

GEORGIA INSTITUTE OF TECHNOLOGY
BIOLOGY 2344 A/Q
Short summer session I
SUMMER 2014
GENETICS LECTURE SYLLABUS

Lecture: Tuesday/Thursday, 12:00 – 2:35 PM

Location: 322 Cherry Emerson

Instructor: Dr. Mirjana M. Brockett, School of Biology
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Office: 323 Cherry Emerson
Office hours: M, W 1:00- 2:00 PM or by appointment

Goals: To obtain an understanding and appreciation of fundamental concepts in genetics; To apply accumulated knowledge by solving problems and interpreting experiments; To understand the experimental path towards early key discoveries in genetics.

Prerequisites: BIOL 1510 or BIOL 1511

Textbooks: Concepts of Genetics Plus MasteringGenetics with eText -- Access Card Package, 11/e

Klug, Cummings, Spencer & Palladino

©2015 | Benjamin Cummings | Cloth Bound with Access Card; 896 pp |

Not Yet Published

ISBN-10: 0321948475 | ISBN-13: 9780321948472

- See more at:

<http://www.pearsonhighered.com/pearsonhigheredus/educator/search/hipSearchResults.page?isbnFlag=false#sthash.OjmvhGCu.dpuf>

Attendance: If you miss lecture, *you* are responsible for obtaining all notes, announcements, and assignments. Lecture is a time when we all work together, so be courteous to your fellow students and do not disrupt class by entering and leaving the room during class, reading, talking, allowing cell phones to ring, etc. If you know that you must leave class early, sit in the back and leave quietly.

Technology: Use of technology including laptops, tablets, and smartphones during lecture is prohibited except when explicitly invited to use them for specific in-class activities.

Assessments: Your grade in genetics lecture will be determined by your performance on exams, unannounced quizzes, in-class activities, and group projects. The relative values of these assignments are:

Assessment	Value
Midterm Exams (3)	45%
Mastering Genetics Activities	20%
Learning Catalytics/ In class Assignments	15%
Final Exam	20%
Total	100%

The most stringent scale used will be 90-100% an A, 80-89% a B, 70-79% a C, 60-69% a D, and 59% or less an F. This scale is subject to adjustment at our discretion. We will attempt to give estimates of grades periodically throughout the semester.

Questions on pop quizzes will usually come directly from suggested problems in your textbook. Questions on exams will follow the homework and book problems very closely. Problems regarding grades on assignments must be handled through the regrade system.

For students in BIOL 2344 A section: {Written confirmation of a legitimate excuse, such as a severe illness, will be required to take any make-up exam or quiz. NO EXCEPTIONS! Your conduct in the course should conform to the Student Honor Code (<http://www.honor.gatech.edu/>). }

Academic Integrity: Academic dishonesty will not be tolerated. This includes cheating, lying about course matters, plagiarism, stealing classroom materials, or helping others commit a violation of the Honor Code. Students are reminded of the obligations and expectations associated with the Georgia Tech Academic Honor Code and Student Code of Conduct, available online at www.honor.gatech.edu.

Learning Accommodations: If needed, we will make classroom accommodations for students with disabilities. These accommodations must be arranged in advance and in accordance with the ADAPTS office (<http://www.adapts.gatech.edu>).

Lecture	Date	Topic
1	12-May	Syllabus review and Introduction (Single gene inheritance and independent assortment of genes)
2	14-May	Gene Interaction MIDTERM 1
3	19-May	From genes to proteins: DNA structure and replication RNA transcription and processing Proteins and their synthesis
4	21-May	Biotechnology and Genomics MIDTERM 2
5	26-May	Regulation of Gene Expression Prokaryotes and Eukaryotes
6	28-May	Genetic Control of Development Epigenetics and Stem Cell Biology
7	02- June	Dynamic Genome: Transposable Elements MIDTERM 3
08	04-June	Mutation, recombination and large scale chromosomal changes
09	09-June	Population Genetics
10	11-June	Genetics and Evolution LAST DAY OF CLASS/ Review
	15-17 June	Final Exam (room 322)