

Advanced Comparative Psychology (Psych 601)

Call Number = XXXXX-X
Winter Quarter 2010 (5 Credits)

Instructor: A.C. DeVries

Class meets Tuesdays and Thursdays 12:30-1:48 pm in XXX, and Thursday from 2:00-2:45 in XXX.

Office Hours: Thursdays and Thursdays 10:00-11:00 and by appointment. Office: PS 51

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Professor's Web Site: <http://www.psy.ohio-state.edu/faculty/devries/>

Course Website: Carmen

The material in the course will be a lecture format. The goal of the course is to learn the principles of comparative psychology and animal behavior. Studies of the behavior of different species in the lab and in the field will be discussed. Topics covered in lecture will include orientation, migration, communication, reproduction, parent-offspring interaction, ontogeny of behavior and social organization. The evolutionary and adaptive significance of the behavior and the physiological adaptations that allow animals to exploit their environment will be emphasized. PowerPoint lectures will be posted on Carmen.

Textbook: Animal Behavior, An Evolutionary Approach 8th Edition, ISBN 0-87893-005-1. Sinauer Associates 2005, by John Alcock.

Additional Required Readings posted in PDF format on Carmen Course Site.

Prerequisite: Psych 313, or by permission of professor based on evidence of other physiology or biology background.

SCHEDULE OF CLASSES

Date	Tentative Topic	Reading
5 Jan	Introduction, aims, requirements, course overview	
7 Jan	Evolution, Natural Selection, LOA	Chapter 1 & Cheverud, 2007.
12 Jan	Levels of Analysis; birdsong	Chapter 2
14 Jan	Development of Behavior, Genes and Environment	Chapter 3 & Keverne et al 2008.
19 Jan	Neural Mechanisms, Effectors and Receptors, Integration-Central Processing	Chapter 4

21 Jan	Hormones and Behavior	Chapter 5 & Nelson chapter, 2006.
26 Jan	Hormones and Behavior cont.	Chapter 5
28 Jan	Predator-Prey Interactions	Chapter 6 & Peckarsky et al., 2008.
2 Feb	Evolution of Feeding Behavior	Chapter 7
4 Feb	*****Exam (40%)*****	
9 Feb	Habitat Selection Paper Outline Due at beginning of Class	Chapter 8
11 Feb	Communication (part 1)	Chapter 9 & Scott-Phillips, 2008.
16 Feb	Communication (part 2)	Chapter 9
18 Feb	Mate Choice	Chapter 10 & Radwan, 2008
23 Feb	Mate Choice and Mating Systems	Chapter 10&11
25 Feb	Mating Systems	Chapter 11 & Dixson et al., 2005
2 March	Parental Investment	Chapters 12
4 March	Social Groups, Inclusive Fitness	Chapter 13 & Bshary & Bergmuller, 2008.
9 March	Social Groups and Evolution of Sociality	Chapter 13
11 March	Summary and Review; paper due (paper worth 20% of grade).	Greenberg et al., 2004.
XX March	*****FINAL EXAMINATION (40%)***** 11:30-1:18 PM	

The exams will include multiple choice, short answer and essay questions. Your final grade will be based on examination scores. The midterm and final exams will be weighted equally and will each be worth 40% of the final grade. The paper will be worth 20% of the final grade. % points: A=90%-100%, B+=85-89%, B=80-84%, C+=79-75%, C=70-74%, D+=65-

69%, D=64-60% and F=<59%). There are no make-up exams; a zero will be assigned as the grade for a missed exam unless a doctor's note is provided. No extra credit will be awarded. Attendance at all lectures is strongly encouraged.

Required Original Paper: A typed, single space paper written in 12 point Arial or New Times Roman font is due at the beginning of class on March 11th. The length should be 3-5 pages (not including references). The literature in comparative psychology is extensive and diverse. It is often necessary to scan many articles quickly and to extract from them the essential message. It is frequently necessary to evaluate methods in order to determine if the claims in the paper are extravagant. Even with careful reviewing, articles are published that may not be tightly reasoned and frequently, alternative explanations for data are not considered. Your term paper should critically examine some problem of current interest in comparative psychology. You have considerable freedom in terms of the approach you use. However, you must use only primary research literature (you can use review articles as points of departure) and you must be critical (exercise careful judgment) in your approach. Wikipedia is not an acceptable source. You might want to examine the development of a particular concept during the past several years by choosing a paper from 10 or so years ago and then picking a very recent paper for comparison. Alternatively, you might pick a controversial topic and examine different points of view based on different scientific methodologies, philosophies or as alternative explanations for similar observations. There is no desire on our part to limit your options; you may be able to think of some other approaches. Do not approach this assignment with the idea that there is something wrong with the papers you read. A critic is one who expresses a reasoned opinion on a matter, involving a judgment of its logical bases, correctness, value or significance. Give the reader sufficient information so that your arguments can be followed and your opinions understood, but do not abstract papers being discussed (i.e., do not write... "Fox and Hound (1985) found X. This was wrong. Cole and colleagues found Y. This was right."). Rather, focus on issues that attract your attention and present a comparative analysis. You might start by reviewing the journals, *Animal Behaviour*, *Physiology & Behavior* or *Biology of Reproduction*. You might also get ideas from your texts, Psychlit, or Medline. Once you find an article of interest, explore its references for other articles of related interest. Use Science Citation Index for determining the researchers who are citing papers of interest to you. The paper is very important to your final grade. Present it in good form, underlining or italicizing scientific names and using the literature citation format of the APA (an APA manual of style will be placed on reserve at the library). We expect all of your arguments to be supported by sufficient references. Your grade on the paper will be based on our assessment of your critical abilities, on the originality of your treatment, your presentation (including grammar, syntax, and spelling), and on the total development of the paper. The T.A. and the instructors will gladly help you with any aspect of your term paper. We expect you to work on this paper during the entire term and our evaluations of the final product will be based on those expectations. Failure to complete the term paper will result in a zero for the assignment (20% of your final grade). A comprehensive outline of your term paper is due in class on February 9th 2010. This typewritten outline should include the thesis of your paper, as well as a list of the major references that you have consulted (approximately 3-5 review papers and 8-12 research papers).

Required Reading: Textbook and articles. The textbook is *An Evolutionary Approach* by John Alcock (Eighth Edition; ISBN 0-87893-005-1) and the articles are provided in PDF format through the Carmen website developed for this course.

Important! If you are having difficulty with any of the material, either in lecture or in the readings, then please see the instructor for help. The instructor is here to facilitate your learning, and that means not only giving lectures, but also consulting with you individually. The quarter is very short, so it is critical to seek assistance as soon as you detect a problem.

Academic Misconduct: All students at The Ohio State University are bound by the Code of Conduct. Violations of this code in this class will be dealt with according to the procedures detailed in that code. Specifically, any alleged cases of misconduct will be referred to the Committee on Academic Misconduct. It is the responsibility of the Committee on Academic Misconduct to investigate or establish procedures for the investigation of all reported cases of student academic misconduct. The term "academic misconduct" includes all forms of student academic misconduct wherever committed; illustrated by, but not limited to, cases of plagiarism and dishonest practices in connection with examinations. Instructors shall report all instances of alleged academic misconduct to the committee (Faculty Rule 3335-5-487). For additional information, see the Code of Student Conduct (http://studentaffairs.osu.edu/info_for_students/csc.asp)."

ACCOMMODATIONS FOR DISABLED STUDENTS

Students with disabilities that have been certified by the Office for Disability Services will be appropriately accommodated, and should inform the instructor as soon as possible of their needs. The Office for Disability Services is located in 150 Pomerene Hall, 1760 Neil Avenue; telephone 292-3307, TDD 292-0901; <http://www.ods.ohio-state.edu/>."