## **BIOL1108**

# Principles of Biology II

Summer 2022

Instructor: Dr. Morgan Meyers Email: morgan.meyers@uga.edu

CRN# 52204 from 10:30am to 11:30am in room 0285 Science Learning Center

### Course Overview

This course is designed to prepare you for more specialized coursework in the life sciences. It is intended to complement BIOL 1107, Principles of Biology I, which focuses on molecular, classical, and population genetics. In both courses, you will develop an understanding of five core concepts in biology:

- **Evolution:** The diversity of life evolved over time by processes of mutation, selection, and genetic change.
- Structure and function: Basic units of structure define the function of all living things.
- **Information flow:** The growth and behavior of organisms occur through the expression of genetic information in context.
- Transformations of energy and matter: Biological systems, from cells to organisms to ecosystems, grow and change by processes based on chemical transformation pathways and are governed by the laws of thermodynamics.
- Systems: Living systems are interconnected and interacting over multiple scales.

The course will be taught using a variety of different teaching methods in order to:

- Help you gain new knowledge about biology through readings and lectures
- Help you develop **new thinking skills**, primarily by applying your new knowledge to answer questions, analyze data, and solve problems either during class or on homework assignments
- Engage you in learning interesting, exciting, and relevant biological ideas and phenomena.

**Note:** There will be three scheduled days of asynchronous online class (I will be out of town for a workshop). These days are Wed. 6/22, Thurs. 6/23, and Fri. 6/24. This information is also communicated on the Unit 1 Calendar. I will provide more details on how these class days will function as we near that time.

### The Basics

#### Your Instructor

Dr. Morgan Meyers

Office: C120B Davison Life Sciences Complex

Phone: 706 542 3188

Email: morgan.meyers@uga.edu

I will respond to emails within 24-48 hours Mon-Fri. If you email over the weekend, I will respond by the

end of the day on Monday.

### You Belong Here

I am excited to learn with each and every one of you, and I am here to support your success. I invite you to bring your whole self into our biology learning community. Each of you brings cultural assets and personal perspectives that will allow you to form unique appreciations and relevant applications of science in your careers and daily lives to help make the world a better place. Please be confident that you can come to me with your questions, concerns, challenges, confusions, victories, and requests for help.

#### **Student Hours**

Student Hours (you may know them as "office hours") are a great way to interact with your instructor, chat about course content, and get help with any confusions. Student Hours are available <u>on Zoom</u> during the following times, so feel pop by the Zoom room (you don't need to email ahead of time):

Mondays and Wednesdays 12 – 1pm

Summer 1108 Student Hours Zoom Link:

https://zoom.us/j/93927463700?pwd=Q2t5b2ZZYVQwRmpVMWx0ejg4dVVBUT09

If those times don't work for you, you can make an appointment, so just send me an email (morgan.meyers@uga.edu) if that's the case.

### Course Resources

- Textbook: We will use freely available reading materials and videos instead of a single textbook. I
  will post these materials or links to them on eLC. If you would like a textbook as a reference,
  OpenStax has a free biology textbook that you may find useful:
  https://openstax.org/details/books/biology-2e?Book%20details
- Powerpoints, assignments, quizzes, and other materials: I will post these on eLC. Please make sure you have access to the eLC site and check it regularly!
- SimBio: We will be using SimBio materials to help reinforce and apply concepts you are learning.
   You will need to sign up for this service online; details will be provided on eLC. SimBio costs \$28 for the term.
- Notecards: Please purchase a single pack of ~100 3x5 notecards for this class. They can be any color/style, but PLEASE make sure they are 3x5 size!

### Communication

To comply with the Family Educational Rights and Privacy Act (FERPA), all communication that refers to individual students must be through a secure medium (UGAMail or eLC) or in person. Instructors are not allowed to respond to messages that refer to individual students or student progress in the course through non-UGA accounts, phone calls, or other types of electronic media.

## Course Organization & Design

The course is divided into five (5) units. Each unit will have learning objectives (i.e., things you should be able to do by the end of the unit), and a calendar to help you keep track of readings, quizzes, assignments, and the four exams. Please review the calendar when we begin each unit, and complete the readings, quizzes, and assignments as noted on the calendar.

Unit		Unit Dates	Exam Dates
1.	Reforestation of Mt. St. Helens	Fri June 10 – Mon June 27	Exam 1: Tues June 28
2.	Surviving Extremes: Desert Ecosystems	Wed June 29 – Fri July 8	Every 2: Tupe July 10
3.	Reintroducing Sea Otters	Mon July 11 – Mon July 18	Exam 2: Tues July 19
4.	Diabetes in America	Wed July 20 – Wed July 27	Exam 3: Thurs July 28
5.	Sensing the Environment	Fri July 29 – Fri Aug 5	Exam 4: Fri August 5 (finals week)

### Course Assessment

Our course will involve the following types of activities:

- Quizzes. You will complete <u>nine quizzes</u> on eLC during the semester as you read material and view videos outside of class. You will have unlimited attempts to complete each quiz to practice revising your responses based on feedback and further studying as needed. Only your highest score will count. The quizzes must be completed BEFORE class (see eLC calendar and unit calendars for due dates). There are no make-up quizzes or extensions. You will be most successful in this class if you complete all of the readings/videos and quizzes.
- Assignments. We will complete <u>six assignments</u> during the semester that will help you learn the material and apply what you learn, rather than simply memorizing facts. Although you can work with others on these assignments, you are expected to complete and submit your own assignments in your own words. The due dates for all assignments will be noted in the unit calendars and on each assignment. If you miss the deadline for an assignment, you may submit it up to midnight the day before the unit exam with a 30% late penalty. Just be aware that you may be foregoing any feedback I could provide on your assignment if you submit it later than the original deadline. You will be most successful in this class if you complete all of the assignments, and on time.
- Class Participation. You will be asked to participate in-person during class in various ways that will contribute to your class participation score at the end of the term. There is no way to make up missed participation points. But see "Attendance Policy" below for more details.
- SimBio. We will be using SimBio materials to help reinforce and apply concepts you are learning. SimBio is an online tutorial/lab simulation software. We will complete <u>four SimBio tutorials</u> during the semester. If you miss the deadline for SimBio, you may submit it up to midnight the day before the unit exam with a 30% late penalty.
- Exams. There will be a total of <u>four exams</u> to cover the five units of the course. The exams are designed to assess your knowledge and comprehension of biological concepts as well as your ability to analyze data and solve problems similar to those we have worked on in class. Each exam will focus on assessing your knowledge and skills related to the content of the unit, building on the knowledge you gained from the previous unit(s). More details on the exam formats will be provided once we near our first exam. If you miss an exam for a legitimate reason, you must contact me within 24 hours of the original exam time to schedule a make-up exam, provide documentation, and the make-up exam must be taken within one week from the original exam date.

### Points Summary

Exams (4)	600 (150 pts each)
eLC Quizzes (9)	90 (10 pts each)
SimBio Labs (4)	120 (30 pts each)
Assignments (6)	90 (15 pts each)

Class Participation	100
TOTAL POINTS	1000

### Letter Grade Scale

Final grades will be assigned as follows:

А	93-100%	
Α-	90-92%	
B+	87-89%	
В	83-86%	
B-	80-82%	
C+	77-79%	
С	73-76%	
C-	70-72%	
D	60-69%	
F	<60%	

### How is my grade determined?

Your letter grade for the course will be calculated at the end of the semester and will be based on your final percentage.

Your final percentage will be determined by:

- 1. Adding up the total number of points you have earned
- 2. Dividing it by the total number of points you could have earned (830 points)
- 3. Multiplying by 100%

The letter corresponding to your final percentage will be your final grade.

### Have a grading grievance?

If you feel that there has been a mistake in your grade on an exam or another assignment, please email me immediately.

Franklin also has a list of all appeal options for students.

See: http://www.franklin.uga.edu/students/student\_appeal\_guidelines.php

Important things to consider regarding grading grievances:

- I will not consider grading appeals beyond one week after we post assignment or exam scores.
- You may feel that you are just a point or two away from earning a higher grade, but I cannot with fairness add points to your score without affecting the grades of everyone else in the class.
- Changing your grade simply because you need a higher score is in violation of the Culture of Honesty guidelines of the University.
- You have many opportunities to earn points by completing course activities throughout the semester. Take advantage of those opportunities.
- If you have general questions about withdrawals versus dropped classes, final exam conflicts, missed classes for illness, or the Hope scholarship you can visit the Student Affairs Website and view the FAQ page: <a href="http://studentaffairs.uga.edu/students.htm">http://studentaffairs.uga.edu/students.htm</a>

### How to be Successful in this Course

To be successful in this course, I encourage you to:

- Complete the assigned readings and videos, then treat them as references. Do not just read or view them over and over again this is NOT a helpful way to study. Instead, focus on answering the types of questions and problems posed in the quizzes and on assignments. Consider how you might alter a question or problem, and how the altered version could be solved.
- Focus on the learning objectives. The exams will assess your accomplishment of the learning objectives. Use the learning objectives as a guide for what to focus on when you are completing assignments and studying for exams.
- Not spend time memorizing. You can look up facts when you are working on assignments. Some facts will be provided for you on exams so that you can focus on applying knowledge rather than just regurgitating facts. You will come to remember the most important facts as you practice solving problems.
- Study with classmates, including working on problems together in a safe, socially distanced way. You must submit all work in your own words, but working with classmates will help you learn key concepts and skills.

### OTHER COURSE INFORMATION

- Well-being, mental health, and student support: If you or someone you know needs assistance, you are encouraged to contact Student Care & Outreach in the Division of Student Affairs at 706-542-7774 or visit <a href="https://sco.uga.edu/">https://sco.uga.edu/</a>. 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 to support your well-being and mental health: <a href="https://well-being.uga.edu">https://well-being.uga.edu</a> Counseling and Psychiatric Services (CAPS) is your go-to, on-campus resource for emotional, social and behavioral-health support: <a href="https://caps.uga.edu/tao/">https://caps.uga.edu/tao/</a>, 7AO Online Support (<a href="https://caps.uga.edu/tao/">https://caps.uga.edu/tao/</a>), 24/7 support at 706-542-2273. For crisis support: <a href="https://healthcenter.uga.edu/emergencies/">https://healthcenter.uga.edu/emergencies/</a>. The University Health Center offers FREE workshops, classes, mentoring and health coaching led by licensed clinicians or health educators: <a href="https://healthcenter.uga.edu/bewelluga/">https://healthcenter.uga.edu/bewelluga/</a>
- Tutoring: Everyone comes to college with different knowledge, skills, abilities and resources, and everyone has a different definition of what college success looks like. This means there isn't one correct path to success! The Division of Academic Enhancement (DAE) offers free peer tutoring in over 200 of UGA's most rigorous courses including writing tutoring. To engage with a tutor, download the Penji app, available on iOS and Android, and create an account using your MyID@uga.edu email address. Don't have a smart phone? Navigate to <a href="https://web.penjiapp.com">https://web.penjiapp.com</a> and create an account using your MyID@uga.edu email address. Need help? Visit their website (<a href="https://dae.uga.edu/services/tutoring/">https://dae.uga.edu/services/tutoring/</a>) or send an email to tutor@uga.edu for more information on how to engage with a tutor. In addition to tutoring, the DAE provides Academic Coaching, Student Success Workshops, and more. The DAE is committed to the success of all students at the University of Georgia. For more on these and other resources, please visit: <a href="https://dae.uga.edu">https://dae.uga.edu</a> I encourage you to use any or all of the DAE and other university resources to help you be successful!
- LGBT Resource Center: The LGBT Resource center is located at 221 Memorial Hall and has a wide range of resources including listservs, a library, and Ambassador Link if you feel like chatting with someone. https://lgbtcenter.uga.edu/
- Disability Resource Center (DRC): The traditional education system is not set up for everyone to succeed; accommodations make this possible. The DRC (<a href="https://drc.uga.edu">https://drc.uga.edu</a>; 114 Clark Howell Hall; 706-542-8719 voice; 706-542-7719 fax; 706-542-8778 tty) has services and resources in place for students who have a disability. Students who seek accommodations due to a disability should contact me during the first week of the semester or as soon as the need for the accommodation is discovered. I am happy to work with students and the Disability Resource Center to provide appropriate accommodations.
- Attendance policy: The course content and discussions will be tailored to build on your existing knowledge and address your questions and concerns, so your attendance is essential. There will be times you will may to miss class because of an illness, emergency, or other professional or academic commitment. I have structured the grading in this course to minimize the impact of

missing a class for legitimate reasons. You will be allowed to miss up to 10% of participation points and still earn full credit for your participation score (i.e., everyone has a 10% buffer for that part of their grade). What to do when you miss class:

- o If you are ill, please stay home! This limits the spread of any illness and allows you to rest so you can recover more quickly. First you should review all class materials (lecture recordings and slides) that you missed, which will be posted to eLC. After reviewing on your own, you are also encouraged to contact a classmate to figure out what you missed and get their notes from class. Classes will NOT be live-streamed via Zoom, but they will be recorded and posted to eLC at the end of each day. See COVID-specific details below if applicable. If you miss an exam for a legitimate reason, you must contact me within 24 hours to schedule a make-up exam, and the make-up exam must be taken within one week from the original exam date.
- o If you know in advance that you are going to miss an exam or other assignment due to illness, authorized representation of the University, or extraordinary personal circumstances, please notify me as soon as possible in advance of the day(s) you anticipate missing. Please provide documentation for your absence and we will work together to reschedule the exam or assignment due dates.
- 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" found at: <a href="https://www.uga.edu/honesty">www.uga.edu/honesty</a>. Academic work includes, but is not limited to, course assignments, quizzes, exams, and in-class questions. Lack of knowledge of the academic honesty policy is not a reasonable explanation for a violation. Questions related to course assignments and the academic honesty policy should be directed to the instructor. Specifically, this means the following examples are violations of the policy, and you WILL NOT:
  - o Post academic work to or use academic work from a text message (e.g., GroupMe, website (Course Hero, Koofers, etc.), electronic media, or physical space.
  - o Copy someone else's academic work, or sharing your academic work with others.
  - o Complete academic work for someone else.
  - o Look at another person's exam while taking your own exam.

NOTE: You are allowed to share your personal course notes if you would like to.

## Student Responsibilities

Education is a two-way street. Both teachers and students have responsibilities to create the best possible learning experience for everyone. Here is what is expected of YOU:

- Be aware of all University rules and regulations pertaining to your rights as a student, and your responsibilities to the degree program in which you are enrolled.
- Be aware that you shall be deemed to have received any and all information that is:
  - o provided in scheduled class, regardless of attendance.
  - o sent to your student email address.
  - o made available via eLC or other University-approved learning management systems.
- Be aware of all information related to this class that is made available to you, and (in a timely manner) raise with staff any questions or concerns related to this information.
- Be aware of, and act in accordance with, the UGA's Academic Honesty Policy.

#### *In other words:*

Know your rights! Read your email! Check eLC! Ask questions! Play by the rules!

## COVID-19 Information (updated Jan. 5, 2022)

#### **CORONAVIRUS INFORMATION FOR STUDENTS**

UGA adheres to guidance from the University System of Georgia and the recommendations from Georgia Department of Public Health (DPH) related to quarantine and isolation. Since this may be updated periodically, we encourage you to review the latest guidance <a href="https://example.com/here">here</a>. The following information is based on guidance last updated on December 29, 2021.

#### Face coverings:

Following guidance from the University System of Georgia, face coverings are recommended for all individuals while inside campus facilities.

#### How can I obtain the COVID-19 vaccine?

University Health Center is scheduling appointments for students through the UHC Patient Portal (<a href="https://patientportal.uhs.uga.edu/login\_dualauthentication.aspx">https://patientportal.uhs.uga.edu/login\_dualauthentication.aspx</a>). Learn more here – <a href="https://www.uhs.uga.edu/healthtopics/covid-vaccine">https://www.uhs.uga.edu/healthtopics/covid-vaccine</a>.

The Georgia Department of Health, pharmacy chains and local providers also offer the COVID-19 vaccine at no cost to you. To find a COVID-19 vaccination location near you, please go to: https://georgia.gov/covid-vaccine.

In addition, the University System of Georgia has made COVID-19 vaccines available at 15 campuses statewide and you can locate one here: <a href="https://www.usg.edu/vaccination">https://www.usg.edu/vaccination</a>

#### What do I do if I have COVID-19 symptoms?

Students showing COVID-19 symptoms should self-isolate and get tested. You can schedule an appointment with the University Health Center by calling 706-542-1162 (Monday-Friday, 8 a.m.-5p.m.). Please DO NOT walk-in. For emergencies and after-hours care, see <a href="https://www.uhs.uga.edu/info/emergencies">https://www.uhs.uga.edu/info/emergencies</a>.

#### What do I do if I test positive for COVID-19? (Isolation guidance)

If you test positive for COVID-19 at any time, either through a PCR test, an Antigen test, or a home test kit, you are **required to report it** through the <u>DawgCheck Test Reporting Survey</u>. Follow the instructions provided to you when you report your positive test result in DawgCheck.

As of December 29, 2021, when an individual receive a positive COVID-19 test: Everyone, **regardless of vaccination status**, should:

- Stay home for 5 days.
- If you do not have symptoms or your symptoms are resolving after 5 days, you can leave your house and return to class.
- Continue to wear a mask around others for 5 additional days.

#### What do I do if I have been exposed to COVID-19? (Quarantine guidance)

If you have been exposed (within 6 feet for a cumulative total of 15 minutes or more over a 24-hour period – unmasked\*\*) to someone with COVID-19 or to someone with a positive COVID-19 test and you are:

- Boosted, or have become fully vaccinated within the last 6 months (Moderna or Pfizer vaccine) or within the last 2 months (J&J vaccine)
  - o You do not need to quarantine at home and may come to class.
  - o You should wear a mask around others for 10 days.
  - o If possible, get tested on day 5.
  - o If you develop symptoms, get tested and isolate at home until test results are received, then proceed in accordance with the test results.
- Unvaccinated, or became fully vaccinated more than 6 months ago (Moderna or Pfizer vaccine) or more than 2 months ago (J&J vaccine) and have not received a booster:
  - O You must quarantine at home for 5 days. After that you may return to class but continue to wear a mask around others for 5 additional days.
  - o If possible, get tested on day 5.
  - o If you develop symptoms, get tested and isolate at home until test results are received, then proceed in accordance with the test results.

\*\* "Masked-to-masked" encounters are not currently considered an exposure; this type of interaction would not warrant quarantine.

You should report the need to quarantine on <u>DawgCheck</u> (<u>https://dawgcheck.uga.edu/</u>), and communicate directly with your faculty to coordinate your coursework while in quarantine. If you need additional help, reach out to Student Care and Outreach (<u>sco@uga.edu</u>) for assistance.

#### Well-being, mental health, and student support

If you or someone you know needs assistance, you are encouraged to contact Student Care & Outreach in the Division of Student Affairs at 706-542-7774 or visit <a href="https://sco.uga.edu/">https://sco.uga.edu/</a>. 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 to support your well-being and mental health: <a href="https://well-being.uga.edu/">https://well-being.uga.edu/</a>

Counseling and Psychiatric Services (CAPS) is your go-to, on-campus resource for emotional, social and behavioral-health support: <a href="https://caps.uga.edu/">https://caps.uga.edu/</a>, TAO Online Support (<a href="https://caps.uga.edu/tao/">https://caps.uga.edu/tao/</a>), 24/7 support at 706-542-2273. For crisis support: <a href="https://healthcenter.uga.edu/emergencies/">https://healthcenter.uga.edu/emergencies/</a>.

The University Health Center offers FREE workshops, classes, mentoring and health coaching led by licensed clinicians or health educators: https://healthcenter.uga.edu/bewelluga/

#### Monitoring conditions:

Note that the guidance referenced in this syllabus is subject to change based on recommendations from the Georgia Department of Public Health, the University System of Georgia, or the Governor's Office. For the latest on UGA policy, you can visit <u>coronavirus.uga.edu</u>.