

**SYLLABUS
GENE (BIOL) 3000**

**Meets Tuesday/Thursdays 11:00 a.m. – 12:15 p.m.
C127 Davison Life Sciences Complex**

1) FACULTY

Dr. Rodney Mauricio	Dr. Daniel Promislow
C224 Davison Life Sciences	C214 Davison Life Sciences
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Office hours: By appointment	Office hours: By appointment

2) TEACHING ASSISTANTS

Ms. Tina Bell	Mr. Philip Berry
C328 Davison Life Sciences	C320 Davison Life Sciences
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3) COURSE DESCRIPTION AND PREREQUISITES

An introduction to biological evolution, from the level of genes to species. The prerequisite for this course is BIOL 1108 or its equivalent. You should have a firm grasp of Mendelian genetics and understand basic concepts of molecular genetics and biochemistry. Since evolutionary biology has a substantial mathematical component, you should feel comfortable with algebra.

4) COURSE OBJECTIVES AND EXPECTED LEARNING OUTCOMES

Evolution is the major organizing principle of all the life sciences. The field of evolutionary biology is an active one, with applications in agriculture, medicine, conservation, computer science, and industry. Darwin's description of evolution by natural selection is one of the key intellectual achievements of humanity and all educated people should understand its basic concepts. The course goals are: to introduce you to the principles of evolutionary biology, including population genetics and macroevolution; to demonstrate the application of evolution to other fields through the use of case studies; to help you understand the mathematical underpinnings of evolution through practice; to have you understand the basic evolutionary forces; and, to appreciate the processes that led to the generation of earth's biodiversity.

5) REQUIRED BOOKS (In bookstore under GENE 3000 and on reserve at Science Library)

Futuyma, D. J. 2005. *Evolution*. Sinauer.
Palumbi, S. 2001. *The Evolution Explosion*. W.W. Norton.
Wells, S. 2003. *The Journey of Man*. Random House.
Zimmer, C. 1998. *At the Water's Edge*. Simon and Schuster.
Weiner, J. 1995. *The Beak of the Finch*. Vintage Books.

6) DISCUSSION SECTIONS

This is a 4 credit course and you are required to attend a weekly one hour section in addition to the lectures. There will be 2 time slots available. Each section will be led by a graduate teaching assistant. These sections are an opportunity for you to ask questions, solve problems and practice exam skills. Sections begin the week of August 27 and will not meet the weeks of Fall or Thanksgiving Break.

7) READINGS

We have put several textbooks on reserve in the library that you might find helpful in explaining concepts that remain unclear from the lectures. The required paperback books are assigned to provide a broader view of evolutionary biology. You should carefully read *The Evolution Explosion* for the first exam, *Journey of Man* for the second exam, *At the Water's Edge* for the third exam and *Beak of the Finch* final exam. Take careful notes as you read and look for connections between the concepts covered in the lectures and the books.

8) EXAMS

We will give 4 exams that will give you the opportunity to demonstrate your understanding of the course material, including the lectures, and readings from the textbook and the paperbacks. Our exams emphasize a conceptual understanding of the course material – not rote memorization and students generally find them challenging. When we grade the exams, we are looking for evidence that you have an understanding of the material; partial credit is not common. **Forming a small study group will help you review the course material and study the subject actively.** We do not use the 90/80/70/65 scale: your final grade is determined only at the end of the semester based on the overall distribution of grades in the class.

9) GRADING POLICY

25% of final grade: exam 1

25% of final grade: exam 2 (cumulative for first half of course)

25% of final grade: exam 3

25% of final grade: final (cumulative for second half of course)

This course is graded on a curve. Therefore, **your final course grade is determined based on the final distribution of all grades in the class, not on any specific grade cut-off.** For example, getting above an 89.45 average does not guarantee an 'A-' grade. We assign final grades using the following guidelines: 'A:' achievement that is outstanding and well above the level necessary to meet course requirements; 'B:' achievement that is above the level necessary to meet course requirements; 'C:' achievement that meets the basic course requirements; 'D:' achievement that is worthy of credit even though it does not fully meet the basic course requirements; 'F:' achievement that fails to satisfy the basic course requirements. We utilize a plus/minus grading system. The final grade distribution in last year's class was: 'A:' 18%; 'A-:' 10%; 'B+:' 14%; 'B:' 18%; 'B-:' 7%; 'C+:' 5%; 'C:' 9%; 'C-:' 4%; 'D:' 11%; 'F:' 4%. Of course, past performance is no guarantee of future results and the distribution of grades this semester may be different from past years.

10) MAKEUP POLICY

No makeup exams will be given under any circumstances. If you have a legitimate excuse for absence, your final grade will be calculated based on the remaining grades. **If you miss more than 1 exam for any reason (legitimate or not), you will be withdrawn from the course.** The faculty has the ultimate discretion as to whether or not you have a legitimate excuse. You must document your excuse in writing **to the faculty** (not a TA) within 1 week of the date of the missed exam (*e.g.*, a detailed note from a physician – not a generic note from the Health Center). You may find it helpful to contact the Office of Student Affairs (201 Holmes-Hunter Academic Building) for assistance in documenting your absence. Without an acceptable written excuse, your grade on a missed exam will be zero.

11) REGRADE POLICY

All exams are graded anonymously by the TA's. We try to grade as quickly and fairly as possible. However, if you believe that a question was graded incorrectly and want it regraded, please submit a signed, written request to the professor within 1 week of receiving the graded exam. The request should detail how you believe the question was graded incorrectly. No exams completed in pencil will be regraded. The professor will regrade the question. Please note: in grading exams, we determine acceptable answers by looking at how the class as a whole answered a question. In this way we can fairly decide what we will accept as a correct answer. Since we have no other exams to compare to in a regrade, the question will be regraded using the faculty member's ideal answer as the standard. **Since it is possible that the new grade for a question will be lower than the original grade, please consider your requests for regrades carefully.** This policy is meant to make regrades as fair as possible to the entire class: it should not deter you from discussing your exam with the TA's or the faculty.

12) FACULTY AND COURSE EVALUATIONS

Student evaluations of the course and faculty will be performed online rather than in class. Online

evaluations should provide you more time to give us thoughtful feedback. The faculty will announce in class the window of time when online evaluations are available. Students will be able to access the evaluation form at <http://eval.franklin.uga.edu/>. Although you will need to login with your UGA MyID, the system is anonymous: your responses are not in any way linked to your identification. **Students who fill out the online evaluation form by the deadline will receive a one-half bonus point added to their final grades.**

13) **DISABILITIES AND LANGUAGE**

We are committed to full inclusion of all students. Students who, by nature of a documented disability, require academic accommodations should contact Dr. Mauricio as soon as possible. Students should speak with Disability Services (542-8719) to discuss the process for requesting accommodations. Since our exams require lengthy essays, if you do not speak English fluently and feel that you require additional time for exams, see Dr. Mauricio.

14) **ACADEMIC HONESTY**

All academic work must meet the standards contained in "A Culture of Honesty." Students are responsible for informing themselves about those standards before performing any academic work.

15) **COURTESIES**

Try to get to lecture on time and do not leave before the lecture ends. If you are late, do not let the door to the lecture hall slam shut – it is loud and distracting. You may feel anonymous in a large lecture hall, but you would be amazed at how much the instructor can see and hear, even those doing crossword puzzles in the back. Please turn off cell phones and silence pagers during class. Although the Davison Building has wireless capabilities, students may not use laptops during lecture except for course-related use.

16) **OFFICE HOURS**

The faculty will have office hours by appointment.

17) **DISCLAIMER**

The course syllabus is a general plan for the course; deviations announced to the class by the instructors may be necessary.