

PCB 3063, GENETICS, SPRING 2014
Periods 3&4
McCarty C, Room 100

SECTION 4462

(4 credits) (SPRING) Transmission genetics: Mendelian inheritance, sex determination, bacterial genetics, biotechnology; Molecular Genetics: Replication, transcription, translation, DNA structure & function, RNA structure & function, gene expression, regulation and development; Evolutionary genetics.

Instructor: Dr. Basma El Yacoubi, Department of Biology

Office Hours: Thursday 12:00 to 1:30 pm, Bartram Hall room 310

Email: PCB3063.2014@gmail.com (**Please do NOT contact me via Sakai**)

Teaching Assistant: Kin-Lan Han (kinhan@ufl.edu) Office hours: Tuesday 7th period, Bartram Hall room 310

Required Textbook: Klug, Cummings, Spencer, & Palladino 2012. Concepts of Genetics, 10th ed. Pearson

COURSE OBJECTIVES:

- To understand the principals of Mendelian genetics and become familiar with problem solving in genetics
- To understand the molecular basis for transcription, translation, replication, and gene regulation and other topics in molecular genetics for both prokaryotes and eukaryotes
- To acquire an appreciation for the impact of molecular genetics (particularly of human) in physiology, evolution, and disease
- To understand basic scientific methods and molecular genetics approaches used in biotechnology (particularly in plant and microbial genetic engineering)

Evaluation of learning:

- Exams will be multiple choice
 - Some exams may require a calculator. You are responsible for providing your own calculator. NO graphing calculators will be allowed. Cell phones are also not an acceptable calculator.
 - You must bring your Gator1 ID to exams.
 - No student will be allowed to start an exam after the first student to complete an exam leaves the classroom
 - Makeup exams will not be given except under exceptional circumstances.
 - Make up exam can be essay type or a blend of essay and multiple choice.
- Assignments can be turned in class or via email at PCB3063.2014@gmail.com
 - Assignments at due on the next class meeting unless stated otherwise.
- Clicker questions will be used in class to monitor learning
 - You will need a TopHat account for this class tophat.com/e/269619 (Course Code 269619) PCB 3063- Spring 2014
- Academic dishonesty will not be tolerated.

Learning will be evaluated based on the following criteria:

100 points each × 3 exams

100 points (brochure)

100 points (assignments)

500 points total

and up to 25 points bonus for attendance and in class questions

Final grades will be based on the following performance standard:

93 - 100 % = A

90 - 92 % = A -

87 - 89 % = B+

83 - 86 % = B

80 - 82 % = B -

77 - 79 % = C+

73 - 76 % = C

70 - 72 % = C -

60 - 69 % = D

Less than 60 % = E

Genetics Syllabus, Spring 2014

	WEEK	TOPIC
1	7-Jan 9-Jan	Transmission Genetics: Intro & Mitosis/Meiosis Chpt 1&2 Transmission Genetics: Mandelian genetics Chpt3
2	14-Jan 16-Jan	Transmission Genetics Chpt4 Transmission Genetics Chpt 5
3	21-Jan 23-Jan	Transmission genetics Chpt 7 Transmission Genetics Chpt 8
4	28-Jan 30-Jan	Transmission Genetics Chpt 9 Bacterial genetics Chpt 6
5	4-Feb 6-Feb	Exam I Review
6	11-Feb 13-Feb	Molecular Genetics: DNA organization, replication Chpt10/11/12 Molecular Genetics: Transcription Chpt13
7	18-Feb 20-Feb	Molecular Genetics: Translation Chpt14 Molecular Genetics: DNA repair Chp15
8	25-Feb 27-Feb	Molecular Genetics: Gene expression and regulation Chpt16-19 Molecular Genetics “ “
9	11-Mar 13-Mar	Molecular Genetics “ “ Molecular Genetics “ “
10	18-Mar 20-Mar	Molecular Genetics Recombinant DNA/Biotechnology Chpt20/21/22 Molecular Genetics “ “
11	25-Mar 27-Mar	Review Exam II
12	1-Apr 3-Apr	Evolutionary Genetics: Chpt23-26 Evolutionary Genetics “ “
13	8-Apr 10-Apr	Evolutionary Genetics “ “ Evolutionary Genetics “ “
14	15-Apr 17-Apr	Brochure Session Review
15	22-Apr 26-Apr	Exam III

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/> You can also meet with Counseling Center staff, and have one-on-one coaching to overcome these challenges and/or diagnose possible learning disabilities. Phone for an appointment.