PCB3063 - Genetics

Syllabus for online course

Summer C 2018 semester

I. Class Meetings

The entire course will be conducted online through the course CANVAS website. You can directly access the Canvas login at http://elearning.ufl.edu/

II. Instructors

Instructor: Dr. Michelle Yoo Department of Biology Office Hours: 9:00 am – 11:00 am Thursday (EST) (Canvas conferences) E-mail: <u>ymj@ufl.edu</u>

Teaching Assistants:

Arthur Rudolph Department of Biology Office Hours: TBA E-mail: <u>rudolph3@ufl.edu</u>

Kathryn Totten Department of Biology Office Hours: TBA E-mail: <u>kt2003@ufl.edu</u>

III. Course Description

PCB3063 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 molecular, transmission and evolutionary genetics. The course emphasis will be on problem solving and conceptual synthesis.

Genetics is a **reading-intensive** course with many highly interconnected concepts. Keeping up with reading assignments in the text will assist students in learning the material and attaining greater understanding and higher grades.

Each student is solely responsible for reading and following the instructions, guidelines and schedules in this syllabus. Not having read the information in this syllabus or in instructor announcements will not constitute an excuse for missing an assignment, exam, or other assessment.

IV. E-mail Communication

All e-mail correspondence to course instructors <u>must originate from your ufl.edu account, have your full</u> <u>name in the body of the e-mail, and contain your course and section number in the subject line</u>. E-mails not meeting these requirements may not be recognized by our e-mail filters, and thus may not be answered. For the most timely responses, use the Inbox Tool in Canvas. If you do choose to use email, you MUST follow the directions above.

V. Course Resources

A. Textbook

Genetics: Analysis and Principles, 6th Edition, Robert J. Brooker, McGraw Hill Education (publisher). You do get an e-book with McGraw-Hill *Connect* that is required for the course.

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 McGraw Hill access code, which will be used to register from within Canvas - https://www.bsd.ufl.edu/G1CO/IPay1f/start.aspx?TASK=INCLUDED - Codes can



also be purchased at the bookstore, but at a higher cost. Any code obtained outside of UF All Access will not work for the course. There will be discounted loose-leaf texts available at the bookstore, but only the access code is required.

Next, register for McGraw-Hill Connect using your access code. Log into your Canvas course and click on the McGraw-Hill Connect link in the left navigation area. When setting up your account, **you must use your Gatorlink (@ufl.edu) e-mail address, which will be your username.** Using an e-mail address other than your UFL e-mail address will result in you receiving NO CREDIT for all assignments administered through *Connect*. This cannot be changed after registration; **be sure to register correctly**.

For help with the McGraw Hill site, contact their Technical Support. Contact information and support hours will be posted on the Canvas webpage for the course.

C. Course Website (e-Learning)

Class material including the syllabus, lectures, discussions, problem sets, exam results, some lecture slides, and other information related to the course will be posted on the course e-Learning website (<u>http://elearning.ufl.edu/</u>). The course is found under "e-Learning in Canvas". You are responsible for all announcements made in lecture and/or posted on the course website for this class. For help with e-Learning, call the UF Computing Help Desk at 352-392-4357, or visit <u>http://helpdesk.ufl.edu/</u>.

VI. Online Instruction Information

As part of PCB 3063, you are required to complete online assignments. If at any time you have questions about these assignments, please contact the Online Instructor. Due dates are posted within the individual Modules on Canvas. All assignments must be completed by the stated due date and time for credit. Extensions will NOT be given because of technical or personal issues that occur within 24 hours of the assignment deadline, so be sure to complete assignments early. Deadlines are final times to hit the submit button and work should be completed well before the deadlines. Most assignments will also have a set time limit, so make sure you have time to devote to that assignment before you begin. Even when assignments do not have stated time limits, Canvas will time them out after several hours. Unless otherwise stated, you are expected to work by yourself on the assignments and cheating will not be tolerated (cheating also includes any form of plagiarism). Note that all due dates for assignments are clearly posted on course website and reflect the most up-to-date information.

To facilitate actual discussion, discussion forums will be set up in e-Learning in Canvas. Any questions regarding the lecture material or the online assignments should be posted in the Prulu discussion communication tool, so that your instructors, or your fellow students will be able to provide answers. Don't be shy about asking questions; after all, if you are confused about the material there will almost certainly be other students with the same questions.

Communication with Your Online Instructor

When you have a question about the assignments, check the following sources first to see if it is already answered, **before** e-mailing your Online Instructor:

- Course Syllabus
- e-Learning announcements (this is the primary means that your Online Instructor has to communicate with you in a timely manner)
- e-Learning Prulu Discussion General Posts

If you still cannot find the answer to your questions:

- If it is a question that others might find useful to know the answer to as well, post it in Prulu.
- If it is a question is specific to you (e.g. account or grade specific), e-mail your instructor. Barring unusual circumstances, expect a reply with 24 hours. E-mails and e-Learning Prulu posts are checked at least once per day, but sometimes not more than that.
- If it is a question about the scoring of a specific assignment, please contact the instructor/TA who did the scoring of that assignment.

Deadlines, Technical Issues and Online Exercises:

There are several different types of assignments that students will complete. There are no make-ups available for assignments. Once assigned, assignments are available online 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 for accommodations to be made. It is especially important not to wait until just before the deadlines to complete assignments. A computer problem happening just before the deadline is not a valid excuse for not completing the assignment. If there is a technical problem with accessing the website or a particular assignment within *CANVAS*, you must contact *eLearning* technical support and the online 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 online instructor well before the deadline.)

<u>Repeated for emphasis: technical problems must be reported to the online instructor at least 48 hours</u> <u>prior to the submission deadline, no exceptions!</u> It is in your best interest to plan to submit all assignments well ahead of the posted deadlines so that you have time to deal with technical problems should they arise.

VII. Assessments and Grading

A. Exams

There will be three "unit" exams, but no cumulative "final" exam. Each exam will cover material from video lectures, chapter quizzes, homework, learning activities, the online discussions, and the assigned reading in the textbook.

All exams will be composed of multiple-choice and short-answered questions and will be administered using ProctorU. Each student must make an appointment to take the exam during the times that have

been scheduled for each exam. DO NOT WAIT to sign up for your exam dates/times. The earlier you sign up, the better chance you will have to get your desired testing time. To avoid additional fees, it is important to schedule the 2-hour exams a week in advance. For detailed instructions on how to sign up for exams and about Proctor U go to the "About Proctor U" page in the "Getting Started/Start Here" section on the course website.

ONLY if necessary, exams **MAY** be curved using the following approach: The top 3% of the scores will be averaged, and the difference from 100 percentage points will be added to each exam score.

Exams will be available for review by appointment for one week after each exam date. Exams will **not** be available for review after the semester has ended.

Make-up Exams: No make-up exams will be given since there is a two-day window to take the exams.

*Bring a calculator to exams – graphing calculators CANNOT be used unless the student demonstrates to the proctor that the memory has been cleared.

*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 (refer to section VIII).

B. Comprehension checks

Each module will contain short comprehension checks. These checks will require you to read, watch videos, and/or complete an exercise from the book. You will then answer questions by taking a quiz in CANVAS. You will be graded based on number of questions answered correctly out of total number of questions on the quiz. You will have TWO chances to complete the quiz and will have twenty minutes for each attempt. Your final quiz grade will be the HIGHEST score from the two quiz submissions.

C. Other Learning Activities

Each module will contain learning activities and homework from the publisher's website and/or question/problem sets on Canvas. Some of the Canvas activities may require a file upload of some sort and will be turned in as an assignment in CANVAS. As necessary, some assignments may be graded based on a specific grading rubric for that assignment. Rubrics for assignments are available within the specific assignment on Canvas. It is advisable to look at the rubric prior to submitting your assignment to make sure you have included all of the required information for the assignment.

D. Grading Summary

Assignment	Percent of Grade	Course Totals
Start Here	1%	1%
Weekly Modules	3% each	36%
Exam I	20%	20%
Exam II	24%	24%
Exam III	19%	19%
Course total		100%

May be subject to minor changes at the discretion of the instructor.

All grades will be posted on e-Learning, and it is the responsibility of the student to check their grades on e-Learning to make sure they are accurate. If there is a discrepancy you must let us know within ONE week of the grade being posted on eLearning.

Minimum grade cutoffs are listed below. Because each exam may be curved individually (see section VII-A, above), the scores for the course as a whole will not be curved (i.e. these grade cutoffs will not be lowered) except under extremely rare circumstances (i.e., unless we tell you otherwise these cutoffs will not be lowered, so do not ask). However, these cutoffs will not be raised; in other words, if you receive 90% of the possible points, you are guaranteed to earn an A grade. Final scores will NOT be rounded (i.e., 89.99% is not 90%).

Point Range (%)	Letter Grade
≥ 90.00	А
≥ 86.66	A-
≥ 83.33	B+
≥ 80.00	В
≥ 76.66	B
≥ 73.33	C+
≥ 70	C
≥ 66.66	C-
≥ 63.33	D+
≥ 60	D
≥ 56.66	D-
< 56.66	E

Note that the current UF policy for assigning grade points is available at the following undergraduate catalog web page: <u>https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx</u>.

E. Computing Requirements

In order to participate in online courses, it is the sole responsibility of the student to maintain a functioning and compatible computing system, proper software and a reliable internet connection. Computing/internet connectivity issues will NOT be acceptable excuses for missed deadlines unless they are brought to the attention of the instructor **at least 48 hours prior to the deadline** and accompanied by the ticket number from technical support. See Resources for Technical Support contact information.

Microsoft Office programs are required for many of the assignments; it can be accessed by current UF students through <u>GatorCloud.</u>

F. Special Treatment

Please do not request individual special treatment regarding grading at the end of the semester; **we do not adjust grades for individuals for any reason**. Plan to do well on all exams and other assessments from the beginning of the semester; if you are having difficulty in the class, please let your instructors know *before* the exams rather than after.

VIII. 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). You are expected to review and abide by the University of Florida Academic Honesty Guidelines at: https://catalog.ufl.edu/ugrad/current/advising/info/student-honor-code.aspx#honesty.

Cheating, including plagiarism will result in consequences which many range from a 0 on the assignment to a failing grade for the entire course.

IX. Attendance

Students are expected check the course website regularly for announcements, assignment due dates, and other course related information. Students are to complete all assigned work (quizzes, activities, discussions, and exams) by the due date. Students are strongly encouraged to read the assigned chapters before attempting any of the assignments as this will make it easier to comprehend the material.

X. Time Commitment

The UF College of Liberal Arts and Sciences assumes that each student will devote 3-4 hours per week per credit-hour to each course, including time in lectures and labs. Because PCB 3063 is 4 credits, each student should therefore expect to devote 12-16 hours per week to this course during a regular semester, or 16-21 hours per week during Summer C. A recommended time allocation is below.

Activity	Hours per Week
Lectures/Videos	3-4
Online Exercises	3-4
Textbook Readings	4-5
Review and Study	5-8

If you find yourself spending more than the recommended number of hours per week on average on these activities, discuss this with your course instructor to see if you can refine your study habits. If you find yourself spending less than the recommended number of hours per week on average, you should recognize that you may have difficulty learning and comprehending the material in this time, and this will probably be reflected in poor performance on the various assessments, causing you to receive a lower overall course grade.

XI. Conduct in Class

Please review the "Netiquette guide" for online courses in the "Start here" section on the course website.

XII. Accommodations for Students with Disabilities

Students who will require an accommodation for a disability must contact the Dean of Students Office of Disability Resources, in Peabody 202 (phone: 352-392-1261). Please see the University of Florida Disability Resources website for more information at: <u>http://www.dso.ufl.edu/drc/</u>. Note that the student should provide documentation of a requirement for accommodation **by the second week of classes**. No accommodations are available to students who lack this documentation. It is the policy of the University

of Florida that the student, not the instructor, is responsible for arranging accommodations when needed. Once notification is complete, the Dean of Students Office of Disability Resources will work with the instructor to accommodate the student.

XIII. Counseling Center

Many students experience test anxiety and other stress related problems. "<u>A Self Help Guide for</u> <u>Students</u>" as well as a diverse array of support systems are available through the UF Counseling and Wellness Center (3190 Radio Road, 392-1575, <u>http://www.counsel.ufl.edu/</u>).

XIV. Course Evaluation

To improve the teaching and learning of this important course, students are required to submit a teaching evaluation for each instructor electronically via this website: <u>https://evaluations.ufl.edu/evals/</u>

Evaluations are stored and reported in a completely anonymous manner. Authentication for evaluation submission is only to ensure that only one evaluation is submitted per student per instructor.

XV. Course Schedule

This is a tentative schedule; the dates and coverage of specific topics are subject to change.

Module	Week of	Торіс	Chapter
1	May 14	Introduction and DNA Structure	1, 9
2	May 21	Chromosome Structure	10
2	May 29		11
5	ividy 20	Translation	13
4	June 4	Regulation of Expression in Bacteria	14
		Regulation of Expression in Eukaryotes	15, 16
5	Jun 11	Mutation and DNA repair	19
		Chromosomal changes	8.2 - 8.4
6	June 18	Exam I (June 18 – 20)	
		Mitosis and Meiosis	3, 8.5 – 8.7
	June 25	Summer Break Week	
7	July 2	Mendelian Genetics	2
		Probability, Chi-square test	
8	July 9	Mendelian Extensions	4
		Beyond Mendelian Inheritance	5
9	July 16	Linkage and Mapping	6
		Exam II (July 18 – 20)	
10	July 23	Quantitative Genetics	28
		Population Genetics	27
11	July 30	Population and Evolutionary Genetics	27, 29
12	August 6	Conservation Genetics	PDF
		Exam III (Aug 8 – 10)	