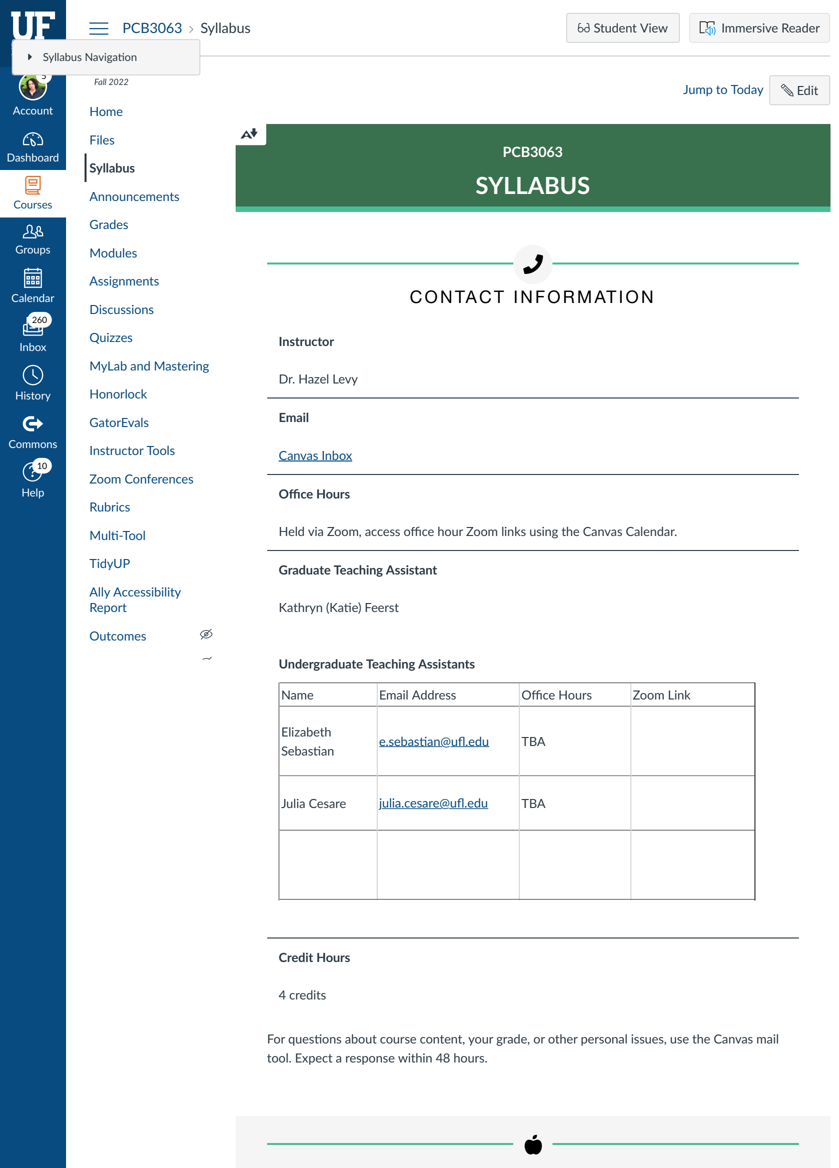

PCB3063

SYLLABUS

CONTACT INFORMATION

Instructor

Dr. Hazel Levy

Email

Canvas Inbox

Office Hours

Held via Zoom, access office hour Zoom links using the Canvas Calendar.

Graduate Teaching Assistant

Kathryn (Katie) Feerst

Undergraduate Teaching Assistants

Name	Email Address	Office Hours	Zoom Link
Elizabeth Sebastian	e.sebastian@ufl.edu	TBA	
Julia Cesare	julia.cesare@ufl.edu	TBA	

Credit Hours

4 credits

For questions about course content, your grade, or other personal issues, use the Canvas mail tool. Expect a response within 48 hours.

COURSE DESCRIPTION

This course will survey chromosome structure and replication, genetic linkage and mapping, regulation of gene expression, epigenetics, genetic mutation, genetics of cancer, and the principles of genetic engineering. Applications of bioinformatics and genetics to modern biological problems are discussed.

COURSE OBJECTIVES

By the end of this course, you will be able to:

1. Describe the historical foundations for the field and discoveries of genetics.
2. Use core knowledge of genetics to critically analyze scientific research literature, and in popular culture and the public discourse.
3. Make connections between research in genetics and quantitative analysis in other natural and social science coursework.
4. Synthesize core knowledge of genetics with current and emerging research in the biological and social sciences.

COURSE REQUIREMENTS

REQUIRED TEXTBOOK

1. Klug, WS, MR Cummings, CA Spencer, MA Palladino, and D Killian. 2019. *Concepts of Genetics*, 12th ed. Pearson, New York.

    Your textbook is provided as an electronic text, which is accessible via MyLab and Mastering in the Canvas menu. Purchase text through UF All Access .

2. Additional course readings may be available on Canvas and via Course Reserves (ARES).

PREREQUISITES

To take this class, students must have taken BSC2011 and BSC2011L (or equivalent) with a minimum grade of C in addition to a general chemistry course.

MINIMUM TECHNOLOGY REQUIREMENTS

The University of Florida expects students entering an online program to acquire computer hardware and software appropriate to his or her degree program. Most computers are capable of meeting the following general requirements. A student's computer configuration should include:

- Webcam
- Microphone
- Broadband connection to the Internet and related equipment (Cable/DSL modem)
- Microsoft Office Suite installed (provided by the university)

Individual colleges may have additional requirements or recommendations, which students should review before the start of their program.

MINIMUM TECHNICAL SKILLS

To complete your tasks in this course, you will need a basic understanding of operating a computer and using word processing, presentation and video-conferencing software.

MATERIALS/SUPPLY FEES

There is no supply fee for this course.

HONORLOCK

Honorlock is an online proctoring service that allows students to take exams on-demand 24/7. There are no scheduling requirements or fees.

You will need a laptop or desktop computer with a webcam, a microphone, and a photo ID. The webcam and microphone can be either integrated or external USB devices.

Honorlock requires that you use the Google Chrome browser, and the Honorlock extension must be added to Chrome.

For further information, FAQs, and technical support, please visit the Honorlock website.

ZOOM

Zoom is an easy-to-use video conferencing service available to all UF students, faculty, and staff that allows for meetings of up to 100 participants. You will need Zoom to interact in groups for some of the assignments in this course.

You can find resources and help using Zoom at the UFIT Zoom website.

COURSE POLICIES

Attendance, Make-Up Exams, and Assignments

Requirements for make-up exams, assignments, and other work in this course are consistent with university policies that can be found on the UF Attendance Policies website. Because most assignments in this class have a long due period of several days over which you can submit your assignment, late work will not be accepted without written documentation excusing you from more than half of the days that the assignment is available. You should submit your assignments *before* the posted final due date/time.

- Late **pre-lecture quizzes** can be submitted for a grade reduction of 10% per day. Starting from the 5th late day, **pre-lecture quizzes** will be worth up to 50% of the original point value, if submitted before the courses reading period begins.
- All other assignments in the class with several days over which you can complete and submit them will not be accepted late.
- No make-up **exams** will be given without prior permission from the instructor, or documentation of illness. Students that will be missing an exam due to a pre-arranged university-approved excused absence (sports, etc.) should let the instructor know a **minimum of two weeks in advance of the exam start date**. Your excused absence will need to cover the entire time that the exam is available, from the exam start date to the final submission date/time.
- In case of illness or personal emergency during the exam window of availability, students must submit documentation to the Dean of Students office (P202 Peabody Hall, dsocares@dso.ufl.edu) and request an instructor notification to be sent. These notes must be received within five business days after the exam. Make up exams may not be multiple choice.

As this is an online class, you are responsible for observing all posted due dates and are encouraged to be self-directed and take responsibility for your learning. Do not wait until the final due date to complete your assignments - this will be at your own risk.

Grade Changes

It is important that you keep up with your grades and review your graded work. Any grade disputes or requests for re-grading, grade changes, etc. must be submitted **within 1 week of receiving the your score** for the assignment/quiz/etc. Requests or disputes submitted past this time period will not be addressed.

Behavior and Communication

Mature and respectful behavior is expected from all members of our class in all interactions with instructors, guest presenters, and other students.

To protect the First Amendment rights of students to speak in class and express their differing views, I ask that you limit your discourse during our class activities to respectful and welcoming tones, behaviors, language, and actions – and whenever possible, use published scientific data to bolster your opinions. I also expect you to be open to opinions, ideas, and scientific data that differ from your own views and beliefs, understanding that all fact-based opinions are welcome in the class and that differing perspectives are valued.

Your email and face-to-face discourse with your TAs and instructor will be polite, professional, and respectful at all times. Make sure your requests of our time are requests, and not demands.

If anyone in our class is abusive or harassing toward you, please bring this to my attention or to your TA's attention, and we will address it with the Student Conduct & Conflict Resolution Office (SCCRO), or you can contact the SCCRO directly. The SCCRO is there to help us, and to protect all students, including students accused of abusive behavior. Working with the SCCRO does not mean a student is necessarily "in trouble." It means that behaviors are disrupting student learning or content delivery, and are beyond my training, capability, or time and labor constraints to address.

You will be asked to self evaluate your work on group projects. Lying or exaggerating about your contribution to the project will be treated as academic dishonesty and may result in getting a zero on the the group assignment. If you do not do your fair share of the group work, you will receive a grade reduction.

GRADING POLICY

Assignments will be graded and feedback given within 7 days after the due date.

ASSIGNMENT GROUPS WEIGHT

Assignment	Weight	Drops*
Pre-lecture Quizzes	10%	1
PlayPosit Lecture Videos	2%	4
Group Activities	10%	0
Group Project Activities	12%	0
Group Project Final Submissions	20%	0
Class Discussions	6%	0
Exams	40%	1

GRADING SCALE

Grades will be assigned based on the following:

Grade	Percentage Range
A	100 - 94.0
A-	< 94.0 - 90.0
B+	< 90.0 - 87.0
B	< 87.0 - 84.0

B-	< 84.0 - 80.0
C+	< 80.0 - 77.0
C	< 77.0 - 74.0
C-	< 74.0 - 70.0
D+	< 70.0 - 67.0
D	< 67.0 - 64.0
D-	< 64.0 - 61.0
F	< 61.0 - 0.0

See the current UF Grading Policies for more information.

UF POLICIES

UNIVERSITY POLICY ON ACCOMMODATING STUDENTS WITH DISABILITIES

Students with disabilities requesting accommodations should first register with the Disability Resource Center (352-392-8565) by providing appropriate documentation. Once registered, students will receive an accommodation letter that must be presented to the instructor when requesting accommodation. Students with disabilities should follow this procedure as early as possible in the semester.

UNIVERSITY POLICY ON ACADEMIC CONDUCT

UF students are bound by The Honor Pledge which states, "We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honesty and integrity by abiding by the Honor Code. On all work submitted for credit by students at the University of Florida, the following pledge is either required or implied: 'On my honor, I have neither given nor received unauthorized aid in doing this assignment.'"

The Student Honor Code and Student Conduct Code specifies a number of behaviors that are in violation of this code and the possible sanctions. Furthermore, you are obligated to report any condition that facilitates academic misconduct to appropriate personnel. If you have any questions or concerns, please consult with the instructor or TAs in this class.

NETIQUETTE AND COMMUNICATION COURTESY

All class members are expected to follow rules of common courtesy in all email messages, threaded discussions, and chats.

GETTING HELP

TECHNICAL DIFFICULTIES

For issues with technical difficulties for Canvas, please contact the UF Help Desk at:

- helpdesk.ufl.edu
- (352) 392-HELP (4357)
- Walk-in: HUB 132

Any requests for make-ups due to technical issues should be accompanied by the ticket number received from the Help Desk when the problem was reported to them. The ticket number will document the time and date of the problem. You should e-mail your instructor within 24 hours of the technical difficulty if you wish to request a make-up.

HEALTH AND WELLNESS

- **U Matter, We Care**: If you or someone you know is in distress, please contact umatter@ufl.edu, 352-392-1575, or visit the U Matter We Care website to refer or report a concern and a team member will reach out to the student in distress.
- **Counseling & Wellness Center:** Visit the UF Counseling & Wellness Center website or call 352-392-1575 for information on crisis services as well as non-crisis services.
- **Student Health Care Center:** Call 352-392-1161 for 24/7 information to help you find the care you need, or visit the UF Student Health Care Center website.
- **University Police Department**: Visit the UF Police Department website or call 352-392-1111 (or 9-1-1 for emergencies).
- **UF Health Shands Emergency Room/Trauma Center:** For immediate medical care in Gainesville, call 352-733-0111, or go to the emergency room at 1515 SW Archer Road, Gainesville, FL 32608; UF Health Shands Emergency Room/Trauma Center website.

ACADEMIC AND STUDENT SUPPORT

- **Career Connections Center:** Career assistance and counseling services. 352-392-1601; UF Career Connections Center website .
- **Library Support:** Various ways to receive assistance with respect to using the libraries or finding resources. UF George A. Smathers Libraries Ask-A-Librarian website
- **Teaching Center:** General study skills and tutoring. 352-392-2010; UF Teaching Center website
- **Writing Studio:** Help brainstorming, formatting, and writing papers. 352-846-1138; University Writing Program Writing Studio website

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 the Providing Constructive Feedback website . 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 the GatorEvals website . Summaries of course evaluation results are available to students at the GatorEvals Public Results website . More information about UF's course evaluation system can be found at the GatorEvals - Faculty Evaluations website .

TIPS FOR SUCCESS

Taking a course online can be a lot of fun! Here are some tips that will help you get the most of this course while taking full advantage of the online format:

- Schedule "class times" for yourself. It is important to do the coursework on time each week. You will receive a reduction in points for work that is turned in late!
- Read ALL of the material contained on this site. There is a lot of helpful information that can save you time and help you meet the objectives of the course.
- Print out the Course Schedule located in the Course Syllabus and check things off as you go.
- Take full advantage of the online discussion boards. Ask for help or clarification of the material if you need it.
- Do not wait to ask questions! Waiting to ask a question might cause you to miss a due date.
- Do your work well before the due dates. Sometimes things happen. If your computer goes down when you are trying to submit an assignment, you'll need time to troubleshoot the problem.
- To be extra safe, back up your work to an external hard drive, thumb drive, or through a cloud service.

PRIVACY AND ACCESSIBILITY POLICIES

For information about the privacy policies of the tools used in this course, see the links below:

- Instructure (Canvas)
    - Instructure Privacy Policy
    - Instructure Accessibility
- Sonic Foundry (Mediasite Streaming Video Player)
    - Sonic Foundry Privacy Policy
    - Sonic Foundry Accessibility
- PlayPosit
    - PlayPosit Privacy Policy
    - PlayPosit Accessibility
- Zoom
    - Zoom Privacy Policy
    - Zoom Accessibility
- YouTube (Google)
    - YouTube (Google) Privacy Policy
    - YouTube (Google) Accessibility
- Microsoft
    - Microsoft Privacy Policy
    - Microsoft Accessibility
- Adobe
    - Adobe Privacy Policy
    - Adobe Accessibility
- Honorlock
    - Honorlock Privacy Policy
    - Honorlock Accessibility

Course Summary:

Date	Details	Due
Mon Aug 29, 2022	Katie (TA) Office Hours	9am to Dec 6 at 4pm
	Orientation Video	due by 11:59pm

Wed Aug 31, 2022	Video: How to Use PlayPosit	due by 11:59pm
Fri Sep 2, 2022	CH 01 Prelecture Assignment	due by 11:59pm
	CH 02 Prelecture Assignment	due by 11:59pm
	Introduction to MasteringGenetics	due by 11:59pm
	Lecture: Cell Division and Gamete Formation	due by 11:59pm
Tue Sep 6, 2022	CH 03 Prelecture Assignment	due by 11:59pm
	CH 04 Prelecture Assignment	due by 11:59pm
Wed Sep 7, 2022	Lecture: Mendel I: Classical Genetics and Modern Refinements	due by 11:59pm
	Lecture: Mendel II: Classical Genetics and Modern Refinements	due by 11:59pm
Thu Sep 8, 2022	Class Discussion: The Language of Genetics	due by 11:59pm
Fri Sep 9, 2022	Submission Quiz: Punnett Squares Quiz	due by 11:59pm
	Group Activity: Punnett Squares Worksheet	due by 11:59pm
Tue Sep 13, 2022	CH 05 Prelecture Assignment	due by 11:59pm
	CH 07 Prelecture Assignment	due by 11:59pm
Wed Sep 14, 2022	Lecture: Morgan I: Chromosomal Theory of Inheritance	due by 11:59pm
	Lecture: Morgan II: Sex Linkage	due by 11:59pm
Fri Sep 16, 2022	Submission Quiz: Gene Mapping	due by 11:59pm
	Group Activity: Gene Mapping	due by 11:59pm
Tue Sep 20, 2022	CH 08 Prelecture Assignment	due by 11:59pm
	CH 09 Prelecture Assignment	due by 11:59pm
Wed Sep 21, 2022	Lecture: Chromosomal Variations and Cytoplasmic Inheritance	due by 11:59pm
Tue Oct 4, 2022	CH 10 Prelecture Assignment	due by 11:59pm
	CH 11 Prelecture Assignment	due by 11:59pm
Wed Oct 5, 2022	Lecture: DNA Structure & Replication	due by 11:59pm
Fri Oct 7, 2022	Group Activity: DNA Replication	due by 11:59pm
	Submission Quiz: DNA Replication	due by 11:59pm
Tue Oct 11, 2022	CH 13 Prelecture Assignment	due by 11:59pm

	CH 14 Prelecture Assignment	due by 11:59pm
Wed Oct 12, 2022	Lecture: Transcription	due by 11:59pm
	Lecture: Translation	due by 11:59pm
Fri Oct 14, 2022	Group Activity: Central Dogma	due by 11:59pm
	Submission Quiz: Central Dogma	due by 11:59pm
Tue Oct 18, 2022	CH 15 Prelecture Assignment	due by 11:59pm
	CH 16 Prelecture Assignment	due by 11:59pm
Wed Oct 19, 2022	Lecture: Gene Regulation I, Transcriptional Regulations	due by 11:59pm
Tue Oct 25, 2022	CH 17 Prelecture Assignment	due by 11:59pm
	CH 19 Prelecture Assignment	due by 11:59pm
Wed Oct 26, 2022	Lecture: Gene Regulation II, Posttranscriptional Regulation	due by 11:59pm
Wed Nov 2, 2022	Guest Lecture: Dr. Miro Herrans, Part 1	due by 11:59pm
Tue Nov 8, 2022	CH 26 Prelecture Assignment	due by 11:59pm
Wed Nov 9, 2022	Guest Lecture: Dr. Miro Herrans, Part 2	due by 11:59pm
	Lecture: Population Genetics	due by 11:59pm
Fri Nov 11, 2022	Group Activity: Hardy-Weinberg	due by 11:59pm
	Submission Quiz: Hardy-Weinberg	due by 11:59pm
Tue Nov 15, 2022	CH 20 Prelecture Assignment	due by 11:59pm
	CH 21 Prelecture Assignment	due by 11:59pm
Wed Nov 16, 2022	Guest Lecture: Dr. Miro Herrans, Part 3	due by 11:59pm
	Lecture: Molecular Techniques	due by 11:59pm
Tue Nov 22, 2022	CH 24 Prelecture Assignment	due by 11:59pm
Wed Nov 23, 2022	Lecture: Cancer Genetics	due by 11:59pm
Wed Nov 30, 2022	Lecture: Gene Therapy and Gene Editing	due by 11:59pm
	Class Discussion: Group Ethics Project Submissions	
	Class Discussion: Group Genetics in Medicine Project Submissions	
	Ethics Project Self-Evaluation Survey	
	Exam 1	

- Exam 2
- Exam 3
- Genetics in Medicine Project Self-Evaluation Survey
- Group Activity: Genetics in Medicine Project, Part 3
- Group Activity: Ethics Project Submission
- Group Activity: Ethics Project, Part 1
- Group Activity: Ethics Project, Part 2
- Group Activity: Ethics Project, Part 3
- Group Activity: Genetics in Medicine Project Submission
- Group Activity: Genetics in Medicine Project, Part 1
- Group Activity: Genetics in Medicine Project, Part 2
- PCB3063 Exam 1
- PCB3063 Exam 2
- PCB3063 Exam 3

Submission Quiz: Genetics in Medicine Project, Part 2

Submission Quiz: Genetics in Medicine Project, Part 3

Submission Quiz: Ethics Project, Part 1

Submission Quiz: Ethics Project, Part 2

Submission Quiz: Ethics Project, Part 3

Submission Quiz: Genetics in Medicine Project, Part 1

August 2022

31	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31	1	2	3
4	5	6	7	8	9	10

Assignments are weighted by group:

Group	Weight
PreLecture Quizzes	10%
Lecture Video Playposit	2%
Group Activities	10%
Group Project Activities	12%
Discussions	6%
Group Project Final Submissions	20%
Exams	40%
Total	**100%**