In this course, we'll examine several philosophical questions concerning the theory of evolution. What do common ancestry and natural selection mean and how can hypotheses about each be tested? How should the concepts of fitness and adaptation be understood? Are there laws concerning natural selection? How can natural selection cause altruistic behaviors to evolve if altruists are, by definition, less fit than selfish individuals?

Requirements

Attendance in class and participation in discussion are required and will affect your grade. There will be an in-class exam, a final, and two essays on assigned topics, which should each be 4-5 double-spaced pages, hardcopy.

Each week you should email me a question about the readings for that week. Here’s the plan: If your last name begins with a letter between A and K, you should email me a question about the readings that will be discussed on Tuesday; you should get your email to me by 1 pm on Monday. If your last name begins with a letter between L and Z, you should email me a question about the readings that will be discussed on Thursday; you should get your email to me by 1 pm on Wednesday.

Completion of all assignments is a requirement for passing the course.

Grading

Your final grade will be based on your grades on the above requirements, as follows: In-class exam = 20%. First Essay = 20%. Second Essay 20%. Final = 30%. Participation = 10%. Your weekly question about the readings will not be graded, though it is required.

Absences

You are allowed two unexcused absences during the semester, after which each absence will lower your grade. If you must miss class due to illness, religious observation, or some other valid reason, please e-mail prior to your absence; this will count as an excused absence.

Problems

Students are encouraged, in this and all classes, to discuss problems concerning the teaching of this course with the instructor and/or the TA. If students wish to pursue a complaint with someone else, they should contact Jesse Steinberg, Assistant to the Chair, Philosophy Department, 5185 Helen C. White Hall, phone: 263-5162.”

Accommodations
Every student should have an equal opportunity to participate in and benefit from this course. To that end, if you need to make special arrangements for receiving class materials or completing assignments because of a disability, please let me know, and I will work with you and the McBurney Disability Resource Center. You can find information about the McBurney Center on their web site: https://mcburney.wisc.edu/

**Academic Misconduct and Plagiarism**

Academic misconduct in any form - including plagiarizing from a published source or a classmate - will not be tolerated. I take academic integrity violations very seriously. Penalties for such violations will be adjudicated based upon the severity of the offence, and may range from a grade reduction on the assignment to failure of the course. For information about academic integrity and associated University policies see https://www.students.wisc.edu/doso/academic-integrity/.

**Office Hours**

My office hours are W 1:30-3:30, or by appointment, in 5199 Helen C. White Hall.

**Books available at University Bookstore (and on reserve at College Library)**


**Schedule**

*Note: There are two extra class meetings (both on Sunday nights) listed below. These are make-up sessions for two regular class sessions that are cancelled (also indicated below).*

*Note also: Additions to this syllabus may be made as the semester progresses at my discretion. I will notify you of all changes and will update the syllabus on the course’s Desire2Learn dashboard as needed.*

**Week 1. The ABCs of Probability**

**Week 2.1. Central Features of Darwinian Theory**
Week 2.2. The Randomness of Mutation

Week 3.1. Fitness and Probability

Week 3.2. Natural Selection and Drift

Extra Meeting on Sunday September 25 (evening): Review for Exam

Week 4.1: Exam

Weeks 4.2, 5, and 6: Altruism and the Units of Selection Controversy

Week 7.1. First writing assignment due.

Weeks 7 and 8: Are there laws of natural selection?

Week 9.1: Second Writing Assignment Due

Week 9: Adaptationism

Week 10: Testing Specific Adaptive Hypotheses

Week 11, plus extra meeting on Sunday evening November 20: Taxonomy, Species, Common Ancestry, Phylogeny, and Race

Week 12: no class

Weeks 13 and 14: The Epistemology of Common Ancestry and Phylogenetics
David Baum and Stacey Smith (2013). Tree-Thinking - An Introduction to Phylogenetic Biology,
Roberts and Company, Ch. 7.

**Week 15.1:** review for Final

**Week 15.2:** no class

**December 17 (10:05-12:05): Final**