Psychology 339: 
Comparative and Evolutionary Psychology
Fall Semester, 2016

Tuesdays & Thursdays, 2:30 – 3:50. Maxey 302

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Office Hours: Tuesday and Wednesday, 1:00-2:00; and by appointment

Class web page: http://people.whitman.edu/~herbrawt/classes/339/psych339.html

Course Materials
Available at the Bookstore:

Additional Readings:
Additional assigned and optional readings will be available on reserve at Penrose Library or on the course web page.

Course Overview

This seminar considers the field of psychology from an evolutionary perspective. That is, it acknowledges that brains and minds are subject to the same principles of evolution that shape other organs and characteristics. Considering this focus on evolution, we will spend a great deal of time talking about the behavior and mental lives of many non-human species (humans do still figure into the mix, but do not occupy any privileged position). In a sense, the main goal of this class is to fight the rampant anthropocentrism that grips modern psychology. It is my hope that you will gain an expanded appreciation for the breadth and ecological relevance of our field. I also hope that you will come to appreciate that human psychology is no more a complete picture of psychology than myrmecology is a complete picture of biology. I should also mention that while we will discuss animal behavior, this is not a biology course (which I would be woefully under-
qualified to teach). Those of you who may have taken courses in evolution, zoology, and the like will no doubt see their relevance, but these are by no means necessary for you to understand and benefit from comparative psychology. Similarly, those of you who have taken a course on learning or behavior analysis will no doubt see the relevance, even though the focus here is very different. In fact, I see the two as quite complimentary: Comparative psychology focuses on behavioral differences between species, while behaviorism focuses on the universal principles of learning that operate in the same way for everything from humans to fruit flies.

**Grading and Assignments**

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<tr>
<th>Assignment</th>
<th>Percentage</th>
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<tr>
<td>Class Participation</td>
<td>20%</td>
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<tr>
<td>Short writing assignments</td>
<td>20%</td>
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<tr>
<td>Discussion lead</td>
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<tr>
<td>Animal-human interaction paper</td>
<td>20%</td>
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<tr>
<td>Take-home final exam</td>
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**Class Participation:** As this is a seminar, participation is integral to the success of the course. Therefore, 20% of your final grade will be based on regular contribution of meaningful and substantive discussion. It is my hope that readings and discussions will be sufficiently fascinating that discussions will be vigorous, and these points will be quite easily earned.

**Short writing assignments:** Classes will regularly have a short, relatively informal writing assignment (1-2 pages, typed). Some of these will be on an assigned topic, to be distributed at the previous meeting. Others will be considerably more free-form “thought papers”, in which you explore some extension of the day’s topic.

The rationale for these writing assignments is two-fold. First is that our time together is limited and writing gives you a chance to make your ideas more structured and articulate before you get to class. I’m constantly impressed with the quality of ideas that show up in these, and they tend to take discussion to a new level, as well as prevent the occasional lulls and awkward silences that can creep up. The second reason is to encourage you to make the class material relevant. We’ll be discussing some exotic species and bizarre behaviors that you may never ever see. The challenge of the course is to realize that no matter how exotic or bizarre, they’re still relevant to your life and to general psychology.

*Short assignments / Thought papers will be graded on a scale of 0-5:*

5: A meaningful, incisive and concise paper. The topic and conclusion reflect creative and original thought about a relevant topic.

4: An interesting, relevant topic and a conclusion that shows evidence of effort and serious thought, but not as well crafted, or containing some annoying linguistic errors.

3: A good paper, but one which communicates less original thought, or indicates only a superficial application of relevant psychological issues; A kernel of a great topic that just needs a little more work to blossom into a solid paper.
2: A paper which reflects little genuine thought; may be based on a hollow cliché, or unmodified regurgitation of classroom discussions or readings.

1: Unacceptable work. Barely comprehensible, self-contradictory or irrelevant, and/or loaded with grammatical or linguistic errors.

0: A blank sheet of paper, or a rambling tirade filled with disparaging, potentially obscene remarks about specific Whitman faculty.

**Discussion lead:** You will share the role of discussion leader for one class session during the semester. You’ll want to read the assigned readings well in advance of the class period in which you will be discussion leader, to make sure you grasp the content, and to allow sufficient time to make necessary clarifications. As discussion leader, you will (naturally) lead class discussion. But don’t overdo it or get too stressed: you do not have the responsibility of educating the class or of correcting their mistakes. Your goal is simply to make discussion fun, lively, and keep it pointed in a logical direction.

As part of the process, I’d like you to turn in a structured outline/handout of your class plan to me (some also like to hand them out to class members). I will return these to you with comments about the organization and about your performance as discussion leader.

Note that for each of these class periods, there will be 2 articles and 2 discussion leaders. You may coordinate however you like (this will probably depend on the relationship between the contents of the two articles). The simplest scheme would be to split the class period down the middle and switch off at the half-way point. Other options include the “tag team” approach, swapping back and forth regularly. Or with highly interrelated articles, the “blender” method might be the best choice. I’ll leave it up to you.

**Animal-human interaction Paper:** Over the course of the semester, we’ll see many examples of how humans and non-humans mutually affect one another. Given this interaction, an important thing that comparative psychology can contribute to the modern world is consideration for how to best configure and optimize these interactions (for both human and non-human participants). For this assignment, you’ll select a species of animal that is affected by the presence of humans (this could be a domesticated pet, a farm animal, a zoo resident, a denizen of a city-encroached forest, etc.). Formulate a program that fosters natural behaviors and is sensitive to their behavioral and/or psychological world. Doing this will require not only some ingenuity and thought, but also some research on the animal’s current situation, as well as their evolutionary history and natural habitat. These will be due on December 1st. I’ll distribute detailed instructions for these later in the semester.

**Take-home final:** The final exam will be a take-home exam to be completed during finals week. I will distribute the questions on the last day of class, and exams will be due December 13th. The questions will be broadly based, philosophical questions, drawing on major issues covered throughout the semester. As with any take-home exam, these should be typed and well-constructed answers. Responses should be approximately 5 pages (but as always, feel free to deviate from this length guideline as necessary).
**Grading Scale:** Grades will be assigned based on the percentage of all possible points earned (see above for the relative contributions of each assignment). Below are the overall performance ranges that result in various letter grades.

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<tr>
<th>Grade</th>
<th>Percentage Range</th>
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<tr>
<td>A</td>
<td>93-100%</td>
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<tr>
<td>A-</td>
<td>90-92%</td>
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<td>B+</td>
<td>87-89%</td>
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<tr>
<td>B</td>
<td>83-86%</td>
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<tr>
<td>B-</td>
<td>80-82%</td>
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<td>C+</td>
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<td>C</td>
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<td>C-</td>
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<td>D+</td>
<td>67-69%</td>
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<tr>
<td>D</td>
<td>63-66%</td>
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<td>D-</td>
<td>60-62%</td>
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Some important class policies you’ll want to know about:

Late Assignments:

I like to think I’m a reasonable fellow, so I’m not against granting deadline extensions from time to time. Here are my guidelines:

1. Extension requests made 1 week (or more) before the due date are almost certain to be granted, without penalty, provided that
   a) the conflict is a reasonable and legitimate one, and
   b) you haven’t requested an extension for every assignment all semester long.
After all, I didn’t just fall off the turnip wagon yesterday (No, it was years ago. And I’m recovering nicely.)
In short, make your requests as early as possible, but don’t abuse my generosity.

2. Within one week (7 calendar days) of the deadline, extensions may still be granted, subject to the following (no exceptions).
   a) If supported by the Dean of Students, there will be no late penalty.
   b) If not, there will be a penalty of 5% per day (e.g., a score of 96% would become a 91%, then an 86% and so on for each day late).
In other words, plan your semester early. Identify your busy weeks early on and get the “free” version of the extension, rather than losing 5% or more. If you’re unexpectedly abducted by howler monkeys, Dean Cleveland and I will understand. If you simply “forgot” you had 3 papers due tomorrow, we’re less forgiving.

Attendance:

If you have to miss class because of some commitment that can’t be missed, that’s fine. Check with me to make sure you didn’t miss any important announcements, and collect any handouts. Re-read the assigned chapters, and ask me about any questions you might have. I also recommend borrowing class notes from that attractive classmate you’ve been dying to meet. Here’s your opener: “Herbranson doesn’t give out his lecture notes. Can I borrow yours?” From there you’re on your own. Good luck.
Tentative Schedule of Topics and Assignments:

**Part I: Four Theoretical Positions**

**T, 8-30** Introduction to comparative and evolutionary psychology / course mechanics

**Th, 9-1** Two scientific perspectives on animal minds (readings on web page)
Burghardt, G., “Darwin's legacy to comparative psychology and ethology”

**T, 9-6** Two philosophical perspectives on animal minds (readings on web page)
Nagel, T. “What's it like to be a bat?”
Cottingham, J. “A brute to brutes? Descartes treatment of animals”

**Part II: Contemporary Research in the Lab**

**Th, 9-8** Perception and Concepts
Read: Wynne, Chapters 1 - 4

**T, 9-13** Conditioning and Reasoning
Read: Wynne, Chapters 5 - 7

**Th, 9-15** Memory and Social Interactions
Read: Wynne, Chapters 8 - 10

**T, 9-20** Language and Communication
Read: Wynne, Chapters 11 - 13

**Th, 9-22** Catch-up day

**Part III: An Evolutionary Framework**

**T, 9-27** The Selfish Gene, part 1
Read: Dawkins, Chapters 1 - 3

**Th, 9-29** The Selfish Gene, part 2
Read: Dawkins, Chapters 4 - 6

**T, 10-4** The Selfish Gene, part 3
Read: Dawkins, Chapters 7 - 9

**Th, 10-6** No class - October break

**T, 10-11** The Selfish Gene, part 4
Read: Dawkins, Chapters 10 - 13

**Th, 10-13** Catch-up day.
Part IV: Research Outside the Lab  
(all readings in this section are from Sherman & Alcock)

T, 10-18 Explaining complex behavior
Hrdy, S.B., “Infanticide as a Primate Reproductive Strategy” (p. 46-55)
Holmes, W.B. & Sherman, P.W., “Kin Recognition in Animals” (p. 118-127)

Th, 10-20 Levels of explanation in comparative psychology
Holekamp, K.E. & Sherman, P.W., “Why Male Ground Squirrels Disperse” (p. 38-45)
Trut, L.N., “Early Canid Domestication: The Farm-Fox Experiment” (p. 239-248)

T, 10-25 Cheating and honesty
Searcy, W.A. & Nowicki, S. “Bird Song and the Problem of Honest Communication” (p. 312-319)
Presenter:______________________________
Borgia, G. “Why do Bowerbirds Build Bowers?” (p. 233-238)
Presenter:______________________________

Th, 10-27 Quirks of human evolution
Sherman, P.W. & Flaxman, S.M., “Protecting Ourselves from Food” (p. 249-258)
Presenter:______________________________
Provine, R.R., “Yawning” (p. 128-136)
Presenter:______________________________

T, 11-1 Sexual Reproduction
Presenter:______________________________
Eberhard, W.G., “Animal Genitalia and Female Choice” (p. 157-165)
Presenter:______________________________

Th, 11-3 Prosocial behavior
Schoech, S.J., “Physiology of Helping in Florida Scrub-Jays” (p. 275-282)
Presenter:______________________________
Presenter:______________________________
T, 11-8  Sexual Reproduction II
West, P.M., “The Lion’s Mane” (p. 166-175)
Presenter:______________________________

Presenter:______________________________

Th, 11-10 Family Life
Presenter:______________________________

Presenter:______________________________

T, 11-15 Unique Animal Societies
Honeycutt, R.L., “Naked Mole Rats” (p. 107-117)
Presenter:______________________________

Presenter:______________________________

Th, 11-17 My Life as a Turkey

Turkey-Centered Gluttony Break

Part V: Finishing Up

T, 11-29 Present papers;
Interaction papers due

Th, 12-1 Finish papers; Continued Discussion

T, 12-6 Thinking about mental life in animals (readings on web page)
Miedaner, T. “The soul of the Mark III beast”
Miedaner, T. “The soul of Martha, a beast”

Th, 12-8 Finish up / assign take-home final

Finals week: Take-home final due Tuesday, Dec 13th at 11:00 am.
Some not so commonly asked questions...

Q: I hate this! How do I withdraw?
A: Students may drop without record until October 12th. If you plan to do this, please do so as quickly as possible so that others may register. After that, students may withdraw until November 4th, and doing so will leave a nifty “W” on your transcript (I think it’s for Wally, for you to remember me by).

Q: Is attendance required?
A: No, but it is highly recommended. My official policy is that you are the one paying to go to class, so you may attend whenever you deem necessary. Keep in mind though, that you are responsible for any material presented in class. If you will be absent from class, it’s a good idea to borrow notes from somebody to ensure you don’t miss anything important. See the attendance policy on page 6.

Q: I think I’m going to have smallpox on several critical exam dates this semester. Can I schedule makeup exams?
A: Notify me as soon as you realize there will be a serious conflict. Makeup exams can be arranged only for legitimate and properly documented excuses (i.e., serious illnesses, natural disasters and the like, with a corresponding doctor’s note, CNN footage, subpoena, etc.) Note: The season finale of Survivor is not a legitimate excuse. If it’s that important I’d be happy to tape it for you. Also see the late assignment policy on page 5.

Q: Dude, I bombed that first exam... What can I do?
A: I don’t offer extra credit, but keep in mind that the remaining assignments (over 80% of your grade) should provide a good opportunity to correct a rough start.

Q: What were you talking about on Thursday?
A: Please feel free to ask questions during lectures, and let me know if I’m moving too quickly or am not explaining something clearly - It’s difficult for me to know what you’re experiencing in class. I’m also glad to take some time at the beginning of class to clarify points from previous lectures or from the text.