PHIL 490 - Fall 2014 Instructor: Taylor Davis

Tue / Thurs 12:00-1:15 Email: taylordavis@purdue.edu

BRNG 1230

Philosophy of (Evolutionary) Biology

The aim of this course is to provide a general introduction to the philosophy of biology. However, since most of the philosophical issues arising from biology have something to do with evolutionary theory, this will form our basic focus. After discussing a basic, received view of the theory of natural selection, we will consider ways in which key concepts from this view, such as *adaptation*, *fitness*, *function*, *gene* and *species*, may stand in need of modification or clarification. We will also discuss the debate over the “units” of selection--are they genes, individual organisms, social groups, or all of the above? After these foundational issues have been addressed, we’ll turn to consider how such concepts are used in one area in which evolutionary thinking has proven both especially useful and especially difficult: the study of human social behavior. We’ll compare cultural evolution to genetic evolution, and discuss the role each process is said to play in explaining human cooperation, including those forms of cooperative behavior we typically refer to as “religion” and “morality.”

**Required Texts:**

- *Philosophy of Biology*, by Peter Godfrey-Smith (2013). Princeton University Press.

- *Sex and Death*, by Kim Sterelny and Paul E. Griffiths (1999). University of Chicago Press.

- *Sense and Nonsense: Evolutionary Perspectives on Human Behavior* (2nd Edition), by Kevin N. Laland and Gillian R. Brown (2011). Oxford University Press.

- Additional articles available online:

[*web address still to be determined…*]

**Evaluation:**

Essay 1 (max 8 pages): 0% or 20%

Essay 2 (max 15 pages or 10 pages): 50% or 30%

Final Exam: 40%

Attendance and Participation: 10%

**Office Hours:**

T/Th 1:45-2:45 (or by appt.) – BRNG 7136

**Course Schedule and Readings\***

Overview[[1]](#footnote--1)\*

1) Aug 26th

What is Philosophy of Biology?

2) Aug 28th 1. *Philosophy of Biology*, Chapter 1

2. *Sex & Death*, Chapter 1

What’s Being Explained, and How?

3) Sept 2nd *Philosophy of Biology*, Chapter 2

4) Sept 4th *Philosophy of Biology*, Chapter 3

5) Sept 9th Christopher Stephens, “Selection, Drift and the ‘Forces’ of Evolution”

6) Sept 11th John Beatty, “Fitness: Theoretical Contexts”

The Received View of Evolution

7) Sept 16th *Sex & Death*, Chapter 2

8) Sept 18th *Sex & Death*, Chapter 3

9) Sept 23rd *Sex & Death*, Chapter 4

Adaptation and Function

10) Sept 25th *Philosophy of Biology*, Chapter 4

11) Sept 30th *Sex & Death*, Chapter 10

12) Oct 2nd Robert Cummins, “Neo-Teleology”

13) Oct 7th Tania Lombrozo, “Causal-Explanatory Pluralism”

Individuals and Species

14) Oct 9th *Philosophy of Biology*,Chapter 5

BREAK: No class on Tues, Oct 14th

15) Oct 16th *Philosophy of Biology*, Chapter 7

16) Oct 21st *Sex & Death*, Chapter 9

What are Genes?

17) Oct 23rd *Philosophy of Biology*, Chapter 6

ESSAY #1 DUE

18) Oct 28th *Sex & Death*, Chapter 6

19) Oct 30th *Sex & Death*, Chapter 7

Units of Selection

20) Nov 4th Elisabeth Lloyd, “Unit of Selection”

21) Nov 6th *Sex & Death*, Chapter 8

22) Nov 11th Frank Jackson and Phillip Pettit, “In Defense of Explanatory Ecumenism”

The Evolution of Human Behavior

23) Nov 13th *Sense & Nonsense*, Chapter 2

24) Nov 18th *Sense & Nonsense*, Chapter 3

25) Nov 20th *Sense & Nonsense*, Chapter 5

26) Nov 25th *Sense & Nonsense*, Chapter 6

BREAK: No class on Thurs, Nov 27th

The Evolution of Human Cooperation

27) Dec 2nd *Philosophy of Biology*, Chapter 8

EARLY DEADLINE FOR ESSAY #2

28) Dec 4th Robert Boyd and Peter Richerson, “Solving the Puzzle of Human Cooperation”

29) Dec 9th 1. Ara Norenzayan and Azim Shariff, “The Origin and Evolution of Religious

Prosociality”

2. Nicolas Baumard and Pascal Boyer, “Explaining Moral Religions”

FINAL DEADLINE FOR ESSAY #2

30) Dec 11th Review Session for Final Exam

FINAL EXAM: TBA

**Course Policies:**

**Class Sessions**:

Because this is an advanced and specialized course, it’s designed to be as much like a graduate seminar as possible. This means that I won’t be lecturing much, and class will consist primarily of informal discussion of the content covered in the readings. This gives you, the student, more power to set the agenda for class discussion, and to drive the discussion toward your own questions, concerns and interests. But with great power comes great responsibility…

It will be your responsibility to come to class prepared to drive the conversation. This means, first and foremost, that you must have already done the readings when you arrive. Since I won’t be lecturing about the content of the readings, if you fail to do them before class, you won’t be able to follow what happens during class. Also, I expect you to come to class with questions from the readings already in mind. If you don’t have any questions after doing the readings, then you aren’t reading properly, and you aren’t doing philosophy. Please let me know if it isn’t clear to you how to approach the readings.

It is also your responsibility to participate in class discussions—note that 10% of your final grade is based on participation. However, this does not mean that I’ll be counting the number of questions you ask during each class period. If you miss one or two classes, or if you say nothing for 3 or 4 class periods in a row, I may not even notice. As a result, the participation grade is different from grades for the essays and the final in the following sense: everyone receives full credit (10 percentage points) *by default*. This means that as long as you don’t stand out as someone who’s especially *not* participating, you’ll get full credit. But if you frequently look down at your phone during class, or if you skip class for three straight weeks, then I have a way of enforcing my expectations.

**Essay Assignments:**

The first essay assignment will be optional, but it is especially recommended for non-philosophy majors. Students who have relatively little experience with philosophical writing are advised to do both essays, so that they can distribute their averages across more assignments, and so that they can receive feedback early in the semester about how to approach Essay #2. We will discuss essay writing in more detail during class.

In addition, notice that on the course schedule there are two different deadlines for Essay #2. The early deadline (right after Thanksgiving Break) is for those who would prefer to have their essays returned to them prior to taking the final exam. If you meet that deadline, I will promise to return your paper by the last day of regular classes (Dec 11th), so that you can receive feedback about your writing before the final exam, and so that you can know more about your overall average as you prepare for the final exam.

By contrast, experienced philosophy majors may not need as much feedback on writing, and may benefit more from investing more heavily in a single, final paper. (If you plan to go to grad school, this is how things will work when you get there.) It is up to you to decide whether or not to put all your eggs in one basket, and to skip the first paper. However, I encourage you to consult with me if you have any questions at all about which choice is right for you. I’m happy to help you strategize.

All essays will be due in class *in hardcopy*. Papers submitted electronically won’t be accepted unless you’ve cleared this with me ahead of time, and unless there’s some special reason for doing so. Papers not turned in by the end of class (1:15pm) on the day they are due are LATE. For each day late, 7 points will be deducted.

**Devices**:

I’ll assume that anyone looking at a phone is not participating. Laptop computers will be allowed *only* *for taking notes*. Almost anything you do on you computer other than taking notes will distract you from participating, and, more importantly, will probably distract other people around you. In either case, these are grounds for deducting participation points. If I see people next to you or behind you looking frequently at your computer screen, I’ll start asking questions.

**Emergencies:**

In the event of a major campus emergency, course requirements, deadlines and

grading percentages are subject to change. Information about emergency changes in the course can be obtained by consulting the course website, or, if necessary by contacting me via email or phone. Purdue’s Emergency Procedures Handbook and other important emergency planning information are available online at <http://www.purdue.edu/emergency_preparedness/>

**Plagiarism**:

The internet has made plagiarism an increasingly serious problem at universities around the country, particularly in classes like this one, where papers determine a substantial part of the grade. In order to avoid plagiarizing from a source, both direct quotations *and paraphrases or* *summaries* of material must be acknowledged. When in doubt, *cite your sources*! It is the best way to avoid being accused of plagiarism. Please ask in class if you have any questions about how to properly cite sources. (We will discuss this in more detail when discussing the essay assignments.)

Plagiarism and cheating undermine the integrity of the academic community. When undetected, they give the perpetrator an unfair advantage over students who are graded on the basis of their own work. Accordingly, if you are aware of violations by others, you should bring this to my attention. Not only is this in your own self-interest, but it is also the right thing to do.

There will be zero tolerance for plagiarism in this course. Plagiarized papers will receive a 0, the

student will automatically fail the course, and her name will be given to the university authorities. For more on the Purdue University policy on plagiarism, see the following website:

<http://www.purdue.edu/odos/osrr/academicintegritybrochure.php>

Purdue’s Online Writing Lab is an excellent resource in general, and has some useful guidelines

for the issue of plagiarism in particular:

<http://owl.english.purdue.edu/owl/resource/589/01/>

**A Note about Philosophy on the Internet:**

Internet sources on philosophy can be useful for getting a broad grasp of positions and debates, but when things get more detailed most of these sources are just horrible – sketchy, convoluted, misinformed, and often simply wrong. The essay assignments are not research papers; there is no need to do additional research beyond the content of the assigned readings. But if you wish to consult online resources, use these:

Stanford Encyclopedia of Philosophy <http://plato.stanford.edu/>

The Internet Encyclopedia of Philosophy <http://www.iep.utm.edu/>

Episteme Links <http://www.epistemelinks.com/Main/MainEncy.aspx>

1. \* Subject to revision later in the term. Please ask if you ever have questions about which readings are assigned for which day--other people are probably wondering too. [↑](#footnote-ref--1)