

PSYC 2211: Cognitive Psychology

Instructor: Dr. Blair Gross

Email: egross@randolphcollege.edu

Office Hours: Virtual office hours Tuesdays 10am-11am, Thursdays 9am-10am, **and by appointment**. PLEASE email me if you would like to meet outside of these times; I will happily find a time that works for us both.

Course Material

The syllabus, assignments, grades, and any other resources will be posted in Moodle.

Required Text

Willingham, D., & Reiner, C. (2020). *Cognition: The thinking animal*, 4th ed. Cambridge University Press.

Course Description

This course is an introduction to human cognition and will cover how humans learn to deal with information from the environment. Students will concentrate on the classic topics including memory, attention, categorization, problem solving, language, reasoning, and decision making. Included is a discussion of the established theories and findings of cognitive psychology, how they relate to brain structure and functions, how these findings can be applied to real world problems, how comparative animal studies can shed light on human cognition, and how different methods of cognitive research can be used to understand mental processes.

Learning Goals

1. The following are content goals. In this class we will cover:
 - i. The history of cognitive psychology
 - ii. Visual and auditory recognition, mental imagery
 - iii. Attention and Consciousness
 - iv. Working memory, long-term memory, and memory strategies
 - v. General knowledge and intelligence
 - vi. Language, including comprehension and production
 - vii. Problem solving and creativity
 - viii. Deductive reasoning and decision making
2. In addition to learning content, you will also master the following skills:
 - i. Clear, concise oral and written communication skills.
 - ii. Applying your knowledge to novel instances and situations.
 - iii. Evaluating the scientific integrity of research studies.
 - iv. Deriving conclusions from visual representations of data.

Class Components

Muddiest point. *In an effort to keep everyone on top of the reading and engaged in the content of the course, you will complete the assigned reading and submit your answer to the question, "What was the muddiest/most unclear part of the reading?"*

Chapter Assignments. For each chapter, I will post an assignment to help you engage with and deepen your understanding of the material. These assignments will vary, but will typically ask you to apply what you have learned.

Exams. *To test your knowledge of content, we will have 3 exams.* Each exam will consist of an open-book essay portion and a multiple choice/short answer portion. **You CANNOT speak to any other person regarding the test (except to ask Dr. Gross questions), and you CANNOT use any other outside resources to answer questions other than your own notes and the resources posted in Moodle.**

Final Applied Project. *In order to develop your research and communication skills, as well as to apply what you have learned to other areas* you will research the cognitive skill of another animal, then compare and contrast the animal's skills to human's skills.

Pick an animal and topic to study. Be careful not to confuse sensation and perception with cognitive abilities – for example, the fact that dogs have a better sense of smell is sensation and perception, whereas how dogs construct mental maps to remember their way home is cognitive psychology. A few areas that you may consider include: the visual abilities, the memory abilities, the language abilities, and the reasoning abilities of other animals.

You will research the topic, and then you have one of two choices: you may EITHER create a recorded 10-15 minute presentation of your topic, OR write a 5-page paper on the topic.

Regardless of your choice, the final product should explain the theories behind the topic you researched, what is known regarding the animal's cognitive abilities, and compare and contrast these abilities with humans. You will also submit a reference page. A rubric for the final applied project will be posted in Moodle.

Your Final Course Grade will be calculated as follows:

Exam 1	20%
Exam 2	20%
Exam 3	20%
Final Project	20%
Muddiest Point	5%
Chapter Assignments	15%

Letter grades will correspond to percentages as follows. **There will be no rounding up of Final Grades:**

A: 93 and up	C: 73-76.99
A-: 90-92.99	C- : 70-72.99
B+: 87-89.99	D+: 67-69.99
B: 83-86.99	D: 63-66.99
B-: 80-82.99	D-: 60-62.99
C+: 77-79.99	F: 59.99 and below

Schedule

<u>Week</u>	<u>Reading</u>	<u>Assignments</u>
Week 1 May 20 th -26 th	Syllabus & Introduction Ch 1. A Cognitive Approach; Ch. 2 Methods of Cognitive Psychology; Ch 3. Visual Perception	Due Sunday, May 26 th , 11:59pm
Week 2 May 27 th -June 2 nd	Ch. 4 Attention Exam 1 Ch. 5 Sensory & Working Memory	Due Sunday, June 2 nd , 11:59pm
Week 3 June 3 rd -June 9 th	Ch. 6 Long-term Memory Ch. 7 Memory Encoding Ch. 8 Memory Retrieval (pp. 204-218;219-229) Exam 2	Due Sunday, June 9 th , 11:59pm
Week 4 June 10 th -June 16 th	Ch. 9 Concepts and Categories Ch. 10 Language Structure Ch. 11 Language Processing Ch. 12 Visual Imagery	Due Sunday, June 16 th , 11:59pm
Week 5 June 17 th -June 25 th	Ch. 13 Decision Making and Reasoning Ch. 14 Problem Solving Exam 3 Final Applied Project	Due Tuesday, June 25 th , 11:59pm

****How to succeed in cognitive psychology**:**

1. Read the book – carefully. What does carefully mean?
 - a. First, it means skimming the book to get an idea of the topics that will be covered in that chapter. Pay attention to the section headers – they are often summarizing the important topics. Look at any figures and graphs and try to understand what they mean. Write down what you think are important topics.
 - b. Read the book one section at a time. Take *brief* notes as you read – not just on definitions, but on the important topics you’ve already listed.
 - c. At the end of each section, can you explain these main ideas (out loud) to a family member or friend? It’s important to actually try this out loud. A lot of times we think we understand something because we just read it – we’re familiar with or recognize the topic and our brain says – ah! Yes! I know that! But to really test your knowledge you should try to put it in *your own words* (not just repeat definitions ☺).
 - d. Write down any questions you have.
2. Answer the questions (without looking) at the end of the chapter, then go back and review the material for the questions you did not know how to answer.
3. Ask questions!! Please oh please ask questions!