This course will survey research and scholarship on the subject of cognition and the “mental lives” of animals. We will start by looking at the fascinating history of ideas about this question. In the late 1800s, the theory of evolution led many scientists to try to trace the evolution of the mind by studying the behavior of animals, and in the early twentieth century, this interest in turn led to the birth of behaviorism. Our guide during this part of the course will be the wonderful book by Robert Boakes (1984), *From Darwin to Behaviourism: Psychology and the minds of animals*. We will then survey the more recent research on animal cognition using an excellent book by Sara Shettleworth (2010), *Cognition, evolution, and behavior*, which uniquely integrates the literatures on animal behavior, behavioral ecology, animal learning, and comparative cognition. I hope the course will deepen our understanding of how cognitive processes can be inferred from the behavior of animals (including humans), and the methods that scientists have developed to help make those inferences. In the process, I hope we will arrive at a better appreciation of many important topics in psychology, including the relationship between behavior and cognition, behaviorism and cognitive psychology, the impact of evolution, and what it takes to be scientific about behavior and the human and animal “mind.”

Organization and student responsibilities

The books assigned in this course are strong, and the overall plan is to go through each of them systematically. Each class meeting will cover two chapters in one of the books. In each half of a class, one student will first give a 45-min presentation of a chapter (presumably on Powerpoint), and then we will discuss the chapter for the next 30 mins. To facilitate the discussion, three students will be assigned the role of “discussant” for each chapter. Discussants will help the instructor keep the conversation moving by highlighting important topics within the chapter, relating chapter material to other themes and concepts, etc. (see “things for discussants to consider” below). The discussants will *not* give formal presentations, but will be expected to have read the chapter carefully, know the material well, and help stimulate and keep the discussion on track.

Finally, in the last class meeting (date and time to be determined, but getting close to the holidays), each student will give a very brief Powerpoint presentation (maximum 5 min with 5 additional minutes for discussion) on a topic of his or her choice. The presentation will briefly summarize a paper (maximum 10 pages) to be submitted by the student at the start of this final class. My hope is that everyone will enjoy contributing on a topic that relates to his or her own specific interests. Brief discussions of a range of such topics will be fun and will provide a good capstone for the course. More information on this assignment will be forthcoming. You will not be graded on the quality of any snacks or beverages that you elect to bring to the final class.
So, to summarize student responsibilities, each student will:

- Present his or her share of the chapters in the two books. Given the number of chapters (22) and the anticipated enrollment, some students will present one chapter and others will present two.
- Be a Discussant for his or her share of the chapters. Students who do not present two chapters will substitute three “discussantships” for the second chapter. The remaining discussantships (total n = 66) will be distributed among all students in the course.
- Write and briefly present a maximum-10-page paper on a topic of your choice.
- Keep up with the weekly readings and contribute to the discussions throughout the course.

I will provide written feedback on your chapter presentations, paper, and discussantships.

Books


Class meetings

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<thead>
<tr>
<th>Date</th>
<th>Topic</th>
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<tbody>
<tr>
<td>8/31</td>
<td>Organizational meeting</td>
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| 9/7  | B1. Mental evolution  
     | B2. Intelligence and instinct |
| 9/14 | B3. Experimental psychology and habits  
     | B4. Reflex action and the nervous system |
| 9/21 | B5. Conditioned reflexes  
     | B6. Comparative psychology and the beginning of behaviorism |
| 9/28 | B7. Apes, problem-solving and purpose  
     | B8. Nature and nurture |
| 10/5 | *NO CLASS* |
| 10/12| S1. Cognition and the study of behavior  
    | S2. Evolution, behavior, and cognition: A primer |
| 10/19| S3. Perception and attention  
    | S4. Learning: Introduction and Pavlovian conditioning |
Examples of things that chapter discussants might consider:

What particularly important parts of the chapter deserve extra focus and discussion?

How do the concepts, ideas, and/or methods used in the chapter relate to another topic you know about or are interested in?

What are the strengths and weaknesses of the methods used in the chapter? What is the quality of the evidence for the cognitive capacities or processes that are discussed in the chapter?

What is the significance of the material for understanding animal behavior, cognition, evolution, or the brain?