

Evolutionary Psychology and Ethology

(Psychology/Ecology and Evolutionary Biology 370)

Time and Place: Tu-Th (9:40-10:55) HSS 217

Instr: Gordon M. Burghardt (Austin Peay 310A, off: 974-3300, lab: 974-0954, gburghar@utk.edu)

TA: Courtney Stec (Walter's Life Sciences A303, lab: 974-5469, cstec@utk.edu)

Office Hours: Tu. & Th., 11:10 - 12:00 (also by appointment if these times do not work)

BlackBoard: syllabus, readings, assignments, grading, study guides, options, etc.

Textbook and Readings: **(Always bring book and assigned readings to class!)**

(EP) de Braak, Hans van (2013). *Evolutionary Psychology*. Pearson: Harlow, England

(BB) Readings assigned/available on Blackboard

(DAB) *The Discovery of Animal Behavior* six part video series – required one shown in class.

Additional Useful Supplementary Sources

To be added.

(NOTE – Please, no food in class. Also, TURN OFF ALL CELL PHONES OR SWITCH TO VIBRATE, but DO NOT ANSWER, TEXT, etc. during class. If you MUST answer or use the phone, leave the classroom to do so. No use of laptop computers, tablets, or tape recorders in class for note taking. However, you can use electronic devices to refer to the Blackboard reading assignment pdf files during appropriate class discussions and group work. Recent research has shown that written notes facilitate better learning than computer note-taking. Bring a notebook, good writing instruments, and take good notes. Exceptions made only for documented disabilities.

CLASS APPROACH – NOTE CAREFULLY: Much information not in the readings is presented in class. There is considerable discussion in class, including bringing in current news and recent research. Websites and articles may be posted on Blackboard, so it is important to check e-mail regularly for announcements and updates to this syllabus. Some outside speakers will address what I think are interesting and important issues. While some of the reading material will not be discussed in detail in class, clarification questions about the material can always be asked. Quizzes or group projects assuming familiarity with the readings may take place without advance notice. You are expected to tie diverse material together as you think deeply about evolution, behavior, and psychology.

This course supports the Psychology Department and Biology UG program objectives of facilitating scientific inquiry and critical thinking. More specifically, by the end of the course, students should be familiar with the application of evolutionary approaches to studying behavior and be able to evaluate

current research findings, develop hypotheses, and evaluate research methods. The goal is to use scientific reasoning in conjunction with various methods of elucidating the origins, development, function, phenomenology, and evolution of human and animal behavior.

STUDY GUIDES FOR EXAMS AND READINGS: Available on BB about a week before each exam and will guide your review of the readings and in-class presented material. It is your responsibility to take notes, read carefully, look for the major themes and concepts, and ask questions if confused or want to explore a topic further. If classes are missed you will need to obtain notes from other students.

PLEASE CHECK BLACKBOARD (<http://www.online.utk.edu>) FOR ANNOUNCEMENTS, READINGS, SYLLABUS UPGRADES, GRADES, ETC. ON A REGULAR BASIS.

Please be sure that you receive e-mail messages through Blackboard.

I expect that all students will visit me in my office at least once during the semester to discuss some aspect(s) of the course. Please do so by April 1.

Filling out the online SAIS form is now a top administrative priority and I encourage you to do so.

Finally, it is your responsibility to know what constitutes plagiarism and cheating. Either can lead to failing the class, not just losing points. If in doubt as to what these are, please see the instructors.

Course Calendar Note: Required assignments are to be completed **before** the date at which they are listed, and reread with notes and any study guide afterwards. The calendar is updated as necessary.

<u>DATE</u>	<u>TOPIC</u>	<u>ASSIGNMENT</u>
Jan. 8	Introduction	In class surveys
13	The aims of ethological analysis The dawn of the science	BB: FiveAims/Play (pp 231-233) EP: Introduction DAB 1 (in class)
15	Behavior before Darwin and the enduring question of nature and nurture	BB: Ethology/Instinct (pp. 323-331) DAB 2 (in class)
20	Darwin, mental evolution, and the beginnings of the Instinct Wars	EP: Ch. 1 (3-14) DAB 3 (in class)
22	Natural selection, behavior, and the tree of life	EP: Ch.1 (pp 14-24), Ch. 3 (pp. 56-74) BB: Ethology/Instinct (pp.366-369)

27	The behaviorist challenge – conditioning, learning, objectivity	BB: Ethology/Instinct: (pp. 378-384) DAB: 4 (in class)
29	Basic concepts in foundational ethology I	BB: Ethology/Instinct (pp. 331-344, 350-360))
Feb. 3	Basic concepts in foundational ethology II	BB: Ethology/Instinct (pp. 384-391) DAB 5 (in class)
5	Modern applications of evolution to human behavior	EP: Ch. 2 Study guide 1
10	Exam 1	
12	Introducing sociobiology and sexual selection	EP: Ch. 4 (pp. 89-93) DAB 6 (in class)
17	Communication and experience in birds (C. Stec)	EP: Ch. 9 (pp. 235-240)
19	Guest speaker – Dr. Neil Greenberg: Neurobiology and behavior	EP: Ch. 1 (pp. 24-30), Ch. 8 (pp. 205-215)
24	Courtship and mating	EP: Ch. 4 (pp. 93-115)
26	Parenting behavior and families I	EP: Ch. 5 (pp. 119-130)
Mar. 3	Parenting behavior and families II	EP: Ch. 5 (pp. 131-147)
5	Evolution and sociality	Study guide 2
10	Cooperation and altruism	EP: Ch. 6 (pp. 165-174)
12	Exam 2	
17	SPRING BREAK	
19	SPRING BREAK	

24	Evolution and emotions	EP: Ch. 7 (pp. 176-187)
26	Emotions, brain, and snakes	EP: Ch. 7 (pp. 187-202)
31	Apes, brains and human cognition	EP: Ch. 8 (pp. 216-231)
April 2	Is language inexplicable?	EP: Ch. 9 (pp. 240-258)
7	Culture and evolution	EP: Ch. 10 (pp. 262-273)
9	Gene-culture coevolution	EP: Ch. 10 (273-283)
14	Evolution and behavioral disorders	EP: Ch. 11 Deadline for observational reports
16	Behavioral development and epigenesis	EP: Ch. 12 (pp. 316-327) BB: NeoLamarck?; CondFearSummary
21	The mystery of play and its importance in evolution	EP: Ch. 12 (pp. 327-336) BB: FiveAims/Play Web: Peruse Current Biology Jan. 5 special issue Deadline for outside essays Study guide 3
23	Bringing it all back home	BB: Darwin's Legacy in CP and Ethology BB: Buss on Darwin and EP
30 (Th)	Final Exam (8:00 A.M. -10:00 A.M.)	

EXAMS

All three exams are based on 80 points each and consist of a mix of objective and short essay questions. Only the two best exam grades will count. If an exam is missed for a documented acceptable reason and I am notified in advance, a makeup will be made available.

IN-CLASS EXERCISES, UNANNOUNCED QUIZZES, ATTENDANCE, AND GROUP WORK

These are worth 2-10 points each. Although there is a limit to how many of these points can be accumulated toward your grade, points beyond this limit will be used in borderline situations. Missed in-class exercises or assignments cannot be made up, but more points will be available than the maximum allowed. It is a good idea to not only do assigned readings before class, but answer any relevant study questions at the end of the EP book chapters.

OUTSIDE CLASS EVENTS

Periodically there will be campus events that I will announce as relevant to the class and send out over Blackboard and /or mention in class.. Some of these should be attended and short essays that summarize/critique the event, preferably submitted within two weeks of the event, but no later than April 21. These will be worth 10 points each. Up to 30 points obtained this way count towards your grade. Additional points may help in borderline situations. Details will be also posted on BB.

RESEARCH/PAPERS

You will be expected to write a brief paper based on observations you make on humans or non-human animals on zoos or farms (not pets) testing an hypothesis derived from evolutionary psychology or ethology. This should be no more than 1000 words and included at least one graph or table. More information and a list of suggested topics will be provided on BB. There will be a bonus for papers handed in early. Max points = 40 (not including bonus points).

GRADING

The points that you accumulate over the semester will determine your final grade. A listing of how points will be accumulated and a grading scale will be available on BB.

SPECIAL SERVICES

If you need course adaptations or accommodations because of a documented disability, please contact the Office of Disability Services at 2227 Dunford Hall (telephone/TTY 865-974-6087; e-mailods@utk.edu) ASAP. This will ensure that you are properly registered for services.