

**PCB 3063, GENETICS, Spring 2025**  
**SECTION 6130**

**Instructor:** Dr. Scott Taylor, Department of Biology  
**Office Hours:** TBA, Carr Hall room 417 or by appointment  
[sm.taylor@ufl.edu](mailto:sm.taylor@ufl.edu)

**Graduate TAs:** TBA

Course website: UF e-learning

**Recommended Text (not required):** Klug et al. 2018 Concepts of Genetics, 12th ed.  
Pearson, New York.

Schedule: T,R, periods 5 and 6 (11:45 – 1:40), TURL011

**Course Description:**

PCB 3063 is an introduction to genetics course covering topics from Mendelian genetics to molecular biology and genomics. The class will provide students with a solid foundation in genetics either as a stand-alone course or as a prerequisite to other life sciences courses offered on campus. The course emphasis is on problem solving and conceptual synthesis. Course performance will be measured by four exams and two written assignments (details in class).

**Course Objectives:**

Upon completion of this course students will have built core knowledge of the field of genetics, including both mendelian and molecular genetics. Students will be able to use this core knowledge to analyze scientific literature and make connections within and between other life-sciences coursework.

**Email Policy:**

All email correspondence must be from your ufl.edu account (or through Canvas), have your full name in the body of the email, and **contain your course and section number in the subject line**. I teach several courses and hundreds of students, and it is difficult for me to remember which course each student is currently in. Emails not meeting these requirements may not be answered.

## Grading:

20% Exam I  
20% Exam II  
20% Exam III  
20% Exam IV  
20% Written Paper Review (10%) and PCR Primer Design Assignment (10%)

Grades are based on the average of 4 stand-alone exams (each examining ~1/4 of the material) + 2 assignments.

• **No make-up exams will be given without prior permission or documentation of illness.** In case of illness, a letter from your primary care provider is required. A personal matter requires a note from the Dean of Students (P202 Peabody Hall). **Make up exams may be given in a different format (e.g. essay, short answer) from the original exam.**

- Attendance in class is not required; material covered only in lecture may be on exams.
- Grading will be on a percent scale.

93 – 100%	A
90 – 92.9%	A-
87 - 89.9%	B+
83 – 86.9%	B
80 – 82.9%	B-
77 – 79.9%	C+
73 – 76.9%	C
70 – 72.9%	C-
67 – 69.9%	D+
63 – 66.9%	D
60 – 62.9%	D-
<60	E

A curve **may** be applied at the instructor's discretion. The curve can only raise your grade, not decrease it. Please see <https://catalog.ufl.edu/UGRD/academic-regulations/grades-grading-policies/> for UF's overall grading policies.

**[READ THIS PARAGRAPH] FOR INQUIRIES REGARDING GRADES:** Please contact me as soon as possible if you notice an error in grading. Please be specific with your inquiry, providing the assignment/exam name and the exact question number that needs to be corrected. **DO NOT contact me with general requests to increase your grade to the next level**, even if it is very close to the next letter grade. I will only adjust grades if there is a legitimate reason (e.g. an error) and any grade adjustments involving curves or extra credit will be applied to everyone in the class. Do not ask me for an additional assignments or any other means for increasing your individual grade in the course. **Any general requests for grade increases, without citing a specific grading error, will either be ignored or will be met with a negative (and possible irritated) response.** Grades are not given upon request – they are earned.

## Academic Honesty

All students registered at the University of Florida have agreed to comply with the following statement:

*"I understand that the University of Florida expects its students to be honest in all their academic work. I agree to adhere to this commitment to academic honesty and understand that my failure to comply with this commitment may result in disciplinary action up to and including expulsion from the University."*

In addition, on all work submitted for credit the following pledge is either required or implied:

*"On my honor I have neither given nor received unauthorized aid in doing this assignment."*

If you witness any instances of academic dishonesty in this class, please notify the instructor or contact the Student Honor Court (392-1631) or Cheating Hotline (392-6999). For additional information on Academic Honesty, please refer to the University of Florida Academic Honesty Guidelines at:

<http://www.dso.ufl.edu/judicial/procedures/academicguide.html>.

## Accommodations for Students with Disabilities:

Students with disabilities who require accommodations should seek assistance at the Disability Resource Center (DRC) (<https://disability.ufl.edu/>), who will work with the student and instructor to arrange testing accommodations. If you have approved accommodations, testing arrangements must be made through the DRC. The instructor will not be able to offer extended testing times or other accommodations in the regular classroom.

## Counseling Center:

Many students experience test anxiety and other stress related problems. "A Self Help Guide for Students" is available through the UF Counseling and Wellness Center at their website:

<https://counseling.ufl.edu/>

## CONTAGEOUS ILLNESSES

In response to highly contagious respiratory illnesses including COVID-19 and influenza, the following recommendations are in place to maintain your learning environment, to enhance the safety of our in-classroom interactions, and to further the health and safety of ourselves, our neighbors, and our loved ones.

- If you are not vaccinated, get vaccinated. Vaccines are readily available and are effective for both COVID-19 and influenza. Visit one.uf for screening / testing and vaccination opportunities.
- If you are sick, stay home. Please call your primary care provider if you are ill and need immediate care or the UF Student Health Care Center at 352-392-1161 to be evaluated.
- Course materials will be provided to you with an excused absence (with a note from a medical provider), and you will be given a reasonable amount of time to make up work.

## **In-Class Recording:**

Students are allowed to record video or audio of class lectures. However, the purposes for which these recordings may be used are strictly controlled. The only allowable purposes are (1) for personal educational use, (2) in connection with a complaint to the university, or (3) as evidence in, or in preparation for, a criminal or civil proceeding. All other purposes are prohibited.

Specifically, students may not publish recorded lectures without the written consent of the instructor. A “class lecture” is an educational presentation intended to inform or teach enrolled students about a particular subject, including any instructor-led discussions that form part of the presentation, and delivered by any instructor hired or appointed by the University, or by a guest instructor, as part of a University of Florida course. A class lecture does not include lab sessions, student presentations, clinical presentations such as patient history, academic exercises involving solely student participation, assessments (quizzes, tests, exams), field trips, private conversations between students in the class or between a student and the faculty or lecturer during a class session. Publication without permission of the instructor is prohibited. To “publish” means to share, transmit, circulate, distribute, or provide access to a recording, regardless of format or medium, to another person (or persons), including but not limited to another student within the same class section. Additionally, a recording, or transcript of a recording, is considered published if it is posted on or uploaded to, in whole or in part, any media platform, including but not limited to social media, book, magazine, newspaper, leaflet, or third party note/tutoring services. A student who publishes a recording without written consent may be subject to a civil cause of action instituted by a person injured by the publication and/or discipline under UF Regulation 4.040 Student Honor Code and Student Conduct Code.

**Course Evaluations:** Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Guidance on how to give feedback in a professional and respectful manner is available at <https://gatorevals.aa.ufl.edu/students/>. Students will be notified when the evaluation period opens, and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via <https://ufl.bluera.com/ufl/>. Summaries of course evaluation results are available to students at <https://gatorevals.aa.ufl.edu/public-results/>.

**Syllabus is subject to change.** While it is very likely that the posted exam and presentation dates will be adhered to, these should be considered tentative ONLY!! Date changes will be announced well in advance.

## Genetics Syllabus, Spring 2025

Dates	Topic	Chapter
1/14, 1/16	Introduction, Mitosis and Meiosis	CH 1/2
1/21	Mendelian Genetics	CH 3
1/23	Extensions of Mendelian Genetics	CH 4
1/28	Extensions of Mendelian Genetics	CH 4
1/30	Finish Material / Review	
2/4	<b><u>Exam I</u></b>	
2/6	Chromosome Mapping	CH 5
2/11	Microbial Genetics	CH 6
2/13	Sex Chromosomes	CH 7
2/18	Chromosome Mutations	CH 8
2/20	DNA, Replication, Recombination	CH 10-12
2/25	DNA, Replication, Recombination	CH 10-12
2/27	Transcription	CH 13
3/4	Finish Material / Review <b>[WRITTEN PAPER REVIEW DUE – See instructions]</b>	
3/6	<b><u>Exam II</u></b>	
3/11	Translation	CH 14
3/13	Mutations and DNA Repair	CH 15
SPRING BREAK 3/17-3/21		

3/25	Regulation of Gene Expression	CH 16,17
3/27	Post Transcriptional Regulation	CH 18
4/1	Epigenetics	CH 19
4/3	Finish Material / Review	
4/8	<b><u>Exam III</u></b>	
4/10	Biotechnology/Genomics	CH 20-21
4/15	Developmental Genetics	CH 23
4/17	Cancer Genetics	CH 24
4/22	Population Genetics / Review [PCR/PRIMER ASSIGNMENT DUE – See Instructions]	CH 26
4/24	<b>No Class - Reading Day</b>	
5/1 10:00am- 11:30am	<b><u>Exam IV – TURL011</u></b>	