

PSYCHOLOGY 331-02: Cognitive Psychology Fall 2023 3:30 – 4:45 TuTh D217 Science Building

Instructor Contact Information:

Instructor: Robert J. Nemeth, Ph.D. *Office:* D237 Science Building *Office hours:* 2:00 p.m. – 3:00 p.m. Tu & Th and 1:00 – 2:00 p.m. We or by appointment. *Email:* rnemeth@uwsp.edu *Phone:* (715) 346-3070 (leave a voicemail with your name and number if I don't answer)

Required Textbook

Farmer, T. A. & Matlin, M. W. (2019). Cognition. (10th ed.). Hoboken, NJ: Wiley.

General Philosophy of Teaching

- Promote life-long learning (thinking for yourself).
- Foster an intellectual curiosity about questions of human behavior and the mind.
- Develop an appreciation of diverse viewpoints in psychology, including alternative and minority views.
- Help my students develop the following skills that typify an educated adult:
 - organizational skills
 - \circ critical thinking skills
 - verbal and writing skills
 - quantitative skills
- Emphasize **partnership** in learning. I am a facilitator of your learning, so think of me as a valuable resource rather than the "voice of authority."

Goals/Objectives

Cognitive Psychology (PSYC 331) will introduce you to research, theory, and application of the branch of experimental psychology that focuses on human and animal cognition. The class will cover the topics of attention, pattern recognition, memory, metacognition, knowledge organization, decision-making, problem solving, and language.

Below I enumerate the goals of the class along with associated APA Learning Outcomes in parentheses (see http://www.apa.org/ed/precollege/about/psymajor-guidelines.pdf)

By the end of the semester, you will

- 1. understand what the major questions in cognitive psychology are and how psychological research has helped answer these questions (APA Learning Outcome 1.2),
- 2. critically consider how cognition forms a core area of psychology and how cognition relates to every other area of psychology (APA Learning Outcome 3.1),
- 3. critically evaluate empirical tests of theories through in-class discussions and class demonstrations (APA Learning Outcomes 2.3 & 3.1),
- 4. conduct a demonstration of a classic experiment in cognitive psychology, give a presentation of your findings explaining the significance in relation to theory and what it tells us about the workings of the mind, and write a brief APA research report on your demonstration findings (APA Learning Outcome 7.4)
- 5. understand how principles of cognitive psychology can be applied to various real-world problems such as the impact of divided attention while driving, the reliability of eyewitness memory, etc. (APA 4.2).

Class Format

Lecture. During lectures, I will discuss important ideas, research, theories, people, and issues in cognitive psychology. While my lectures will draw on material in the textbook, *they will not duplicate the textbook.* The degree of overlap may be small or great depending on the topic, and I will present a lot of new material not contained in the textbook. For this reason, *attendance is expected* at lectures, and *many exam questions will come from the lectures alone. If you must miss a lecture, you are responsible for the material you have missed.* Thus, be sure to get lecture notes from *several* classmates (don't depend on only one person's note-taking skills!). I have provided space on this syllabus for you to collect contact information from fellow students. In addition, I sometimes present audio-visual clips to supplement the course material. Videos will not be repeated later if you happen to miss the day they were shown. If possible, I can give links to video clips through the UWSP Library or on YouTube, but at the very least you should ask several classmates to describe or explain the media clip to you.

Experiment Demonstrations. Cognitive psychology depends heavily on experimental research to develop and refine theories of cognition. I feel that the best way to learn how cognitive psychologists study questions of cognition is to take part in demonstrations of classic cognitive psychology experiments. These demonstrations will be run by you and your fellow students. See the section on the class project below.

Reading Assignments

Textbook reading assignments are indicated in the class schedule. To gain the most out of our time together, it is essential that you keep up with the course readings. Reading quizzes will test your knowledge of the reading assignments; to do well in the course, you will need to keep up with the reading. If you are ever confused about what you read in the textbook, please feel free to contact me through any of the various means listed above or feel free to ask questions in class.

Canvas

Lecture outlines, quizzes, handouts, class announcements, and grades will be posted on *Canvas*. Make sure to check Canvas on a weekly basis for new material. To find Canvas, from the UWSP home page (<u>https://www.uwsp.edu</u>), click on the Logins in the upper right-hand corner of the page. Alternatively, you can just point your web browser directly to <u>https://www.uwsp.edu/canvas/Pages/default.aspx</u>

Attendance

According to UWSP's attendance policy, students are required to attend classes regularly (<u>http://www.uwsp.edu/regrec/Pages/Attendance-Policy.aspx</u>). I will not be recording attendance except for the first few days of the course, but I expect you to attend every class unless you have an understandable excuse (e.g., illness, unforeseen emergencies, etc.). If you miss a class, you are responsible for the material you missed. Please contact fellow students to obtain the notes.

Guidelines for Courtesy and Respect in the Classroom

- Please **ask questions** if you are unclear about anything presented in lecture.
- Please **minimize disruptions** during class (e.g., conversations, doing other classwork, mobile devices, or other electronics, etc.).
- Please show respect for your fellow students and your instructor during classroom discussions and activities by attending, listening, and being open to diverse perspectives.
- I will let you out on time; please **do not get ready to leave** before the class is over.
- If you wish to use any **electronic device** to record class lectures and discussions, please speak with me first to get permission. In addition, the use of electronic devices during exams will be prohibited unless approval has been documented by the Disability and Assistive Technology Center.

Thank you for your cooperation.

Grading

Exams. There will be three exams over the course of the semester.

- Each exam will cover only the material up to the test.
- The format of the exam will be 40 multiple-choice questions.
- The questions will cover the assigned readings and any in-class activities such as lectures, discussions, demonstrations, video/audio, and handouts.
- If you know in advance that you will miss an exam date (e.g., for university functions, family functions such as marriages, religious holidays, etc.), please contact me a week before the exam and we will schedule a make-up. If you miss an exam due to an unexpected absence (e.g., illness), you must contact me within 2 business days of the exam date to schedule a make-up exam. Should you fail to contact me within the 2 business days of the exam date, you will be assigned a 0 for that exam. Make-up exams are typically taken within 1 week of the scheduled exam date. You may not make up exams after 2 weeks have passed since the original exam was scheduled. Make-up exams are on paper just like the regular exam. There are no online make-up exams.
- Exams may not be retaken once completed.

Reading Quizzes. To help you keep up with the reading as well as to provide an opportunity for regular feedback, and to prep you for class, I will be giving semi-weekly quizzes on *Canvas*.

- These quizzes will consist of 5 multiple-choice questions that will test your knowledge of every new chapter, except for the chapters that will be covered after an exam. There will be a 7-minute time limit to complete the quizzes; the time limit is designed to prevent "fishing" for answers from the textbook.
- In addition, these quizzes will show you what to expect for the multiple-choice questions on the exams.
- The quizzes will be posted one week before they are due.
- You will have the opportunity to retake the quiz 3 times within the time availability.
- Normally, make-ups for reading quizzes will **NOT** be permitted. However, I will provide make-up availability to students with exceptional circumstances on a case-by-case basis. If you miss a reading quiz and feel you should be given extra time, please contact me. I will consider these make-up possibilities for up to one week after the respective quiz is due.

Class Project: Student-Run Demonstrations and Presentations. To promote student engagement in the course, students will work in pairs to conduct an in-class demonstration derived from classic experiments in cognitive psychology.

- I will provide you with a list of demonstrations to choose from and all the stimulus materials to conduct the demonstration.
- Due dates for the demonstrations will occur periodically over the course of the semester, depending on when they are relevant to the class topic.
- Student pairs will usually run the demonstration during one class period and will give a presentation on the demonstration a week later.
- Student-pairs will write an APA-style research report of their demonstration.
- I will provide you with more details about the project in a separate handout.

Graded Components of Psych 331	Point Values	Percentage of Grade
Reading Quizzes		
8×5 points	40	9%
Unit Exams		
3×100 points	300	68%
Class Project: Student-Run Demos and Presentations	100	23%
TOTAL	440	100%

Grades will be given according to the following scale:

Grade	Points	% Total
А	407 - 440	93%-100%
A-	394 - 406	90%-92%
B+	381 - 393	87%-89%
В	363 - 380	83%-86%
B-	350 - 362	80%-82%
C+	337 - 349	77%-79%
С	319 - 336	73%-76%
C-	306 - 318	70%-72%
D+	293 - 305	67%-69%
D	262 - 292	60%-66%
F	≤ 261	\leq 59%

Academic Honesty

- I treat academic honesty seriously. In short, academic honesty means that academic work you submit for your classes is yours alone (unless explicitly allowed by your instructor to work together with another and submit your assignment jointly), that you have properly cited sources of information in your work, that you have not misrepresented, in whole or in part, another person's work as your own, and that you respect the academic work of others.
- If I suspect that a violation of academic honesty has occurred, I will pursue disciplinary sanctions up to and including suspension or expulsion from the university as permitted in Chapter UWS 14, "Student Academic Standards and Disciplinary Procedures," of the *Wisconsin Administrative Code, Rules of the Board of Regents of the University of Wisconsin System.*

- Copies of Ch. UWS 14 can be found in electronic form at https://www.uwsp.edu/dos/Documents/UWS%2014-1.pdf. I recommend that you get a copy and read about your rights and responsibilities. In addition, Ch. UWS 14 provides specific examples of academic misconduct.
- For additional information about academic integrity and misconduct see, <u>https://www.uwsp.edu/dos/Documents/AcademicIntegrityBrochure.pdf</u>

Course Withdrawal

• If you wish to drop the class, you must do so within published deadlines to avoid a failing grade or loss of reimbursable tuition. The published deadlines can be found at https://www.uwsp.edu/regrec/Pages/AddDropSchedule.aspx

For Assistance:

- If you find that you are having academic difficulties in this course, please contact me. I am interested in helping you succeed in this course.
- For personal difficulties or concerns (e.g., stress, depression, etc.), please consider seeking professional counseling from the UWSP Counseling Center, Third Floor Delzell Hall, 346-3553. Additional mental health resources (e.g., teletherapy and telepsychiatry) are available at this website: http://www.uwsp.edu/counseling/.
- If you need additional accommodations (e.g., extra time on an exam), please contact me and the Disability and Resource Center (DRC) within the first two weeks of the semester. The DRC can be found at 108 CCC, and can be contacted at 346-3365, <u>http://www.uwsp.edu/disability/Pages/default.aspx</u>.

Emergency Procedures: The UWSP Office of Risk Management has recommended the following emergency procedures:

- In the event of a medical emergency, call 911 or use the red emergency phone located outside this classroom. Offer assistance if trained and willing to do so. Guide emergency responders to victims.
- In the event of a tornado warning, we please move to the designated severe weather shelter (hallway). See http://www.uwsp.edu/rmgt/Pages/em/procedures/other/floor-plans.aspx for floor plans showing severe weather shelters on campus.
- In the event of a fire alarm, evacuate the building in a calm manner. Notify instructor or emergency command personnel of any missing individuals.

Abuse and Sexual Assault:

• Due to recent legislation, if any disclosure of unreported neglect or abuse of a child, elder, or disabled individual is made to a university instructor, he or she is required to report such information to the appropriate administrative or law enforcement officials. This includes instances of sexual assault of an adult.

Class Schedule

I reserve the right to make changes to the class schedule as circumstances dictate (e.g., class is canceled due to bad weather). If such a situation occurs, I will make an announcement regarding the changes of the schedule in class and on *Canvas*.

WEEK	DATE	TOPIC	READINGS/QUIZ DATES
1	Sept. 5	Introduction Course Objectives and Expectations	No Readings
'	Sept. 7	What is Cognitive Psych?	
	Sept. 12	The Historical Roots of Cognitive PsychologyOverview of Research Methods	Ch.1
2	Sept. 14	Perceptual Processes Sensory Register	Ch. 2 (pp. 23-39) Q <i>uiz 1 on Ch. 2 Due</i>
	Sept. 19	Object/Pattern RecognitionFace Recognition	Ch. 2 (pp. 23-39)
3	Sept. 21	Attention Filter Models of Attention	Ch. 3 Quiz 2 on Ch. 3 Due
	Sept. 26	Capacity Models of Attention	Ch. 3
4	Sept. 28	Short-Term/Working Memory Short-term Memory	Ch. 4 Quiz 3 on Ch. 4 Due
	Oct. 3	Working Memory	Ch. 4
5	Oct. 5	Catch-up Day	
6	Oct. 10	Unit Exam 1 Intro Perceptual Processes Attention STM/Working Memory 	Covers class material from 9/5 – 10/5 and Chs. 1-4
	Oct. 12	Long-Term Memory Levels of Processing Context and Memory	Ch. 5 (pp. 85-92)
7	Oct. 17	 Implicit Memory Research and Theory Amnesia 	Ch. 5 (pp. 92-95)
	Oct. 19	Autobiographical Memory	Ch. 5 (pp. 95-106) Q <i>uiz 4 on Ch. 5 Due</i>
0	Oct. 24	Memory Failure Forgetting	No readings
8	Oct. 26	False Memory	Ch. 5 (pp. 107-109)
9	Oct. 31	Imagery • Visual Imagery	Ch. 7 (pp. 134-146)
3	Nov. 2	Cognitive Maps	Ch. 7 (pp. 148-157) Q <i>uiz 5 on Ch. 7 Due</i>
10	Nov. 7 Nov. 9	 Catch-up Day Unit Exam 2 Long-Term Memory Implicit Memory Memory Failure Imagery 	Covers class material from 10/12 – 11/7 and Chs. 5 & 7

Nemeth – Psych 331-02: Cognitive Psychology – fall 2023 7

	Nov. 14	Metacognition Metamemory 	Ch. 6 (pp.123-133)
11	Nov. 16	Knowledge Theories of Knowledge Organization	Ch. 8 Quiz 6 on Ch. 8 Due
	Nov. 21	Schemas and Scripts	Ch. 8
12	Nov. 23	Thanksgiving Holiday	
13	Nov. 28	Language Introduction to Language	Ch. 9 (pp.187-192) Quiz 7 on Ch. 9 & 2 Due
	Nov. 30	Structure and Speech	Ch. 2 (pp. 39-43)
14	Dec. 5	 Syntax and Language Acquisition 	Ch. 9 (pp. 192-203) Ch. 10 (pp. 215-219 & 227-235)
	Dec. 7	Reasoning and Decision Making Deductive Reasoning	Ch. 12
15	Dec. 12	Decision Making	Ch. 12 Quiz 8 on Ch. 12 Due
15	Dec. 14	 Problem Solving Structure, Heuristics, and Expertise 	Ch. 11
16	Dec. 21 12:30 p.m. – 2:30 p.m.	Unit Exam 3 – Final Exam Metacognition Knowledge Language Reasoning and Decision Making Problem Solving 	Covers class material from 11/14 – 12/21 and Chs. 8, 11, 12 and portions of Chs. 2, 6, 9 & 10

GRADE SUMMARY

Reading Quizzes	
Quiz 1	/5
Quiz 2	/5
Quiz 3	/5
Quiz 4	/5
Quiz 5	/5
Quiz 6	/5
Quiz 7	/5
Quiz 8	/5
Sub-total	/40

Exams	
Exam 1	/100
Exam 2	/100
Exam 3	/100
Sub-total	/300

Class Project	
Presentation	/30
Paper	/70
Sub-total	/100