

PCB 3063, GENETICS, FALL 2015, SECTION 4608

Instructor: Dr. W. Brad Barbazuk, Department of Biology and the UF Genetics Institute
Office hours: TUESDAY 12:00PM-2:00pm, CGRC room 407 2033 Mowry rd. or by appointment (273-8624)

bbarbazuk@ufl.edu

Graduate TAs:

Wenbin Mei, Department of Biology, CGRC room 420

Office hours: FRIDAY 10AM-12PM

wenbin mei wmei@ufl.com

Guanqiao Feng, Department of Biology, CGRC room 420

Office hours: THURSDAY 3PM-5PM

gfeng@ufl.edu

Course website: UF e-learning

Text: Klug, Cummings, Spencer, & Palladino 2015. Concepts of Genetics, 11th ed. Pearson, New York.

Schedule: T,R, periods 3 and 4 (9:35 - 11:30), LIT 0109

Description:

PCB 3063 is an introduction to genetics course covering topics from Mendellian 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).

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.

Grading:

25% Exam I; 25% Exam II; 25% Exam III; 25% Class Project

- Regrades must be requested in writing, and be taken within 7 days of return of exam.
- **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 an essay format.**

- Attendance in class is not required, but 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.

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.

Special pre-exam review sessions:

TBA.

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!! Actual dates will be announced well in advance.

Genetics Syllabus, Fall 2015

Week	Topic	Read:	Suggested Problems	Subtopics
1 8/25 & 8/27	Transmission Genetics I	CH 1,2,3	TBA	Genetics Introduction; mitosis & meiosis; Mendelian genetics: Punnett squares & probability,
2 9/1 & 9/3	Transmission Genetics I Transmission Genetics II	CH 3 CH7	TBA	Mendelian genetics continued Sex Chromosomes
3 9/8 & 9/10	Transmission Genetics III Transmission Genetics IV	CH4 CH 4/5	TBA	Epistasis, lethality, etc.
4 9/15 & 9/17	RECAP Transmission Genetics -	CH 4/5 CH 5/6	TBA	Linkage & mapping in eukaryotes Microbial genetics
5 9/22 & 9/24	Molecular Genetics I	CH 6 CH 8	TBA	Microbial genetics Chromosome Mutations
6 9/29 & 10/1	Exam I Molecular Genetics II	CH 10-12	TBA	EXAM I 9/29 DNA: the genetic material; replication & recombination; chromatin structure
7 10/6 & 10/8	Molecular Genetics III	CH 10-12 CH 15	TBA	DNA: the genetic material; replication & recombination; chromatin structure Gene Mutation
8 10/13 & 10/15	Molecular Genetics IV	CH 13 CH 13/14	TBA	The Genetic code & Transcription Translation
9 10/20 & 10/22	Molecular Genetics V	CH 14 CH 16	TBA	Translation Regulation of gene expression: prokaryotes
10 10/27 & 10/29	Molecular Genetics V EXAM II 10/29	CH 17	TBA	Regulation of gene expression: eukaryotes
11 11/3 & 11/5	Molecular Genetics VI	CH18 CH19	TBA	Developmental genetics Cell Cycle regulation and Cancer
12 11/10 & 11/12	Molecular Genetics VI	CH20 CH21	TBA	Biotechnology Genomics and Proteomics

13 11/17 & 11/19	Molecular Genetics VI	CH22 CH23	TBA	Applications of Genomics Quantitative Genetics
14 11/24 & 11/26	Evolutionary Genetics I UF Thanksgiving Break	CH25		Population and Evolutionary Genetics
15 12/1 & 12/3	Class Project Presentation Class Project Presentation	CLASS PROJECT	TBA	Population genetics Class Project 12/3
16 12/8	Exam III			EXAM III 12/9