

NEW COURSE PROPOSAL

Courses must be submitted by October 15, 2014, and finalized by the end of that fall semester for the next catalog production.

Use YELLOWED areas to enter data.

DATE (*Change if modified and redate file with current date*)

NOVEMBER 19, 2014, 1.26.15, REV 2.11.15

PROGRAM AREA(S)

PSYCHOLOGY

1. Course Information. *[Follow accepted catalog format.]*

Prefix(es) (Add additional prefixes if cross-listed) and **Course No.** **PSY 329**

Title: **ANIMAL BEHAVIOR** **Units:** **4**

X Prerequisites Upper Division standing

☐ Corequisites None

☐ Consent of Instructor Required for Enrollment

Catalog Description (Do not use any symbols): **Explores how animals interact with each other and their environment to solve problems related to survival and reproduction. Emphasizes the mechanisms of solving problems like finding food while not becoming food, reproduction and parental care, when and how animals communicate, navigation over short and long distances, and the tension between cooperation and competition that arises in social living. The class provides perspective on the relationship between organisms and their environment, the neurological and hormonal mechanisms of behavior, the role of learning and cognition, and the origins of human behavior.**

Grading Scheme:

X A-F Grades

☐ Credit/No Credit

☐ Optional (Student Choice)

Repeatability:

☐ Repeatable for a maximum of ☐ units

Total Completions Allowed ☐

☐ Multiple Enrollment in Same Semester

Course Level Information:

X Undergraduate

☐ Post-Baccalaureate/Credential

☐ Graduate

Mode of Instruction/Components (*Hours per Unit are defaulted*).

	Units	Hours per Unit	Default Section Size	Graded Component	CS & HEGIS # (Filled in by the Provost's Office)
Lecture	4	1	40		
Seminar		1			
Laboratory		3			
Activity		2			
Field Studies					
Indep Study					
Other Blank					

Leave the following hours per week areas blank. The hours per week will be filled out for you.

4 hours **lecture** per week

hours per week

2. Course Attributes:

General Education Categories: All courses with GE category notations (including deletions) must be submitted to the GE website: <http://summit.csuci.edu/geapproval>. Upon completion, the GE Committee will forward your documents to the Curriculum Committee for further processing.

A (English Language, Communication, Critical Thinking)

☐ A-1 Oral Communication

☐ A-2 English Writing

☐ A-3 Critical Thinking

B (Mathematics, Sciences & Technology)

- B-1 Physical Sciences
- B-2 Life Sciences – Biology
- B-3 Mathematics – Mathematics and Applications
- B-4 Computers and Information Technology

C (Fine Arts, Literature, Languages & Cultures)

- C-1 Art
- C-2 Literature Courses
- C-3a Language
- C-3b Multicultural

D (Social Perspectives)

E (Human Psychological and Physiological Perspectives)

UDIGE/INTD Interdisciplinary

Meets University Writing Requirement (Graduation Writing Assessment Requirement)

Meets University Language Requirement

American Institutions, Title V Section 40404: ☐ Government ☐ US Constitution ☐ US History

Regarding Exec Order 405, for more information: <http://senate.csuci.edu/comm/curriculum/resources.htm>

Service Learning Course (Approval from the Center for Community Engagement must be received before you can request this course attribute).

Online Course (Answer YES if the course is ALWAYS delivered online).

Lab Fee Request – Lab fee requests should be directed to the Student Fee Committee.

3. Justification and Requirements for the Course. (Make a brief statement to justify the need for the course)

A. Justification: This course explores how animals respond to their environment and each other to aid survival and reproduction. We will emphasize the mechanisms underlying behaviors (biological and developmental) and how evolutionary pressures can change them over time. Our discussion of theory will allow students to evaluate when animal behavior can improve our understanding of human health and behavior, and when not. Students will develop their critical, scientific, and evolutionary thinking on a topic (the behavior of animals) for which it is all too easy to be uncritical. This topic informs neuroscience, ecology, organismal biology, evolution, and the behavior and evolution of humans, thus fitting into a level of analysis that supports other classes. **The 4 credits will be structured as 3 hours of lecture per week and 1 hour of discussion or activity, which will involve some outside of class observations at a local zoo.**

B. Degree Requirement:

- ☐ Requirement for the Major/Minor
- ☒ Elective for the Major/Minor
- ☐ Free Elective

Note: Submit Program Modification if this course changes your program.

4. Student Learning Outcomes. List in numerical order. Please refer to the Curriculum Committee's "Learning Outcomes" guideline for measurable outcomes that reflect elements of Bloom's Taxonomy:

<http://senate.csuci.edu/comm/curriculum/resources.htm>. The committee recommends 4 to 8 student learning outcomes, unless governed by an external agency (e.g., Nursing).

Upon completion of the course, the student will be able to:

- Communicate the benefits, limitations, and ethics of studying animal behavior
- Articulate how the behavior of animals can lead to evolutionary change
- Compare and contrast how different adaptations address common problems across species
- Evaluate claims made about animal behavior encountered in popular media by assessing the scientific evidence
- Apply the methods of animal behavior research to studying new hypothesis
- Design an experiment that would add new evidence to an unresolved issue in animal behavior.

5. Course Content in Outline Form. [Be as brief as possible, but use as much space as necessary]

- Evolutionary theory
- Methods in animal behavior research
- Development of behavior
 - nervous
 - endocrine
 - learning: individual and social
 - cognition: physical and social
- Foraging behavior
- Anti-predator behavior

- Mating systems
 - o parental care
- Navigation
- Communication
- Social Behavior
 - o kinship, cooperation, aggression, play

Does this course content overlap with a course offered in your academic program? Yes ☐ No ☒ X
 If YES, what course(s) and provide a justification of the overlap.

Does this course content overlap a course offered in another academic area? Yes ☒ X No ☐
 If YES, what course(s) and provide a justification of the overlap. Bio 407

Overlapping courses require Chairs' signatures.

Firstly, behavioral ecology and animal behavior are distinct approaches to the very broad topic of the behavior of organisms. I had multiple classes in both, and perhaps that is why the differences stand out to me. If anything, behavioral ecology is a sub-discipline within animal behavior. At the annual meeting of the Animal Behavioral Society, some presentations would count as behavioral ecology, but not all. The same goes for articles published in animal behavior journals. While both behavioral ecology and animal behavior may cover similar topics (e.g., communication), how they do so differs. Behavioral ecology tends to focus on the evolution of behavior, whereas animal behavior places additional focus on the mechanisms of behavior. For example, the textbook used for behavioral ecology includes a chapter on communication which discusses "how natural selection shapes signals." In contrast, one of the books that I am considering (Goodenough et al. 2010) contains two chapters on communication: one on evolution and one on "Channels and Functions" (the one closer to my own research and interests), which emphasizes mechanisms. I would summarize the differences as behavioral ecology focusing on how behaviors came about and my approach to animal behavior as focusing on how behaviors happen in the here and now.

To illustrate the differences, the behavioral ecology class uses observations of animals in a natural setting, whereas I would use a zoo for observations. The natural setting emphasizes the organism in the environment, but the level of detail of behavior one can observe is inherently limited. I study behavior under captive conditions in which I can focus in on mechanisms, but the natural context for the behavior is absent. The difference may seem subtle, but the setting has a huge impact on the methods one uses and the questions one asks. My friends studying chimpanzees in Africa use very different methods than I do studying chimpanzees in captivity. I believe the difference in activities serves as a microcosm of the way the courses present different aspects of behavior.

Secondly, these classes will serve different populations. The behavioral ecology class is for biology majors, and it cannot count toward a psychology major's electives. The class I am proposing will be a psychology major elective, and it will not be cross-listed with biology. Thus, the students who take animal behavior would be ones who would not take behavioral ecology, and vice versa. I have spoken to psychology students since arriving about adding this class, and they have been excited about it. No one mentioned behavioral ecology, so I assume that it is not a resource for psychology majors. I do not see the classes competing for the same students, and any student who takes both (as I did) will obtain a richer understanding of behavior. As I would expect students who do research with me or take a special topics class in my area to have had animal behavior, the class I'm proposing serves as a foundation for more advanced study by psychology majors, in and out of the classroom.

Appended by Blake Gillespie: I discussed this proposal extensively with the proposer and the chair of the Biology Program, since which there is significant overlap between PSY329 and BIOL407. A key issue seemed to be that double majors in Psychology majors seeking a Biology double major may hope to substitute the psychology course for the biology course; the former does not have the pre-reqs that the latter does, which is problematic for allowing substitutions. It was agreed that this was a potential problem, but one for which there is no immediate solution beyond respective chairs agreeing to NOT allow such substitutions. While substantial overlap remains, the proposer has clearly described the differences, and has written a course description that successfully distinguishes the two courses.

6. Cross-listed Courses (Please note each prefix in item No. 1) Beyond three disciplines consult with the Curriculum Committee.

A. List Cross-listed Courses (Signature of Academic Chair(s) of the other academic area(s) is required).

List each cross-listed prefix for the course:

B. Program responsible for staffing: Psychology

7. **References.** [Provide 3 - 5 references]

Goodenough, J., McGuire, B., and Jakob, E. 2010. *Perspectives on Animal Behavior* 3rd Ed. Wiley: New York.

Dugatkin, L.A. 2014. *Principles of Animal Behavior* 3rd Ed. Norton: New York.

Sherman, P.W. and Alcock, J. 2013. *Exploring Animal Behavior: Readings from American Scientist* 6th Ed. Sinauer: Sunderland, MA.

Martin, P. and Bateson, P. 2007. *Measuring Behaviour* 3rd Ed. Cambridge UP: New York.

8. **Tenure Track Faculty Qualified to Teach This Course.**

Matthew Campbell
Beatrice de Oca

9. **Requested Effective Date:**

First semester offered: Spring 2016

10. **New Resources Requested.** Yes ☐ No ☒

If YES, list the resources needed.

A. Computer Needs (data processing, audio visual, broadcasting, other equipment, etc.)

B. Library Needs (streaming media, video hosting, databases, exhibit space, etc.)

C. Facility/Space/Transportation Needs

D. Lab Fee Requested Yes ☐ No ☒ (Lab fee requests should be directed to the Student Fee Committee)

E. Other

11. **Will this new course alter any degree, credential, certificate, or minor in your program?** Yes ☒ No ☐

If, YES attach a program update or program modification form for all programs affected.

Priority deadline for New Minors and Programs: October 1, 2013 of preceding year.

Priority deadline for Course Proposals and Modifications: October 15, 2013, of preceding year.

Last day to submit forms to be considered during the current academic year: April 15th.

Matthew Campbell

October 14, 2014

Proposer of Course (Type in name. Signatures will be collected after Curriculum approval)

Date

Approval Sheet

Program/Course: [REDACTED]

If your course has a General Education Component or involves Center affiliation, the Center will also sign off during the approval process.

Multiple Chair fields are available for cross-listed courses.

The CI program review process includes a report from the respective department/program on its progress toward accessibility requirement compliance. By signing below, I acknowledge the importance of incorporating accessibility in course design.

Program Chair		
Signature		Date
Program Chair		
Signature		Date
Program Chair		
Signature		Date
General Education Chair		
Signature		Date
Center for International Affairs Director		
Signature		Date
Center for Integrative Studies Director		
Signature		Date
Center for Multicultural Engagement Director		
Signature		Date
Center for Civic Engagement Director		
Signature		Date
Curriculum Chair		
Signature		Date
AVP		
Signature		Date