

Genetics

Last Updated: Fri, 11/14/2025

Course prefix: BIOS

Course number: 2600

Section: A

CRN (you may add up to five):
27147

Instructor First Name: Onur

Instructor Last Name: Birol

Semester: Spring

Academic year: 2026

Course description:

Attention: This course will have about 100 dollars of required learning materials associated with it. Budget accordingly if you are taking the course.

Course Description:

Diving deeper into the various genetic systems and mechanics in biology

Course learning outcomes:

Course Goals and Learning Outcomes

By the end of this class, students will be able to: **(1)** understand fundamental and applied concepts in genetics, **(2)** apply biological principles to solving genetics problems, **(3)** interpret and analyze experiments in genetics, **(4)** explain methods and techniques use in genetic analyses, and **(5)** explain how biological information is stored and transmitted.

Required course materials:

Course Text

9780135194157 Concepts of Genetics - With Access (Looseleaf) by Klug, William S. / Cummings, Michael R. / Spencer, Charlotte A. (If you can access digital text – that is easiest)

9780134839714 Concepts of Genetics - Modified Mastering Access by Klug, William S. (ELECTRONIC PRODUCT)

Outside Materials: Journal articles, website links of interest/discussion, etc. Provided by Instructors.

Course Website and Other Classroom Management Tools

All lectures and any outside materials will be posted on Canvas. It is highly recommended that students take notes to supplement their understanding of lecture content and outside materials.

Grading policy:

Your grade will be determined by a combination of quizzes, in-class activities, and online homework assignments combined with in-class exams. The relative value of these assessments are:

Assignment Date Weight (Percentage, points, etc)

Quizzes, HWs &

In-class activities Throughout the semester 28%

Exam I Feb 9 18%

Exam II Mar 2 18%

Exam III Apr 6 18%

Final Exam May 1 18%

Description of Graded Components

Homework: Will be posted via either Mastering Genetics or professor-provided assignments after each class and are due before the start of the subsequent class. Each homework has two attempts and will be graded for completion.

In-class quizzes: Will be scheduled. Questions may be comprised of a variety of question types including: true or false statements, fill in the blank, multiple choice, definitions, short answer, and simple problems.

In-class activities: Our classroom community is strengthened by your active participation in Q/A sessions, in-class assignments, and group activities. These are designed to increase your comprehension and capacity to speak intelligibly about important topics in genetics.

Exams: Will cover lecture materials and assignments, and will include questions of various types (problems, definitions, true/false statements, list and describe questions, multiple choice questions, short answer). All exams will be taken in class in a closed book format unless otherwise indicated by the professor. See course schedule below for exam dates.

Grading Scale

Your final grade will be assigned as a letter grade according to the following scale:

A 90-100%

B 80-89%

C 70-79%

D 60-69%

F 0-59%

Attendance policy:

Attendance is expected unless with institute approved absence. The in class quizzes and activities will be used for participation.

Academic honesty/integrity statement:

Students are expected to maintain the highest standards of academic integrity. All work submitted must be original and properly cited. Plagiarism, cheating, or any form of academic dishonesty will result in immediate consequences as outlined in the university's academic integrity policy.

Georgia Tech aims to cultivate a community based on trust, academic integrity, and honor. Students are expected to act according to the highest ethical standards. For information on Georgia Tech's Academic Honor Code, please visit

<http://www.catalog.gatech.edu/policies/honor-code/> or visit
<http://www.catalog.gatech.edu/rules/18/>.

Any student suspected of cheating or plagiarizing on a quiz, exam, or assignment will be reported to the Office of Student Integrity, who will investigate the incident and identify the appropriate penalty for violations. Please note that all quizzes must be taken in the classroom. Attempts to take the quizzes outside of the classroom, or facilitating other students taking the quizzes outside of the classroom, will be considered cheating.