
726 S 8th St., Griffin, GA 30224 i 770-450-8878.

ALL OTHERS: Consult your community healthcare provider.

For UGA updates and prevention, visit www.uga.edu/coronavirus.



Approximate schedule of topics for Spring 2021 (Face-to-Face Instruction)

	Topic	Chapters
Weeks 1-2	Eukaryotes, Eubacteria, and Archaea	1, 2, 8, 9
	Protein structure/binding interactions	3
	Lipids and biological membranes	10
	Permeability and transport, Channels/membrane potential	11
Weeks 3-4	Receptors as channels	15
	G protein coupled receptors	15
	Receptor tyrosine kinases, Phosphoinositides	15
	Endosomes/Receptor Mediated Endocytosis	13
Thu, Feb. 18	Exam 1	
Weeks 5-6	Signal Peptides and the ER	12,13
	Journal Article Discussion and Summary Paper 1	
	ER and Golgi	13
	Golgi and Lysosomes	13
Weeks 7-8	Secretory Pathway	13
	Mitochondria	14
	Cytoskeleton, Cytoskeleton and Movement	16
Thu, March 11	Exam 2	
Weeks 9-10	Mitosis	17
	Cell Nucleus: structure and membranes	12
	Nuclear Transport	12
	Journal Article Discussion and Summary Paper 2	
Weeks 11-12	Chromatin and Genome organization	1, 4, 6
	DNA Replication	5
Tue, April 6	Exam 3	
Thu, April 8	No Class – UGA Instructional break	
Weeks 13-14	Transcription and Processing	1, 4, 6
	Regulation of Transcription	7
	Translation	6
	Cell Cycle Control	17
	Project Proposal	
Week 15	Cancer	20
Thu, April 29	Exam 4	
Tuesday, May 11	Final Exam (Comprehensive) 12:00 -3:00 pm	