

PCB 3063, GENETICS, Fall 2025, SECTION 4608

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Office Hours: Monday 12:00– 2:00 PM.

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Schedule: M,W | Period 3 - 4 (9:35 AM - 11:30 AM). LIT 0109

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 three exams and a class project (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.

Course Resources

A. Textbook – *Concepts of Genetics*, 12th Edition, William S. Klug, Pearson Education, Inc. (publisher), with *MasteringGenetics* online learning system.

One physical copy of 12th and 11th editions each are put on Course Reserves and will be available to loan for 2 hours from Marston Science Library.

B. Online Resources and Electronic Textbook - This course will be participating in the UF All Access program. Login at the following website and Opt-In to receive your required Pearson access code, which will be used to register from within Canvas - <https://www.bsd.ufl.edu/G1CO/IPay1f/start.aspx?>. Follow the UF All Access Student Instructions. Any code obtained outside of UF All Access will not work for the course. When setting up your account, **you must use your Gatorlink (@ufl.edu) email address.**

Next, register for Mastering Genetics using your access code.

1. Sign into Canvas and enter your Canvas course.
2. Do one of the following: Select any Pearson link from any module.
OR Select an Access Pearson link in the Course Navigation.
3. Next, select OpenMyLab and Mastering or a content link.

Never use temporary access because all work will be lost when you purchase Mastering Genetics.

From the You're Done page, select Go to My Courses.

Note: We recommend you **always enter Mastering Genetics through Canvas**. Also, it is recommended that you use **Google Chrome** as your browser and **turn off pop-up blockers** when doing assignments in Mastering to avoid issues.

For help with All Access registration, email: allaccess@bsd.ufl.edu

For help with the Pearson site, contact their Technical Support. Contact information and support hours will be posted on the Canvas webpage for the course.
https://help.pearsoncmg.com/integration/cg/canvas/student/en/content/get_started.htm

C. Course Website (e-Learning) - Class material, including the syllabus, problem sets, exam results, lecture slides, and other assignments and information related to the course will be posted on the course e-Learning site <http://elearning.ufl.edu/>. The course is found under "e-Learning in Canvas". You are responsible for **all** announcements, whether made by email or Canvas inbox and/or posted on the course website for this class. So, please be sure to check into the online course often.

For help with e-Learning, call the UF Computing Help Desk at 352-392-4357, or visit the e-Learning support website: <http://helpdesk.ufl.edu/>

Email Policy:

All email correspondence must be from your ufl.edu account, have your full name in the body of the email, and contain your course and section number in the subject line. Emails not meeting these requirements may not be recognized by my email filters, and thus may not be answered.

Assessments and Grading:

75% Exams (details below)

25% Online assignments (details below)

- Regrades must be requested in writing and be taken within 7 days of return of exam.

- **All make-up exams require a note from the Dean of Students (P202 Peabody Hall).**

- Attendance in class is required, material covered only in lecture may appear on exams.

- Grading will be on a per cent 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/ugrad/current/regulations/info/grades.aspx> for UF's policy for assigning grade points.

Homework Assignments (Pearson Mastering Genetics):

Homework assignments will help you comprehend the material better, compare and contrast the concepts to each other, and apply the knowledge to new situations. Homework assignments may include problems and questions from topics covered earlier in the semester. Homework is assigned online on the Pearson website at least 7 days before the due date and is usually due on Mondays at 12:00 PM. **Three attempts per homework assignment and three attempts** per question are allowed (you will keep the best score). Ten best scores out of 11 will be kept at the end of the semester. **The homework assignments are open-book and working in groups is encouraged.** There is no penalty for using hints or for a second attempt before the due date. A late penalty of 25% per day applies.

Due dates are posted in the individual Modules on Canvas. All assignments must be completed by the stated due date and time for full credit. Once assigned, online assignments are available at all times up until the deadlines. Because they are assigned well ahead of time, documentation of illness or a personal matter must be provided for at least **five of the seven days** of the week of the assignment's deadline. The documentation must be from **the Dean of Student's Office, DSO, or a doctor** for accommodations to be made. A doctor's notice or a letter from the Dean of Students Office stating that the student is recommended to withdraw from a class will not be considered to re-make a homework assignment. The documentation must explicitly state that the student is recommended to re-make the assignment on the missed days.

It is in your best interest to plan to submit all online assignments well ahead of the posted deadlines so that you have time to deal with technical problems should they arise. If there is a technical problem with website access or a particular assignment within CANVAS, you must contact **eLearning technical support and the instructor at least 48 hours prior to the deadline** so appropriate steps can be taken to fix the issue and appropriate extensions can be given, if necessary. Thus, check early that you can access the assignments. **You will not be granted an extension for technical problems if you do not contact the instructor well before the deadline.**

Please note that Mastering grades can take up to a day to transfer to Canvas, so don't panic if you don't see them right away.

Exams:

How many exams will be given? There will be three Unit Exams (each worth 25 % of the final grade) and one cumulative Final Exam (worth 25 % of the final grade). The highest three scores out of the four exams will be counted towards the final grade, and the lowest score dropped at the end

of the semester ($3 \times 25\% = 75\%$ of the final grade).

What will be covered on the exam? The topics covered on each exam are listed in the “XV. Tentative Course Schedule” Section of this syllabus. Each exam will cover material from the assigned reading in the textbook, lectures, pre-lecture assignments, homework, in-class learning activities, and discussions. Practice exams will be posted on eLearning.

What will the format of the exams be? The exams will be in-class, closed-book, paper and scantron, and will last for the whole duration of class. The Unit Exam questions will be a combination of multiple-choice and free-response or numeric questions. The Final Exam will consist of only multiple-choice questions.

How will the exams be graded? Each of the four exams is worth 125 points and will be graded by scantron machines (multiple-choice questions) and by hand (numeric and free-response questions). No curving will be applied to any of the exams. Requests for regrades will only be considered in the period of one week after exam grades are posted.

How do I prepare for the exam? To prepare for the exams, review the assigned textbook chapters and lecture slides, homework, and assignments. Each lecture presentation has the Learning Objectives slide. This slide is your learning guide, which you can use to prepare for the exam.

What is the format of the exams? Paper and scantron. Exam questions include multiple-choice and numerical answer or short-answer response-type questions. Expect exams to require the full 2 hours allotted.

What can I bring to the exams? Bring No2 pencils and a calculator. You may use your scientific calculator during exams if you demonstrate to the proctor that the memory has been cleared. Your belongings must be brought to the front of the class before the exam begins. Please make sure your cell phone is off or on silent. Water bottles are allowed on the floor next to you. Baseball caps are allowed but only if worn backward – with the bill to the back.

What do I do if I missed an exam? If this is the first exam you have missed, you may choose to forfeit this exam. In this case, a score of 0 will be assigned for the missed exam and discarded at the end of the semester if the other three exams are taken. No documentation of illness from a doctor or letter from the Dean of Students Office is required for the first missed exam.

If you wish to make up for this exam, or if you miss a second exam (including the Final Exam), you will need to provide proper documentation from the Dean of Students (DSO) to pro-rate your missed exam.

Both personal matter and illness requires a note from the Dean of Students (P202 Peabody Hall). Any request for a missing-related exam regrade must be submitted by email to the instructor (Dr. Juannan Zhou, juannanzhou@ufl.edu) within five business days of the exam or assignment deadline. If the documentation recommends withdrawing from class, please withdraw from class. A letter recommending withdrawal from class will not be accepted for extending assignment deadlines or exam pro-rating. With proper documentation, you may be allowed to re-make a missed exam or an assignment.

What do I do if I do not have proper documentation for the second missed “unit” exam? You will receive a final grade of 0 for the second exam, which will reflect on your final score.

What do I do if I miss 3 “unit” exams (the first unexcused and two others excused)? You may request a withdrawal or an incomplete (please contact your academic advisor). If your second and third missed Unit Exams are unexcused, you will get a failing grade of E for the course.

What do I do if I miss one unit exam and am unable to attend the Final Exam? First, provide the instructor with proper documentation for missing the Final Exam as soon as possible. Second, consider a makeup Final Exam, withdrawing from the class, or getting an incomplete (please contact your course instructor and your academic advisor). The Final Makeup Exam may be in a closed-book, 2-hour essay format.

What do I do if I miss one “unit” exam and miss the Final Exam without proper documentation? You will receive a final grade of 0 for the Final Exam, which will be reflected in your final score.

To recap, if you have never missed an exam, and are satisfied with your grade, you can skip the final exam (it will be marked as a 0). Make sure that you have taken three exams. Of your four possible exams, your lowest exam score will be dropped. Provide proper documentation if you are in a position to miss a second exam.

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 first seek assistance at the Dean of Students Office of Disability Resources, in Peabody 202 (phone: 352-392-1261). The Dean of Students Office of Disability Resources will work with the instructor to accommodate the student. Please see the University of Florida Disability Resources website for more information at: <http://www.dso.ufl.edu/drp/services/>.

Counseling Center:

Many students experience test anxiety and other stress related problems. "A Self Help Guide for Students" is available through the Counseling Center (301 Peabody Hall, 392-1575) and at their website: <http://www.counsel.ufl.edu/>

Other Information:

Please do not request individual special treatment at the end of the semester; we do not adjust grades for individuals for any reason. Plan to do well on all exams from the beginning of the semester.

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.

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

Tentative Course Schedule, Fall 2025

Week	Lecture	Date	Day of the week	Topic	Book chapter(s)	Subtopics
1	1	8/25/2025	M	Transmission Genetics I	CH 2/3	Genetics Introduction; Mitosis & meiosis; Mendelian genetics: Punnett squares & probability
1	2	8/27/2025	W	Transmission Genetics I	CH 3	Mendelian genetics: Punnett squares & probability,
2	3	9/1/2025	M	No class		
2	4	9/3/2025	W	Transmission Genetics II	CH 4	Extensions of Mendelian genetics.
3	5	9/8/2025	M	Transmission Genetics II	CH4/5	Extensions of Mendelian Genetics; Linkage mapping
3	6	9/10/2025	W	Transmission Genetics II	CH 5	Linkage & mapping in eukaryotes
4	7	9/15/2025	M	Transmission Genetics II	CH 6	Microbial Genetics
4	8	9/17/2025	W	Exam 1		
5		9/22/2025	M	Transmission Genetics III	CH 7	Sex Determination
5	9	9/24/2025	W	Chromosomes	CH 8	Chromosome Variation
6	10	9/29/2025	M	Molecular Genetics I	CH 10-12	DNA: the genetic material; replication & recombination; chromatin structure
6	11	10/1/2025	W	Molecular Genetics I	CH 10-12	DNA: the genetic material; replication & recombination; chromatin structure
7	12	10/6/2025	M	Molecular Genetics II	CH 13	RNA/Transcription
7	13	10/8/2025	W	Molecular Genetics II	CH 14	Translation
8	14	10/13/2025	M	Molecular Genetics II	CH 15	DNA Repair
8	15	10/15/2025	W	Exam 2		
9	16	10/20/2025	M	Molecular Genetics III	CH 16	Regulation of Gene expression: Prokaryotes
9	17	10/22/2025	W	Molecular Genetics III	CH 16	Regulation of Gene expression: Prokaryotes
10		10/27/2025	M	Molecular Genetics IV	CH 17	Regulation of gene expression: eukaryotes
10	18	10/29/2025	W	Molecular Genetics IV	CH 17	Regulation of gene expression: eukaryotes

11	19	11/3/2025	M	Molecular Genetics V	CH 18	Post Transcriptional Regulation
11	20	11/5/2025	W	Molecular Genetics V	CH 19	Epigenetics
12	21	11/10/2025	M	Exam 3		
12	22	11/12/2025	W	Molecular Genetics V	CH 20-22	Biotechnology/Genomics
13	23	11/17/2025	M	Molecular Genetics VI	CH 23	Developmental Genetics
13	24	11/19/2025	W	Molecular Genetics VII	CH 24	Cancer Genetics
14		11/24/2025	M	No class		
14	25	11/26/2025	W	No class		
15	26	12/1/2025	M	Transmission Genetics IV	CH 25	Quantitative Genetics
15	27	12/3/2025	W	Transmission Genetics IV	CH 25/26	Quantitative Genetics & Pop. and Evol. genetics
15	28	12/8/2025	M	Final Exam		