

**SOUTHEAST COMMUNITY COLLEGE
DIVISION OF ARTS AND SCIENCES**

Sciences

Revision Date: 07-01-21

[Syllabus Statements](#)

I. CATALOG DESCRIPTION

Course Number: BIOS2210/PSYC2210
Course Title: Animal Behavior
Prerequisite(s): Suggested BIOS 1010/1400/1410 and/or PSYC 1810; not required.
Catalog Description: This cross-disciplinary biology/psychology course provides a study of how and why animals behave in response to their environments. More specifically, concepts from evolutionary biology, ecology, physiology, psychological neuroscience, learning, and cognition will be addressed. This course provides hands-on opportunities for animal behavior research and community engagement through science outreach. Special emphases will be placed on arthropod behavior and domestic animal behavior.

Credit Hours: 3
Class Hours: 45
Lab Hours: 0
Total Contact Hours: 45

II. COURSE OBJECTIVES: *Course will:*

- A. Introduce animal behavior as a cross-disciplinary, integrative study of why and how animals behave in the ways that they do.
- B. Explore different perspectives and approaches to the researching animal behavior.
- C. Foster a framework for students to engage in the scientific process by relating to organisms that are both familiar and alien to us.

III. STUDENT LEARNING OUTCOMES AND GENERAL EDUCATION LEARNING OUTCOMES

- A. Student Learning Outcomes: *Student will be able to:*
 - 1. Identify and evaluate scientific literature, in order to form their own informed conclusions.
 - 2. Directly engage in the scientific process by designing, implementing, and interpreting their own research question within animal behavior.
 - 3. Explain key concepts in animal behavior through the lens of evolution.
 - 4. Teach themselves and each other about animal behavior.
 - 5. Synthesize animal behavior research with the perspectives and experiences of scientists conducting that research.
 - 6. Develop means of communicating science with diverse audiences.
 - 7. Relate the study of animal behavior to their own lives.
 - 8. Develop an appreciation for the natural world.
 - 9. Learn to provide quality caregiving to their own pets.
- B. General Education Learning Outcomes
 - 1. GELO 1: Oral Communication
 - Outcome: Develop a central idea for presentations.
 - Outcome: Organize information clearly and logically, in an outline format, citing sources when appropriate.
 - Outcome: Assess an audience and situation so as to adapt verbal and nonverbal messages to best meet the needs and expectations of the audience.
 - Outcome: Competently communicate messages – both verbally and nonverbally to a variety of audience types in a variety of situations.

- Outcome: Utilize active and critical listening behaviors.
2. GELO 2: Written Communication
 - Outcome: Comprehend, analyze, and evaluate a given text.
 - Outcome: Develop a focused thesis statement and write with a clear purpose, using relevant examples, claims, and evidence.
 - Outcome: Identify and evaluate evidence from a variety of printed, visual, and electronic sources.
 - Outcome: Use content and style appropriate to a given audience.
 - Outcome: Read and write in mechanically-sound, college-level English.
 3. GELO 3: Critical Thinking and Problem Solving
 - Outcome: Collect, identify, interpret and analyze data.
 - Outcome: Synthesize information to arrive at reasoned solutions to problems.
 - Outcome: Evaluate ideas presented in writing, medical, speech, or artistic presentations.
 - Outcome: Evaluate the validity of arguments, alternatives, data, outcomes, and/or impacts of actions.
 - Outcome: Acquire and integrate knowledge and construct relationships across disciplines.
 4. GELO 5: Analytical, Quantitative, and Scientific Reasoning
 - Outcome: Apply mathematical and scientific methods to solve problems from an array of contexts and everyday situations.
 - Outcome: Understand and create logical arguments supported by quantitative and scientific evidence and communicate those arguments in a variety of formats.
 - Outcome: Effectively develop strategies, algorithms, or experiments (or performing experiments) to better describe the systems or to solve the problems.
 - Outcome: Manipulate formulas, data sets, graphs, tables, etc. in a way to produce a meaningful outcome.
 5. GELO 6: Career and Life Skills
 - Outcome: Employ effective interpersonal and intrapersonal communication skills.
 - Outcome: Use digital technology effectively to access, manage, integrate, evaluate, and present information.
 - Outcome: Develop skills that will support positive and fulfilling relationships with others, with the natural world, and with companion animals.

IV. CONTENT/TOPICAL OUTLINE (*course outline may provide more detailed information*)

- A. Unit 1: Evolution and the Study of Animal Behavior
 1. Ch. 1: An Introduction to Animal Behavior
 2. Ch. 2: The Integrative Study of Animal Behavior
- B. Unit 2: The Proximate Causes of Behavior (“How” Behavior Happens)
 1. Ch. 3: The Developmental and Genetic Bases of Behavior
 2. Ch. 4: The Neural Basis of Behavior
 3. Ch. 5: The Physiological Basis of Behavior
- C. Unit 3: The Ultimate Causes of Behavior (“Why” Behavior Happens), Part I – Survival
 1. Ch. 6: Avoiding Predators and Finding Food
 2. Ch. 7: Territoriality and Migration
- D. Unit 4: The Ultimate Causes of Behavior, Part II – Communication and Reproduction
 1. Ch. 8: Principles of Communication
 2. Ch. 9: Reproductive Behavior
 3. Ch. 10: Mating Systems
- E. Unit 5: The Ultimate Causes of Behavior, Part III – Social Behavior
 1. Ch. 11: Parental Care
 2. Ch. 12: Principles of Social Evolution
 3. Ch. 13: Social Behavior and Sociality

V. INSTRUCTIONAL MATERIALS

A. Required Text(s):

1. Rubenstein, D. & Alcock, J.A. (2018). *Animal Behavior*. 11th edition. Oxford, United Kingdom: Oxford University Press. ISBN: 978-1605355481.
Publisher website: <https://global.oup.com/ushe/product/animal-behavior-9781605355481?cc=us&lang=en>
2. Allaby, M., *Oxford Dictionary of Zoology*, 5th ed., 2020. New York, N.Y.: Oxford University Press. ISBN: 978-0198845089.
3. Colman, A., *Oxford Dictionary of Psychology*, 4th ed., 2015. Oxford, United Kingdom: Oxford University Press. ISBN: 978-0199657681.

B. Other Resources:

1. Provided at no cost to students, will include:
 - a. Selected readings from other textbooks
 - b. Primary literature from the field of animal behavior
 - c. Videos available through YouTube

VI. METHODS OF PRESENTATION/INSTRUCTION

A. Methods of presentation typically include a combination of the following:

1. Class discussion
2. Lecture
3. Student presentations
4. Videos
5. Observations of animal behavior
6. Research studies of animal behavior

VII. METHODS OF EVALUATION

A. Methods of evaluation typically include a combination of the following:

1. Formative assessments:
 - a. Graded class discussions
 - b. Quizzes
2. Cumulative assessments:
 - a. Unit exams
 - b. Unit papers
3. Observational Study of Animal Behavior
 - a. Research paper
 - b. Oral presentation
4. Profile of an animal behavior scientist
 - a. Interview of scientist
 - b. Synthesis of research

B. SCC GRADING SCALE

A+	95-100	C+	75-79	F	59 or less
A	90-94	C	70-74		
B+	85-89	D+	65-69		
B	80-84	D	60-64		

VIII. SPECIFIC COURSE REQUIREMENTS:

- ### A. None