

Philosophy 3334: Philosophy of Biology Spring 2016

Basic Information

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Course Description

This course provides an introduction to the burgeoning field of philosophy of biology. This is a **reading-intensive, discussion-based** course. In other words, students are expected to come to class having read the assigned material, and ready to discuss it. You are not expected to understand everything in the readings, but you are expected to raise questions about what you don't understand, engage in debate and dialog about the material, and raise objections to claims that seem questionable. Rather than sit passively, I want you to **THINK FOR YOURSELF** and **ACTIVELY ENGAGE** with the readings, other students, and the instructor. **You cannot do well in this course without doing the assigned readings.** Although there are no prerequisites, it is an advantage to have *some* background in philosophy and theoretical biology.

To begin, we will examine a range of philosophical questions that arise within the study of evolutionary biology and its application to the human sciences. We'll first discuss questions concerning selection, fitness, adaptationism, and evolutionary explanations. We'll then look at Sociobiology and Evolutionary Psychology with an eye toward thinking about humans and human nature. We will then ask how we can (and should) study human behavior and finally, we will ask if human races exist.

Class Participation

Philosophy is a communal enterprise: the ability to make valuable oral contributions to philosophical discussions can be as important as the ability to write well. Moreover, since the written assignments will force the students to think carefully about very specific topics, participation in class discussion is an important way for students to demonstrate a broader competence with the material than is possible in the papers alone. Evaluation will be based upon the quality, not the quantity, of comments made during class. Students are encouraged to continue class discussions after the class is over, by meeting with me in person, or continuing the discussion over e-mail with me. Of course discussion with each other outside of class is strongly encouraged as well. Students who for any reason have difficulty speaking up in class are especially encouraged to (and must!) pursue these options. It should go without saying that attendance is an absolutely essential component of class participation.

Academic Integrity:

Cheating and plagiarism are, of course, prohibited in this class just as they are in all university classes. They will be taken particularly seriously in this class, and any cases that may arise will be treated in a manner consistent with University policy. These two violations of academic integrity are each defined in the section of the Texas Tech online

official publications titled “Academic Integrity.” Plagiarism is there described as follows: “Plagiarism’ includes, but is not limited to, the appropriation of, buying, receiving as a gift, or obtaining by any means material that is attributable in whole or in part to another source, including words, ideas, illustrations, structure, computer code, other expression and media, and presenting that material as one’s own academic work being offered for credit.” <http://www.depts.ttu.edu/studentconduct/academicinteg.php>

You can find excellent explanations of what specifically constitutes plagiarism as opposed to proper citation, and also tutorials on how to avoid plagiarism at the following websites: <http://www.dartmouth.edu/~writing/sources/>

<http://www.indiana.edu/~wts/pamphlets/plagiarism.shtml> Note: If, at any time, you are at all unclear about what counts as plagiarism, or about whether you are properly citing sources in any of your written work, please just come by and ask me about it. You do not want to be confused or careless about this serious matter.

Grades

The grades will be based on class participation, short essays, a midterm exam, and a final essay.

- Weekly, ‘One-Minute’ Papers (10%): At the end of class on most Thursdays, we will do ‘one-minute’ papers individually. This involves answering two questions: (1) What is the most significant thing you learned this week?; and, (2) What question is uppermost in your mind after the previous two class discussions? These short assignments will help you isolate confusions about the course material and guide my instruction in subsequent class presentations. Each ‘one-minute’ paper (11 total) is worth 1% of your grade and you may miss one without penalty (no extra credit given). Grading is according to a ‘✓’ (done) or ‘Ø’ (not done) rubric. (This assignment must be completed in class, no exceptions).
- Short Essays (30%): Periodically throughout the semester (see due dates marked on the course schedule), you will be asked to write short essays (approximately 1 double-spaced page and absolutely not more than 2 double-spaced pages). These short essays are intended to stimulate you to think independently and creatively about the readings for that week. There will be 6 think pieces in all, and I will drop your lowest think piece score.
- Midterm Exam (30%): There will be one midterm examination on Thursday, March 10th (before spring break). The midterm will be divided into two parts, short answer and essay. The short answer section will test knowledge of important concepts, often by either providing an example to which you must apply the concept or by asking you to supply an example yourself that illustrates the concept. Questions in the essay portion of the exam will test your ability to reconstruct chains of philosophical argumentation, for example, the back-and-forth between two contrasting views. The essay questions may also ask you critically assess ideas or arguments.
- Final Essay (30%): One of the most important skills you can gain from studying philosophy is the ability to make a clearly and cogently argued case for a particular perspective. More details about the criteria for argumentative essays

will be posted on the course website and will be discussed in class. The paper will be due during our scheduled final exam (Tuesday, May 17th). There will be no in-class final.

Rough Grading Scale:

92—100% → A

90—92% → A-

88—90% → B+

82—88% → B

80—82% → B-

78—80% → C+

70—78% → C

65—70% → C-

50—65% → D

0—49% → F

Late Paper Policy

In the absence of a documented excuse, I will subtract 5% per day from assignments submitted after the due date.

Religious holy days: a student who intends to observe a religious holy day should make that intention known in writing to the instructor prior to the absence. A student who is absent for the observance of a religious holy day shall be allowed to take an exam or complete an assignment scheduled for that day within a reasonable time after the absence.

ADA Statement: Any student who, because of a disability, may require special arrangements in order to meet the course requirements should contact the instructor as soon as possible to make any necessary arrangements. Students should present appropriate verification from Student Disability Services during the instructor's office hours. Please note: instructors are not allowed to provide classroom accommodations to a student until appropriate verification from Student Disability Services has been provided. For additional information, please contact Student Disability Services in West Hall or call 806-742-2405.

Required books:

Peter Godfrey-Smith, *Philosophy of Biology*, Princeton University Press, 2014 (PGS)

All other readings will be found on the course website:

<http://joelvelasco.net/teaching/3334>

Rough Course Outline:

Week 1: Introduction, PGS 1

Week 2: Machery, A plea for human nature, Plutynski, Should intelligent design be taught in public school science classrooms?

Week 3: Biological laws and models, PGS 2, Beatty, “The evolutionary contingency thesis.”

Week 4: Natural Selection, PGS 3, Mills and Beatty, “The propensity interpretation of fitness”

Week 5: Adaptation, Construction, Function: PGS4, Ruth Garrett Millikan, “In defense of proper functions.”

Week 6: Individuals + Genes: PGS5, PGS 6

Week 7: Species and the Tree of Life: PGS7, Velasco “Species concepts should not conflict with evolutionary theory, but often do”

Week 8: Evolution and Social Behavior: PGS8, Ruth Garrett Millikan, “What is Behavior?”

Week 9: more on behavior: Paul E. Griffiths, “What is innateness?”, nature vs. nurture

Weeks 10-12: Evolution and the study of humans

Readings from

E.O. Wilson – *Sociobiology*

Sociobiology Study Group of Science for the People

Pinker – *The Blank Slate*

Thornhill and Palmer – *The Natural History of Rape*

Criticisms of all of the above

Hull, Griffiths, and Pinker on Human Nature

Weeks 13-15: Human races

Looking at race from the different approaches of population genetics, systematics, anthropology, and finally philosophy.

Papers by Quayshawn Spencer, Feldman and Lewontin, Noah Rosenberg, Kaplan and Pigluicci, Anthony Appiah, Robin Andreason and possibly others