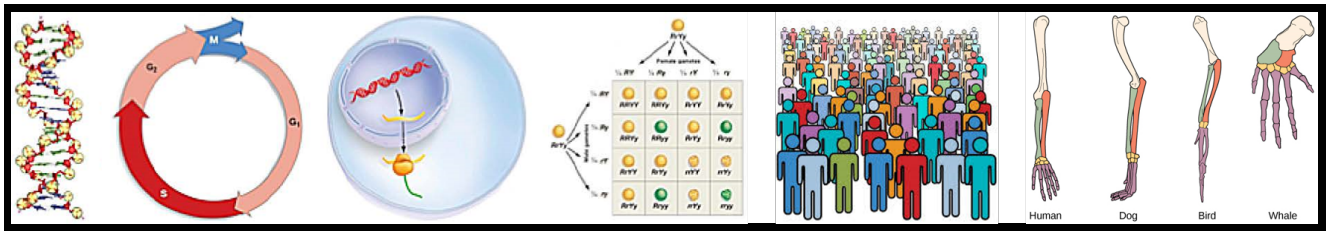
Principles of Biology (BIOL 1107) - Armstrong Course Syllabus Fall 2021



This syllabus is a general plan for the course. Some deviations might become necessary during the semester. Changes to the course will be announced on eLC and through email.

Instructor

- Dr. Norris Armstrong, Department of Genetics, Biological Sciences 409B (narmstro@uga.edu)
- Office Hours
  - MWF 10:15-11:15 in room outside classroom
  - MWF 2:30-3:30 in 409B Biological Sciences

Enrollment

- Participation in this course requires enrollment in BIOL 1107 (lecture) and BIOL 1107L (lab). By default, the registration system will not allow enrollment in only one of the two components. If you previously completed BIOL 1107 or BIOL 1107L and only wish to take the other component, please contact Biology Advising at (706) 583-0496 or biology@uga.edu.
- Questions about the lab should be directed to the lab coordinator at biolabhelp@uga.edu.

Communication

- To comply with the Family Educational Rights and Privacy Act (FERPA), all communication with students regarding personal information must be in person or through a secure account (eLC or UGA email). Instructors are not allowed to release personal information through other methods.

Course Format and COVID-19

- UGA has resumed a normal class schedule and this class will be taught through in-person sessions three days a week. Each class session will consist of interactive lectures and practice problems that will give you an opportunity to apply your understanding of important concepts when the instructor and your peers are available to give you help and feedback.
- Because COVID-19 infections in Georgia have increased substantially in the past few weeks, ALL students, including those who have been vaccinated, are encouraged to wear appropriate masks while in the classroom to reduce the likelihood of spreading the virus.
- Students, faculty, and staff are asked to monitor their health. Anyone who tests positive for COVID-19 should record the positive test in DawgCheck (http://dawgcheck.uga.edu.) Student Care and Outreach will provide support and guidance on isolation.
- Students who are unable to attend class because of illness or other valid circumstances should contact the instructor to arrange accommodations.

Learning Objectives

- A list of learning objectives (what you are expected to know or be able to do at the end of this course) will be provided on eLC. The learning objectives are a valuable guide that you should use to measure your understanding of course material.

eLearning Commons (eLC)

- Class information will be posted on eLC. Your login is your myID. If you experience difficulty, contact the EITS Help Desk (542-3106, helpdesk@uga.edu).
- **YOU ARE RESPONSIBLE FOR ALL ANNOUNCEMENTS MADE IN CLASS AND THROUGH eLC!** Absence from class and forgetting to check eLC on a regular basis does not relieve you from this responsibility.

Instructional Materials

- This course will use Open Education Resources (OER) and other materials developed by your instructors. These materials will be available on eLC and through TopHat (see below) throughout the semester.
- Students who wish to use alternative resources may do so but are responsible for all concepts and skills covered in the materials provided by the instructors.

Top Hat Response System Account

- We will use the Top Hat response system for pre-lecture reading / homework assignments and in-class participation exercises. Instructions for accessing Top Hat are posted on eLC.
- To submit answers through Top Hat, you will need either an Internet capable device (laptop, tablet or cell phone) or a cell phone that can submit text messages. If you do not have any of these of these, please let your instructor know at the beginning of the course.
- Top Hat class participation and homework assignments are worth a set percentage of the final grade. Your average score (%) can be viewed on Top Hat and will be used to determine how many points you receive. Averages of 80% or above will receive full credit. Averages below 80% will receive partial credit. Handwritten and late submissions will not be accepted. The 20% cushion is meant to accommodate occasional technical problems and absences.

Evaluation

- Performance in this class will be evaluated based on the criteria shown below. Note that the lab component (BIOL 1107L) is administered and graded independently of the lecture component.

Reading Quizzes (Top Hat)	10%	As Assigned
Class Participation (Top Hat)	10%	As Assigned
Worksheet Problems	10%	As Assigned
Exams	70%	
Exam #1: 10%		Sept 7, (Tues.) 5:30 - 7:30 PM, Location TBA
Exam #2: 15%		Sept 28, (Tues.) 5:30 - 7:30 PM, Location TBA
Exam #3: 15%		Oct 19, (Tues.) 5:30 - 7:30 PM, Location TBA
Exam #4: 15%		Nov 9, (Tues.) 5:30 - 7:30 PM, Location TBA
Exam #5: 15%		Dec 10th (Fri., finals week), 7-10 PM, Location TBA

- The exams will be a mixture of multiple choice and short answer questions. You must bring a #2 pencil and a photo ID (e.g. Drivers license, UGA ID, Military ID, etc) to all exams.
- There are no dropped exams.
- Missed Exams:
    - If you miss an exam, you must contact your instructor and provide a documented excuse as soon as possible to schedule a make-up exam.
    - If you know you will miss a test in advance, you should contact your instructor in advance of the exam to schedule an alternate time to take the test.

- Deadlines for assignments will not be extended except for valid, documented excuses or for technical problems that affect the entire class.

- Requests to regrade an assessment must be made in person or in writing (by email) within one week of the assessment being returned to the student. To be considered, you must explain why your answer for a specific question should be considered correct.

- Letter grades will be assigned at the end of the semester according to the following scale.

Grade	Percentage	Grade	Percentage
A	93–100%	C+	77–79.9%
A-	90–92.9%	C	73–76.9%
B+	87–89.9%	C-	70–72.9%
B	83–86.9%	D	60–69.9%
B-	80–82.9%	F	< 60%

- Scores cannot be changed after the course grades have been posted except for clerical errors.

Enrollment Dates

- Add/drop deadline for this course is Tuesday, August 24th.
- Withdrawal deadline for receiving a W in the course is Monday, October 25th.

Course Assistance

- If you are having trouble with the course material, I strongly encourage you to meet with me as soon as possible during office hours or by appointment. Do not wait until it is too late!

- Division of Academic Enhancement (DAE) offers peer tutoring for some of the most challenging courses at UGA, as well as academic coaching, student success workshops, and more. The DAE is committed to the success of all students. More information can be found at http://dae.uga.edu.

- Student Care and Outreach provides help to students who experience hardship by providing individualized assistance and interventions. Information can be found at http://sco.uga.edu/.

Disabilities

- The Disability Resource Center (DRC) provides a wide variety of services to help students succeed in courses. We encourage students who may need help or are eligible for accommodations to contact the DRC and learn about resources they can provide. All inquiries are confidential. Contact the DRC at (706) 542-8719 or https://drc.uga.edu for more information or to apply for accommodations.

Academic Honesty

- All academic work must meet the standards contained in "A Culture of Honesty". Students are responsible for informing themselves about these standards before performing academic work.

- Any student determined to be using unauthorized assistance will be reported to the Office of the Vice President for Instruction for possible disciplinary action. Lying to an instructor to obtain an advantage is also academic dishonesty. The minimum penalty for academic dishonesty is a failing grade for the assessment, and the maximum penalty is suspension from the university.

BIOL1107 (Armstrong) Fall 2021 Lecture Schedule (tentative)

Links to assignments for individual classes will be posted in the daily schedules under the Content section of eLC.

DATE	DAY	LECTURE TOPIC
18-Aug	Wed	Course Intro
20-Aug	Fri	DNA, RNA, and Proteins
23-Aug	Mon	Genes and Transcription
25-Aug	Wed	RNA processing
27-Aug	Fri	Translation
30-Aug	Mon	Mutations
1-Sep	Wed	Gene Regulation
3-Sep	Fri	help session for test #1
6-Sep	Mon	No class: Labor Day
7-Sep	Tues	Test #1 5:30-7:30 PM location TBA
8-Sep	Wed	DNA Replication
10-Sep	Fri	DNA Replication (cont)
13-Sep	Mon	DNA Replication (cont)
15-Sep	Wed	PCR
17-Sep	Fri	Chromosomes and Mitosis
20-Sep	Mon	Mitosis and the Cell Cycle
22-Sep	Wed	Meiosis
24-Sep	Fri	Meiosis (cont.)
27-Sep	Mon	help session for test #2
28-Sep	Tues	Test #2 5:30-7:30 PM location TBA
29-Sep	Wed	Life Cycles
1-Oct	Fri	Meiosis and variation
4-Oct	Mon	Meiosis and variation (cont)
6-Oct	Wed	Genotype and Phenotype
8-Oct	Fri	Genes and Meiosis
11-Oct	Mon	Mendel
13-Oct	Wed	Mendel
15-Oct	Fri	Probabilities
18-Oct	Mon	help session for test #3
19-Oct	Tues	Test #3 5:30-7:30 PM location TBA
20-Oct	Wed	Complex Traits
22-Oct	Fri	Complex Traits (cont)
25-Oct	Mon	Sex Linked Traits
27-Oct	Wed	Linked Genes
29-Oct	Fri	No Class: Fall Break

1-Nov	Mon	Linked Genes (cont)
3-Nov	Wed	Human Genetics and Pedigrees
5-Nov	Fri	More exceptions
8-Nov	Mon	help session for test #4
9-Nov	Tues	Test #4 5:30-7:30 PM location TBA
10-Nov	Wed	Populations and allele frequencies
12-Nov	Fri	Predicting allele and genotype frequencies
15-Nov	Mon	Violating Hardy-Weinberg
17-Nov	Wed	Natural and sexual selection
19-Nov	Fri	Drift, gene flow, and non-random mating
22-Nov	Mon	speciation
24-Nov	Wed	No Class: Thanksgiving Break
26-Nov	Fri	No Class: Thanksgiving Break
29-Nov	Mon	phylogenetics
1-Dec	Wed	phylogenetics (cont)
3-Dec	Fri	Darwin
6-Dec	Mon	help session for test #5
7-Dec	Tues	TBA
10-Dec		Exam #5 7-10 PM Tentative Date, Location TBA
		*midterm withdrawal deadline - 10/25