

GENE (BIOL) 3000 Evolutionary Biology, Spring Semester 2011

Jim Hamrick (JH) and Mike Arnold (MA), Instructors

<u>Instructor</u>	<u>Date</u>	<u>Topic</u>	<u>Reading</u>
JH	Tues, Jan 11	Introduction and Basic Concepts	F&H, Ch. 2
MA	Thurs, Jan 13	History of Evolutionary Thought	F&H, Ch. 2 F&H, Ch. 3, pp. 94-97
JH	Tues, Jan 18	Genetic Variation I	F&H, Ch. 5, pp. 160-166, Ch 6 pp. 169-177
JH	Thurs, Jan 20	Genetic Variation II <i>Quiz</i>	F&H, Ch. 5, pp. 160-166 Ch 9 pp. 319-343
JH	Tues, Jan 25	Genetic Structure I	
JH	Thurs, Jan 27	Genetic Structure II Patterns of Variation <i>Problem Set 1</i>	
JH	Tues, Feb 1	Hardy-Weinberg – Evolutionary Factors: Mutation	F&H, Ch. 6, pp. 177-182, 210-216; Ch 5, pp. 143-160
JH	Thurs, Feb 3	Fitness and Natural Selection I <i>Quiz</i>	F&H, Ch. 6, pp. 186-202; Ch. 9, pp. 344-355
JH	Tues, Feb 8	Natural Selection II	F&H, Ch. 6, pp. 202-210
JH	Thurs, Feb 10	Adaptation <i>Problem Set 2</i>	F&H, Ch 3, Ch 10
JH/MA	Tues, Feb 15	Exam 1	
JH	Thurs, Feb 17	Inbreeding and Mating Systems	F&H, Ch. 7, pp. 264-276
JH	Tues, Feb 22	Genetic Drift	F&H, Ch. 7, pp. 232-264
JH	Thurs, Feb 24	Gene Flow I <i>Quiz</i>	F&H, Ch. 7, pp. 223-232
JH	Tues, Mar 1	Gene Flow II	F&H, Ch. 7, pp. 223-

JH	Thurs, Mar 3	Species Concepts <i>Problem Set 3</i>	F&H, Ch. 16, pp. 605-611 Arnold, Ch. 1
MA	Tues., Mar 8	Speciation I	F&H, Ch. 16
MA	Thurs, Mar 10	Speciation II <i>Quiz & Discussion</i>	F&H, Ch. 16 Arnold, Ch. 3, Pp. 34-54
Mar 14 - 18		SPRING BREAK	
MA	Tues, Mar 22	Phylogenetic History I	F&H, Ch. 4
MA	Thurs, Mar 24	Phylogenetic History II	F&H, Ch. 4
MA/JH	Tues, Mar 29	Exam 2	All material since Exam 1
MA	Thurs, Mar 31	Fossil Record and Extinctions I <i>Quiz & Discussion</i>	F&H, Ch. 18 Arnold, Ch. 4
MA	Tues, Apr 5	Fossil Record/Ext. II	F&H, Ch. 18
MA	Thurs, Apr 7	Biogeography <i>Quiz & Discussion</i>	F&H, Ch. 4 Arnold, Ch. 5, Pp. 82-93
MA	Tues, Apr 12	Biogeography	F&H, Ch. 4
MA	Thurs, Apr 14	Evolution of Interactions <i>Quiz & Discussion</i>	Arnold, Ch. 6
MA	Tues, Apr 19	Molecular Evolution	F&H, Ch. 7
MA	Thurs, Apr 21	Molecular Evolution <i>Quiz & Discussion</i>	F&H, Ch. 7 Arnold, Ch. 7, pp. 123-137
MA	Tues, Apr 26	Human Evolution I	F&H, Ch. 20
MA	Thurs, Apr 28	Human Evolution II Review <i>Quiz & Discussion</i>	F&H, Ch. 20 Arnold, Ch. 9
MA	Tues, May 10	FINAL EXAM 8:00 am – 11:00 am	Room C127 , Davison Life Sciences Building

1) INSTRUCTORS

Dr. Jim Hamrick
2512 Miller Plant Sciences Bldg.
Phone: 542-1826
hamrick@plantbio.uga.edu
Office Hours: by appointment

Dr. Mike Arnold
C-216B, Life Sciences Building
Phone: 542-1407
arnold@plantbio.uga.edu
Office Hours: by appointment

2) TEACHING ASSISTANTS

Emily Peeden
peedener@uga.edu

Mark Fisher
mark.aaron.fisher@gmail.com

Becky Shirk
rshirk@plantbio.uga.edu

3) CLASS TIME AND LOCATION:

9:30-10:45 Tue/Thu; Room C127, Davison Life Sciences Bldg.

In addition, ALL students are required to attend at least one discussion session each week.

4) REQUIRED READING (Available in the University of Georgia Bookstore)

S. Freeman and J. C. Herron. 2007. *Evolutionary Analysis*

J. Weiner. 1995. *The Beak of the Finch: A Story of Evolution in Our Time*, Vintage Books

M. L. Arnold. 2006. *Evolution Through Genetic Exchange*. Oxford University Press.

5) eLC: You are responsible for checking the eLC course, GENE/BIOL 3000, each day for class outlines, for mail, and for supplementary materials.

6) GRADING SYSTEM

25% of Final Grade: Quizzes and problem sets

25% of Final Grade: Exam I; Tues, Feb. 15

25% of Final Grade: Exam II; Tues, Mar. 29

25% of Final Grade: Final Exam; Tues, May 10, 8-11am

No makeup exams will be given. You must document in writing (e.g., an explanatory note from a physician, NOT a generic note from the Health Center), and sign any excuse for an absence, within a week of the missed exam. Without an excused absence, your grade on a missed exam will be zero. Your highest 10 scores on quizzes and problem sets will be counted. If you miss a quiz, that score is one of the quiz grades you will drop.

7) ACADEMIC HONESTY

It is each student's responsibility to be familiar with University policy on academic honesty (read *A Culture of Honesty: Policies and Procedures on Academic Honesty*). See

http://www.uga.edu/honesty/ahpd/culture_honesty.htm. Any evidence of academic dishonesty will be turned over to the Office of the Vice President for Academic Affairs, for consideration and possible action. The minimum penalty for students found guilty of academic dishonesty is a grade of "F" in the course and a note on the student's academic transcript.

8) DISABILITIES

The instructors will be happy to accommodate any documented disabilities. Speak to them early in the semester. Contact Disability Services (542-8710) about requesting accommodations.

9) A FEW WORDS TO THE WISE: Get to class on time; don't leave before class ends; turn off cell phones and pagers during class; don't use laptops during lecture except to take notes for the course.