

ANIMAL BEHAVIOR CONCENTRATION - INTERDISCIPLINARY STUDIES MAJOR

Program Co-Director: Dr. Mark Bulmer
Science Complex 4150A
Phone: 410-704-4065
Email: mbulmer@towson.edu

Program Co-Director: Mr. Mark Hendricks
Liberal Arts 2106
Phone: 410-704-8019
Email: mhendricks@towson.edu

The Program

The study of animal behavior has received an increasing amount of attention from the public because of the emphasis placed by zoological parks on behavioral biology and the large number of presentations in the media regarding animal behavior and sociobiology.

The Animal Behavior Concentration is designed to offer a solid foundation in the diverse approaches used to study behavioral biology. The program uses a carefully selected combination of courses in biology and psychology to achieve this goal. In addition, students are required to complete either an independent research project or an internship in order to apply their knowledge in an intensive research experience.

Students who complete the program may be qualified for positions at zoological parks, aquariums and nature centers. In addition, they will have the necessary technical knowledge to pursue a career in freelance writing about animal behavior. However, students who are considering attending graduate school will need to complete additional courses in either biology or psychology. Most of the students currently enrolled in the program are also majoring in either Biology or Psychology.

Students who are considering the Animal Behavior Concentration must meet with one of the program coordinators before declaring Interdisciplinary Studies as a major. Students who are also majoring or minoring in Psychology or Biology should contact the respective co-coordinator: Mark Bulmer (Biological Sciences), Paul Pistell (Psychology).

Requirements

Requirements for the Concentration

The Animal Behavior Concentration requires students to complete 45 units. Students should discuss elective course selections with their adviser.

| Code | Title | Units |
|-------------------------|---|-------|
| Required Courses | | |
| BIOL 200 & 200L | BIOLOGY I: INTRODUCTION TO CELLULAR BIOLOGY AND GENETICS [LECTURE] and BIOLOGY I: INTRODUCTION TO CELLULAR BIOLOGY AND GENETICS [LAB] | 4 |

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|----------------------|---|-----|
| BIOL 206 & 206L | BIOLOGY II: INTRODUCTION TO ECOLOGY AND EVOLUTION [LECTURE] and BIOLOGY II: INTRODUCTION TO ECOLOGY AND EVOLUTION [LAB] | 4 |
| BIOL 207 | GENERAL ZOOLOGY | 4 |
| BIOL 371 | ANIMAL BEHAVIOR | 4 |
| PSYC 101 | INTRODUCTION TO PSYCHOLOGY | 3 |
| PSYC 212 | BEHAVIORAL STATISTICS | 4 |
| PSYC 314 or BIOL 381 | RESEARCH METHODS IN PSYCHOLOGY WRITING IN THE BIOLOGICAL SCIENCES | 3-4 |
| PSYC 460 | ETHOLOGY AND COMPARATIVE PSYCHOLOGY | 3 |

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|------------------------------|--|---|
| Select one of the following: | | 3 |
| BIOL 491 | ELECTIVE IN INDEPENDENT RESEARCH | |
| BIOL 493 | INTERNSHIP IN BIOLOGY | |
| IDIS 495 | INTERNSHIP IN INTERDISCIPLINARY STUDIES | |
| PSYC 391 | DIRECTED RESEARCH EXPERIENCE IN PSYCHOLOGY | |

Biology Electives

| | | |
|------------------------------|---|-----|
| Select two of the following: | | 6-8 |
| BIOL 304 | NATURAL HISTORY INTERPRETATION AND PUBLIC ENVIRONMENTAL EDUCATION | |
| BIOL 306 | HUMAN ECOLOGY AND SUSTAINABILITY | |
| BIOL 309 | GENETICS | |
| BIOL 310 | CONSERVATION BIOLOGY | |
| BIOL 325 | ANIMAL PHYSIOLOGY | |
| BIOL 334 | HUMANS, SCIENCE AND THE CHESAPEAKE BAY | |
| BIOL 347 | MARINE BIOLOGY | |
| BIOL 353 | INVERTEBRATE ZOOLOGY | |
| BIOL 367 | ENDOCRINOLOGY | |
| BIOL 402 | GENERAL ECOLOGY | |
| BIOL 413 | EVOLUTION | |
| BIOL 444 | WILDLIFE MANAGEMENT | |
| BIOL 446 | TROPICAL ECOLOGY AND CONSERVATION | |
| BIOL 455 | FISH BIOLOGY | |
| BIOL 456 | ORNITHOLOGY | |
| BIOL 458 | MAMMALOLOGY | |
| BIOL 461 | ENTOMOLOGY | |
| BIOL 467 | HERPETOLOGY | |
| BIOL 472 | ORGANISMAL FORM AND FUNCTION LABORATORY | |
| BIOL 481 | DIRECTED READINGS BIOLOGY ^{Must be taken for a minimum of 3 units} | |

Psychology Electives

| | | |
|------------------------------|--------------------------|---|
| Select two of the following: | | 6 |
| PSYC 305 | PSYCHOLOGY OF LEARNING | |
| PSYC 309 | PSYCHOPHARMACOLOGY | |
| PSYC 315 | MOTIVATION | |
| PSYC 317 | SENSATION AND PERCEPTION | |
| PSYC 447 | PSYCHOLOGY OF GENDER | |

| | |
|--------------------|--|
| PSYC 470 | SPECIAL TOPICS IN PSYCHOLOGY ^{Must be taken for 3 units and must be a topic related to Animal Behavior approved by the program director.} |
| PSYC 486 | ADVANCED EXPERIMENTAL DESIGN |
| Total Units | 44-47 |

Four-Year Plan of Study

Sample Four-Year Plan

The selected course sequence below is an example of the simplest path to degree completion. Based on course schedules, student needs, and student choice, individual plans may vary. Students should consult with their adviser to make the most appropriate elective choices and to ensure that they have completed the required number of units (120) to graduate.

First Year

| Term 1 | Units Term 2 | Units |
|-----------------------------|---|-----------|
| BIOL 200 & 200L (Core 7) | 4 BIOL 206 & 206L (Core 8) | 4 |
| MATH 115 (Suggested Core 3) | 3 PSYC 285 (or 201, 203, 205, 225 or 261, taken as a prerequisite for PSYC 460) | 3 |
| PSYC 101 (Core 6) | 3 Core 2 (or Core 1) | 3 |
| Core 1 (or Core 2) | 3 Core 4 | 3 |
| Elective | 3 Core 5 | 3 |
| | 16 | 16 |

Second Year

| Term 1 | Units Term 2 | Units |
|------------------------------|--------------|-----------|
| BIOL 207 | 4 PSYC 460 | 3 |
| PSYC 212 | 4 Core 11 | 3 |
| WMST 231 (Suggested Core 13) | 3 Core 12 | 3 |
| Core 10 | 3 Core 14 | 3 |
| | Elective | 3 |
| | 14 | 15 |

Third Year

| Term 1 | Units Term 2 | Units |
|--|-----------------|-----------|
| PSYC 314 or BIOL 381 (either satisfies Core 9) | 3 BIOL 371 | 4 |
| Elective | 3 PSYC Elective | 3 |
| Elective | 3 Elective | 3 |
| Elective | 3 Elective | 3 |
| Elective | 3 Elective | 3 |
| | 15 | 16 |

Fourth Year

| Term 1 | Units Term 2 | Units |
|--------------------------------------|-----------------------------------|-----------|
| BIOL 491, 493, IDIS 495, or PSYC 391 | 3 BIOL Elective | 3 |
| PSYC Elective | 3 BIOL Elective | 3 |
| Elective | 3 Elective | 3 |
| Elective | 3 Elective | 3 |
| Elective | 3 Elective if needed ¹ | 1 |
| | 15 | 13 |

Total Units 120

¹ This elective is optional and only necessary if the student is not on target to earn 120 units by the end of their final term.

Learning Outcomes

1. Students possess the ability to integrate knowledge and modes of thinking across two or more disciplines.
2. Students communicate effectively in the presentation of interdisciplinary materials through various modes of transmission.
3. Students conduct, analyze and apply research from two or more disciplines or through interdisciplinary research.