

THE UNIVERSITY OF TEXAS AT EL PASO
COLLEGE OF SCIENCE
Department of Biological Sciences

Course #: BIOL 3320 CRN#15720
Course Title: Genetics
Credit Hrs: 3
Term: Fall 2014
Course Meetings & Location: College of Business Administration #323, Mondays & Wednesdays 3:00–4:20 PM
Prerequisite Courses: BIOL 1305-1107; BIOL 1306-1108
Instructor: Eli Greenbaum, Ph.D.
Office Location: Biology 301 (between Classroom & Biosciences Buildings)
Contact Info: Phone # 747-5553; Fax # 747-5808
E-mail address: egreenbaum2@utep.edu
NOTE: **please do NOT email me on Blackboard**
Emergency Contact: (Cell) 785-393-3583 *emergencies only please*
Office Hrs: Mondays and Wednesdays 1:00-3:00 PM, email for other appointment times if necessary
Textbook(s), Materials: Required: Russell, Peter J. 2009. iGenetics: A Molecular Approach. 3rd Edition, **with online resources.** (I highly recommend you buy this book from Amazon) **Make sure that if you buy a used book that it has an unused code for website access, or you will have to pay about \$30 for a new one.**
Course Objectives (Learning Outcomes): At the end of this course, students will understand the nature and functions of hereditary material, with emphasis on the experimental procedures and data that have led to the current concepts in genetics.
Course Activities/Assignments: We will occasionally work on problems during classtime in groups for about 10–15 minutes. Otherwise students are expected to read assigned chapters **before** class, and to practice with problems at the end of the chapters on their own or in study groups outside of class to ensure adequate understanding of the material. Students are expected to bring a calculator to every class, including exams, and for calculation-based problems, work must be shown for full credit.
Assessment of Course Objectives: Students will be assessed on the course objectives from four exams, attendance/punctuality and participation in group problems during classtime, and participation in online course evaluations. Dates of exams are provided in advance (see course schedule below). Classtime group problems can occur without prior warning.
Grading Policy: Each of 4 exams will include multiple choice and matching questions, and short written responses to genetics problems. All four exams will: (1) include two or three bonus questions such that it will be possible to receive a grade of 103%; (2) not be cumulative; and (3) not be curved. **The lowest of the first THREE exams will be dropped; note that the final cannot be dropped, and failure to take the final exam will result in a grade of F.** Each of the three counted exams will be worth 30% of the final grade; failure to bring a undamaged, unfolded green SCANTRON to class on the day of exams will result in a penalty of 5 points to the exam grade. **Ten percent** of the final grade will be assessed from group problems during classtime, attendance/punctuality, participation in online course evaluations, and adherence to the civility and academic integrity statements below. To receive full credit for group problems, **students must show all work.** Final grades for the course will be as follows: 90–103: A; 80–89: B; 70–79: C; 60–69: D; < 60: F. **Please note that I do not provide grades of any kind via email OR phone; students must come to office hours to receive grades if they are not present to get them in class.**

- Make-up Policy: Makeup exams will be offered to students who miss a scheduled exam because of illness, death in the family or university-sponsored activity, **but written documentation must be provided within 2 weeks of the missed exam.** Makeup exams will not conform to the scheduled exam format, and often consist of several essays worth 10–25 points each. There will be no makeup group problems, but with excused absences, missed group problems will be dropped from final grade calculation. **NOTE: Final grades will be submitted within 24 hours after the final exam;** thus, final exam makeups must be completed within 24 hours of the scheduled final exam.
- Extra Credit: Note that with the exception of bonus questions on exams, no extra credit will be given for any assignment at any time during the entire duration of this course.
- Attendance Policy: **Attendance and punctuality are a significant portion of your grade in this course.** Valid excuses for tardiness/missing class include illness, vehicle breakdown, death in the family, or university-sponsored activity, but **all valid excuses must be accompanied by written documentation** to receive credit. Students who miss group problems or exams without written documentation will receive a grade of zero. I will monitor attendance/punctuality on a regular basis throughout the semester.
- Academic Integrity Policy: Because of the opportunity for cheating, bathroom visits during exams are not permitted; students who must leave during the exam for any reason will have their exams graded whether completed or not. **Sharing of calculators or use of calculator features of cell phones during exams/group problems will not be permitted.** The UTEP policy on academic honesty can be found at: <http://academics.utep.edu/Default.aspx?tabid=23785>. All students will be expected to adhere to this policy.
- Civility Statement: I expect all students to be actively engaged in taking notes and class activities during the brief time we meet each week. This means that students should not: (1) converse with classmates during lectures; (2) use cell phones during class (including texting); (3) use laptop computers for any purpose other than note taking; or (4) otherwise disrupt your fellow students from learning and active participation.
- Disability Statement: If you have a disability and need classroom accommodations, please contact The Center for Accommodations and Support Services (CASS) at 747-5148, or by email to cass@utep.edu, or visit their office located in UTEP Union East, Room 106. For additional information, please visit the CASS website at www.sa.utep.edu/cass. Requested accommodations must be made 5 working days before an examination.
- Military Statement: If you are a military student with the potential of being called to military service and/or training during the course of the semester, please contact me within the first two weeks of class to arrange in advance for makeup exams, etc.
- A Note About Dropping the Course: Students are cautioned to consider dropping the course if they are performing poorly **BEFORE** the drop deadline (see below for date). You must drop this class yourself – Dr. Greenbaum will not automatically drop you if you just stop attending. However, Dr. Greenbaum reserves the right to drop you if you register for the course and never show up to class. Also remember that courses may only be repeated a total of 3 times, and a “W” counts as one. After the drop deadline, students must make an appointment to see the Dean of the College of Science, who will generally approve drop requests only under extraordinary circumstances (e.g., hospitalization). Note that if a student has an advisor submit a drop request after the drop deadline without permission from the dean, Dr. Greenbaum will be asked to assign a grade by the registrar, and that grade will be F.
- A Note About Videos: Occasionally I will assign videos for you to watch from websites including CBS News, Youtube, New York Times and other sites with stories relevant to class. If videos don’t load for you on the first attempt, it is the student’s responsibility to try different web browsers to view the videos. If for any reason the website is not working, it is the student’s responsibility to bring this to my attention at least 2 days before a given exam so that I can omit any questions that are related to these videos.

Course Schedule:

	Lecture Schedule	Topic/Exam	Relevant Reading
M	Aug 25	Objectives & Introduction	Chapter 1
W	Aug 27	DNA: basic genetic material	Chapter 2
M	Sep 1	*****LABOR DAY NO CLASS*****	
W	Sep 3	DNA Replication	Chapter 3
M	Sep 8	Gene Function & Structure	Chapter 4
M	Sep 10	Transcription	Chapter 5
M	Sep 15	Translation	Chapter 6
W	Sep 17	EXAM 1	
M	Sep 22	Mutation & Repair	Chapter 7
W	Sep 24	Recombinant DNA I	pp. 170-182 & pp. 221-223
M	Sep 29	Recombinant DNA II	Chapter 10 & pp. 183-194
W	Oct 1	Mendel and Genetics	Chapter 11
M	Oct 6	Allelism, gene expression, etc.	Chapter 13
W	Oct 8	Chromosomes & Inheritance	Chapter 12
M	Oct 13	EXAM 2	
W	Oct 15	Special Topics in Genetics	TBA
M	Oct 20	Population Genetics I	Chapter 21
W	Oct 22	Population Genetics II	Chapter 21
M	Oct 27	Non-Mendelian Inheritance	Chapter 13
W	Oct 29	Evolutionary Genetics I	Chapter 23
F	Oct 31	***** DROP DEADLINE *****	
M	Nov 3	Evolutionary Genetics II	Chapter 23
W	Nov 5	Evolutionary Genetics III	None
M	Nov 10	EXAM 3	
W	Nov 12	Genomics	Chapter 9 & pp. 199-206
M	Nov 17	Genetics of Development	Chapter 19
W	Nov 19	Cancer Genetics	Chapter 20
M	Nov 24	Eukaryote Gene Mapping	Chapter 14
W	Nov 26	Chromosome Mutation	Chapter 16
M	Dec 1	Epigenetics	TBA
W	Dec 3	FINAL EXAM	

NOTE: Dr. Elizabeth Walsh (interim chair, Dept. Biological Sciences) and Dr. Robert Kirken (Dean, College of Science) approved my request to give your final exam on the last day of class, Wednesday, December 3rd. Please note that Dr. Greenbaum will be departing for an official UTEP expedition to Africa shortly after your final exam, and final grades for the course will be submitted to the registrar by Friday December 5th. Requests for a makeup final exam will be given only under extraordinary circumstances, and must be completed by Thursday December 4th.