

GENETICS: PCB 3063
SECTION 8261

Instructor: Dr. Bernard Hauser
Office: 516A Bartram
Office Hours: After class or 8:30-9:30 am Monday
Email: bahauser@ufl.edu

Teaching Assistant: Arthur Rudolph
Office: 611 Bartram
Office Hours: Monday noon-1:30 pm or by appointment
Email: rudolph3@ufl.edu

Teaching Assistant: Dorian Feistel
Office: 611 Bartram
Office hours: Tuesday 11-12 am
Email: dfeistel@ufl.edu

Course Description: PCB 3063 is a challenging and stimulating course covering genetics from Mendel to the present. The class provides a solid foundation in genetics as a stand-alone course as well as a prerequisite to other genetics classes offered on campus. Topics to be covered include transmission, molecular, and population genetics. The course emphasis is on problem solving and conceptual synthesis.

Class: Tuesday and Thursday, Periods 5-6 (2:00-4:05pm) in L011 Turlington Hall.

Textbook: *Concepts of Genetics* by Klug et al. 10th Edition, which is published by Pearson-Benjamin Cummings. The 9th edition of this text is remarkably similar and you might save some money if you're willing to cope with the differences. Access to the solutions manual that accompanies this text is helpful when you get stuck working problems.

Grading	Points
Exam I	120 (24%)
Exam II	100 (20%)
Exam III	100 (20%)
9 Quizzes	90 (18%)
9 Problem Sets	<u>90 (18%)</u>
Total	500

One of the best ways to learn genetics is to work in study groups—I encourage you to study for exams together and work together on genetics problems. Consequently, two people that work together on a problem set can submit a single set of answers.

For quizzes and problem sets, the following grading scale will be used:

91-100 A	88-90.9 A-	
85-87.9 B+	81-84.9 B	78-80.9 B-
75-77.9 C+	68-74.9 C	
65-67.9 D+	61-64.9 D	

Below 60 is failing.

Exam scores rarely conform to this scale. To circumvent this problem, a grade rubric will be distributed in class when each exam is returned.

General Policies

- * Makeup exams will not be given.
- * Attendance in class is not required, but exams are based on material covered in class. You are responsible what is covered in class even if you do not attend! Check the e-Learning calendar frequently to see updates to test and assignment dates.
- *To be considered on time (no late penalty), problem sets are due **in class no later than 15 minutes** after the beginning of the class on the due day.
- *Bring a calculator to exams—Graphing calculators CANNOT be used.
- * Academic dishonesty will not be tolerated. If cheating or plagiarism is suspected, all persons involved will receive a zero on the affected problem set or exam, and will be reported to the Dean of Students Office.

University Support Services

Resources are available on campus to help students meet academic goals and solve personal problems, which interfere with their academic performance. Resources include:

1. University Counseling Center, 301 Peabody Hall, 392-1575, personal and career counseling.
2. Student Mental Health, Student Health Care Center, 392-1171, personal counseling.
3. Career Resource Center, Reitz Union, 392-1601, career development assistance and counseling.

Disability Notice: Students with disabilities enrolled in this course and who may need disability-related classroom accommodations are encouraged to make an appointment to see me before the end of the second week of the term. All discussions will remain confidential, although the Student Accessibility Services office may be consulted to discuss appropriate implementation of any accommodation requested.

TENTATIVE SCHEDULE (CHECK THE COURSE CALENDAR ON ELEARNING FOR UPDATES)

Week	Topic	Reading & Assignments
1	Course philosophy & policies Mitosis and Meiosis Holliday Structure	CH 1 & CH 2 Sections 11.8
2	Mendelian Genetics Mendelian Extensions Chromosomal Theory	CH 3 CH 4
3	Linkage and Mapping in Eukaryotes	CH 5
4	Sex Determination Extranuclear Inheritance	CH 7 CH 9
5	Exam1 (June 10) DNA: the genetic material	Ch. 1-5, 7, 9 CH 10
6	DNA Replication Transcription	CH 11 CH 13
7	Translation Regulation of gene expression	Ch 14 CH 17
8	Mutations Chromosomal Changes	CH 15 CH 8
9	Exam 2 (July 15) Quantitative Genetics	CH 23
10	Population Genetics Evolutionary Genetics	CH 25
11	Conservation Genetics Developmental Genetics	CH 26 CH 18
12	Genomics Final Exam (Aug. 7)	Special topics II