

## Evolution

Instructor: Brice Noonan

Office: 502 Shoemaker

e-mail: [bnoonan@olemiss.edu](mailto:bnoonan@olemiss.edu)

Class time: Tues.-Thurs: 11:00 – 12:15

Office Hrs: T,X: 2:30 – 4:00

Text: Evolution (Futuyma, 3<sup>rd</sup> ed.)

<b>Week 1:</b> Jan 20	<b>Chapter 1:</b> <i>Evolutionary Biology</i>
<b>Week 2:</b> Jan 27	<b>Chapter 2:</b> <i>The Tree of Life</i>
<b>Week 3:</b> Feb 3	<b>Chapter 3:</b> <i>Patterns of Evolution</i>
<b>Week 4:</b> Feb 10	<b>Chapter 4,5:</b> <i>Evolution in the Fossil Record A History of Life on Earth</i>
<b>Week 5:</b> Feb 17	<b>Chapter 6:</b> <i>The Geography of Evolution</i> <b>EXAM 1 Feb 20</b>
<b>Week 6:</b> Feb 24	<b>Chapter 7:</b> <i>The Evolution of Biodiversity</i>
<b>Week 7:</b> Mar 3	<b>Chapter 8,9:</b> <i>The Origin of Genetic Variation Variation</i>
<b>Week 8:</b> Mar 10	<b>SPRING BREAK</b>
<b>Week 9:</b> Mar 17	<b>Chapter 10:</b> <i>Genetic Drift: Evolution at Random</i>
<b>Week 10:</b> Mar 24	<b>Chapter 11:</b> <i>Natural Selection and Adaptation</i> <b>EXAM 2 Mar 27</b>
<b>Week 11:</b> Mar 31	<b>Chapter 12:</b> <i>The Genetical Theory of Natural Selection</i>
<b>Week 12:</b> Apr 7	<b>Chapter 13:</b> <i>Phenotypic Evolution</i>
<b>Week 13:</b> Apr 14	<b>Chapter 14:</b> <i>The Evolution of Life Histories</i>
<b>Week 14:</b> Apr 21	<b>Chapter 17:</b> <i>Species</i>
<b>Week 15:</b> Apr 28	<b>Chapter 18:</b> <i>Speciation</i>
<b>Week 16:</b> Final	<b>FINAL EXAM Tues 6 May at NOON</b>

### Grading:

Exams: 84 total pts.

Quizzes: in class & online (16 total)



**Course Description:**

A study of current evolutionary theory, including systematics, with an examination of macroevolutionary patterns and microevolutionary processes.

This course is designed to present an overview of biological evolution. Students are introduced 1) to the historical context that gave rise to the various questions about order in the natural world to which evolution has proposed answers and the scientific reception of Darwin's ideas about the mechanisms of evolution, 2) to an up-to-date history of life, 3) to current evolutionary theory, and 4) to the ways in which evolutionary biologists go about gathering data to refute or support hypotheses derived from theory. Specific evolutionary studies are used to illustrate the application of theory as a tool for understanding natural systems. Thus, students are expected to become familiar with the conceptual models through which we attempt to understand complex biological systems, the facts upon which those models are based, and the processes through which we discover these facts.

**Make up:**

- Make up Quizzes and Exams are NOT given. The ONLY exception would be if you were admitted to the hospital.
- If you have a documented school function (marching band, game), you will need to provide documentation BEFORE the day of the exam.
- Quizzes are given (unannounced) at the beginning of class. If you come late (after the class has finished) you will not be allowed to take the quiz.

**Students With Disabilities:**

- University policy provides for reasonable accommodations to be made for students with verified disabilities on an individualized and flexible basis as specified under Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990 (ADA).
- SDS provides classroom accommodations to all students on campus who disclose a disability, request accommodations, and who meet eligibility criteria. We do not have specialized programs for specific types of disabilities.
- It is the responsibility of any student with a disability who requests a reasonable accommodation to contact the Office of Student Disability Services (915-7128). SDS will then contact the instructor through the student by means of an Instructor Notification of Classroom Accommodations form.

**Cheating:**

- is a very bad idea. Cheaters will be assigned a 0 for the test in question.

**Disclaimer:**

The instructor retains the right to modify this syllabus during the semester. Students will be notified of modifications through their registered email address on Blackboard.

