# PSYCHOLOGY 200-002H Cognitive Psychology Honors Section

Spring 2023 Syllabus Department of Psychology

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## Part 1: Course Information

Credit Hours: 3 Website: d2l.msu.edu

Time and Location: Tuesdays and Thursdays from 3:00PM to 4:20PM in the Psychology Building Room 119.

There are **due dates for exams and assignments**. These are listed in the schedule on Page 4 of this document. **Please add these due dates to your calendar** <u>now</u>, so you do not forget them.

## Instructor Information

Instructor: Dr. Karl Healey Preferred Pronouns: he, him, his Office Hours: Thursdays 1:00PM – 2:00PM (Zoom or in-person) Zoom link for office hours: <u>https://msu.zoom.us/my/khealey</u> Office: Psychology Building Room 289C Office Telephone: 517-432-3107 E-mail: <u>khealey@msu.edu</u>

## Graduate Teaching Assistant

Assistant: Beau Zhang Preferred Pronouns: he/him Office Hours: Mondays 1:00PM – 3:00PM (Zoom or in person) Zoom link for office hours: https://msu.zoom.us/my/beau.zh In person: Psychology Building Room 285A (suite 282 first door on the left) Link to schedule an appointment: https://beauzhang.youcanbook.me/ E-mail: <u>zhangb42@msu.edu</u>

## **Undergraduate Teaching Assistants**

Assistant: Katie Bowen Preferred Pronouns: <u>she, her, hers</u> Office Hours: Fridays 1:00PM – 3:00PM (zoom) Zoom link for office hours: <u>https://msu.zoom.us/j/96350897947\_Passcode: 599975</u> E-mail: <u>bowenka6@msu.edu</u>

Assistant: Jill Cool Preferred Pronouns: she/her Office Hours: Thursdays 12:00PM – 2:00PM Zoom link for office hours: https://msu.zoom.us/j/97572469912 Passcode: 882372 In person: Main Library Room W220 E-mail: cooljill@msu.edu

## **Course Description and Instructional Objectives**

This course is an introduction to the field of Cognitive Psychology and will provide an overview of its major theories, findings, and methods. Cognitive psychology views the mind as an information processing system and attempts to discover and explain the mental processes underlying perception, attention, memory, language, thinking, and decision making. The course will also introduce a number of different methods that are used to investigate brain processes and their functions. At the end of the course, you should be familiar with the main theories, methods, and findings of Cognitive Psychology.

## **Textbook & Course Materials**

- You will need the CogLab 5 Software. This is a digital platform for interactively learning about classic cognitive psychology experiments. You will need to complete these experiments to do the CogLab quizzes described below. You can purchase it here: <u>https://www.cengage.com/c/coglab-5-5e-francis/9781285461083PF/</u> (Credit card required)
- The following textbook is helpful but not required: COGNITIVE PSYCHOLOGY: CONNECTING MIND, RESEARCH, AND EVERYDAY EXPERIENCE BY E. BRUCE GOLDSTEIN. Any edition from the last 5 years is fine.
- Several articles from scientific journals will be assigned over the semester. These will be posted as PDFs to the class D2L page.
- You will need to bring your laptop to class on days we are scheduled to work on the Honors Project (more detail on this below). We will be doing exercises that require a laptop with internet access.

## **Getting Help – Office Hours and Email**

The best way to get help is to come to office hours. The TA, UAs, and I hold regular office hours. If you can't make office hours, you can email us to make an appointment for a different time. If you are having problems, or just want more information about the course material come see us — Don't hesitate to take advantage of the office hours! *Be sure to use your MSU account when trying to join a Zoom meeting as for security reasons our office hours are only accessible to MSU users.* 

Questions about class material can be very difficult to communicate and answer over email (it often requires visual aids) — you can almost always get a much better answer in person. Therefore, we will not answer technical questions over email. Don't hesitate to take advantage of the office hours!

If you have a non-technical question that requires only a short response, you can email the TA or a UA. We will try to be diligent about responding but occasionally your message may be hidden amongst the spam; If you don't hear back in a reasonable time, send the message again. If a TA is unable to answer your question, email me. For questions that require a longer response, please use office hours.

## Part 2: Course Schedule

The schedule is tentative. I reserve the right to change it to best suit the course. Please mark the quiz and exam dates on your calendar now!

Date	Торіс	Chapter
January 10	Introduction	1
January 12	History & Methods	1
January 17	Cog. Neuro	2
January 19	Cog. Neuro	2
January 24	Perception	3
January 26	Perception	3
January 31	Attention	4
February 2	Short-Term Memory + Quiz 1	5
February 7	Exam 1	
February 9	Memory - Structure	6
February 14	Memory - Encoding	7
February 16	Memory - Retrieval	7
February 21	Memory - Errors	8
February 23	Knowledge	9
February 28	Catch Up + <b>Quiz 2</b>	
March 2	Exam 2	
March 7	Spring Break	
March 9	Spring Break	
March 14	Honors Project	
March 16	Honors Project	
March 21	Honors Project	
March 23	Honors Project	
March 28	Honors Project	
March 30	Honors Project	
April 4	Imagery	10
April 6	Language	11
April 11	Problem Solving	12
April 13	Creativity	12
April 18	Judgment & Decision Making	13
April 20	Reasoning + Honors Reports Due	13
April 25	Catch Up + <b>Quiz 3</b>	
April 27	Exam 3	
May 2	5:45PM-7:45PM office hours to discuss Ex	am 3

## Part 3: Grading Policy

You can earn up to 600 points from the following required assignments:

#### **Graded Course Activities**

The table below describes the graded course activities, including points and activity description. The first column includes the assignment type, the second column describes how many assignments of that type there are, the third column indicates how many points each of that assignment is worth, and the fourth column indicates how many total points are possible for all of those assignments.

Assignment Type	Description	Points Each	Total Points
CogLab Quizzes	3 Quizzes	33 ⅓ each	100
Honors Project Reports	4 Questions	25 each	100
Subject Pool	5 hours	5 per hour	25
Three Exams	Exam with the best score	150	
	Exam with the second best score	125	
	Exam with the lowest score	100	
	Total for exams		375
Course Total			600

#### Exams

There will be three multiple choice exams: three midterms (dates are given on the previous page). They will test your knowledge of the material presented in lecture, the readings, CogLabs, and any videos we watch. The three midterms are worth a total of 375 points: the one you score best on will be worth 150 points, the one you score second best on will be worth 125 points, and the one with your lowest score will be worth 100 points.

All exams will be administered during class time on the scheduled day through D2L's online testing features.

## CogLab Quizzes

You will have to complete 12 CogLab experiments that are applicable to different course topics. Your completion in these experiments will familiarize you with behavioral methods that are used to investigate human cognition and will help you better understand the lectures. There will be three short multiple choice quizzes during class (dates shown in the schedule), designed to assess your familiarity with the procedures, results, and implications of these CogLab experiments. Here are the CogLab experiments assigned for each quiz:

Quiz 1:

- 1. Signal Detection
- 2. Simple Detection
- 3. Visual Search
- 4. Stroop Effect

#### Quiz 2:

- 1. Operation Span
- 2. Serial Position
- 3. Levels of Processing
- 4. Von Restorff Effect

#### Quiz 3:

- 1. Prototypes
- 2. Mental Rotation
- 3. Wason Selection
- 4. Monty Hall

Be sure to complete each lab before the quiz to which they are assigned. To do well on the quiz you need to have read and studied the material provided after finishing each lab.

## Honors Project Reports

The textbook and the lectures give an introduction to the many sub-areas within cognitive psychology. But, by necessity, they simplify those areas by eliminating detail. When you read the primary scientific literature in any particular area, you quickly find that things are *vastly* more complex than can be presented in a textbook. In the Honors Project, we will explore this complexity for one specific area: the distinction between short-term memory and long-term memory. Your textbook presents this model of memory as a simple flow chart (sensory memory  $\rightarrow$  short-term memory  $\rightarrow$  long-term memory). In the literature, this theory is presented as a set of equations and computer simulations. You will read two classic papers. In class, we will discuss them and learn how to program the model in Python. That is, we will take the flow chart and turn it into a working computer simulation. There are three weeks devoted to this project in the class schedule.

After the final week, you will have to submit a structured report on the project. The report will take the form of answering four questions posted to D2L. Some questions will ask you to write summaries of our discussions of the readings, others will ask you to add comments to the computer code we wrote in class to show you understand how it works. **The report is due by the end of class on April 20.** My intention is that doing well on the report will be challenging but eminently achievable for anyone who has attended class and thought carefully about the topics, therefore each question will be graded on the following scale: 0 (did not turn in), 10 (turned in but it is clear you did not put in the effort to understand the material), 25 (you gave a thoughtful response). I expect the modal score will be 25 per question. If you get less, please take the initiative to come to office hours to discuss how you can improve (I may even give second chances to those who do). By the end of the project, you will know the difference between a textbook version of a cognitive psychology theory and the real thing.

## Subject Pool Participation (HPR/Sona)

Part of this course is participation in research. You will receive 5 points for every hour of research participation up to a total of 25 points. For example, if you do 3.5 hours you will get 3.5 × 5 = 17.5 points. Details for how to create your Sona account are available under the "Sona Setup" link on D2L. Be careful: some experiments posted on Sona compensate with money, not

course credit! For all questions about research participation, please contact the Research Participation Coordinator (Ms. Audra Jeffrey: jeffre22@msu.edu).

If you are under 18 years old and therefore cannot participate in research, you can perform an alternative assignment. For details on this assignment, please contact the TA. If you do not wish to participate in research for any other reason but would still like to get the points, then you can contact the TA to learn about an alternative assignment.

## Make Up Exams

You may take a makeup exam in case of (1) a documented medical emergency, or (2) a legitimate schedule conflict, such as a religious holiday or sports travel, that you inform the professor about at least 1 week in advance. In either case, please send me an email identifying the emergency or conflict as soon as possible. In those cases, you may take the exam either at another time on the normal exam day, or sometime prior to the next course meeting. If you cannot take the exam on one of those days, then that exam will be omitted from your final score and its points distributed over the other exams. If you miss an exam for any other reason, or don't notify us about your emergency or conflict, your score will be a 0.

## Extra Credit

You may complete up to 2 bonus hours of HPR/Sona experiments in addition to any points you completed as part of the course's HPR/Sona requirement. Each bonus hour completed in this way will earn you 5 points, up to a total of 10 points. The same deadline applies as for the standard HPR/Sona experiments (see above). If you do not wish to participate in research or are under 18 and cannot participate, contact the TA to learn about an alternative extra credit assignment.

## Grade Assignment (Grading Scale)

Your final grade is based on the percentage of the 600 points you earn:

The table below describes the relationships between grades and percentage of total points. The first column describes the grade. The second column describes the percentage associated with that grade.

Grade	Percentage
4.0	90% and above
3.5	85 – 90%
3.0	80 - 84%
2.5	75 – 79%
2.0	70 – 74%
1.5	65 – 69%
1.0	60 – 64%
0.0	59% and below

## Part 4: Course Policies

## **Special Considerations related to COVID-19**

Please read the Michigan State University Community Compact regarding COVID-19 (<u>https://msu.edu/together-wewill/msu-community-compact/</u>). If you need to self-isolate due to COVID-19, please let me know and I will work with you to ensure illness or self-isolation does not harm your performance or put you at a disadvantage in the class.

#### **Academic Honesty**

Article 2.III.B.2 of the <u>Academic Rights and Responsibilities</u> states that "The student shares with the faculty the responsibility for maintaining the integrity of scholarship, grades, and professional standards." In addition, the Psychology Department adheres to the policies on academic honesty as specified in <u>General Student Regulations</u> 1.0, Protection of Scholarship and Grades; the <u>all-University Policy on Integrity of Scholarship and Grades; and Ordinance 17.00, Examinations</u>. See <u>Spartan Life Online</u> (splife.studentlife.msu.edu) and/or the <u>MSU Web site</u> (msu.edu) for more.

Therefore, unless authorized by your instructor, you are expected to complete all course assignments, including homework, lab work, quizzes, tests and exams, without assistance from any source. You are expected to develop original work for this course; therefore, you may not submit course work you completed for another course to satisfy the requirements for this course. Also, you are not authorized to use the <u>www.allmsu.com</u> Web site to complete any course work in this course. Students who violate MSU academic integrity rules may receive a penalty grade, including a failing grade on the assignment or in the course. Contact your instructor if you are unsure about the appropriateness of your course work. (See also the <u>Academic Integrity webpage</u>.)

#### Limits to Confidentiality

Materials submitted for this class are generally considered confidential pursuant to the University's student record policies. However, students should be aware that University employees, including instructors, may not be able to maintain confidentiality when it conflicts with their responsibility to report certain issues to protect the health and safety of MSU community members and others. As the instructor, I must report the following information to other University offices (including the Department of Police and Public Safety) if you share it with me:

- Suspected child abuse/neglect, even if this maltreatment happened when you were a child,
- Allegations of sexual assault or sexual harassment when they involve MSU students, faculty, or staff, and
- Credible threats of harm to oneself or to others.

These reports may trigger contact from a campus official who will want to talk with you about the incident that you have shared. In almost all cases, it will be your decision whether you wish to speak with that individual. If you would like to talk about these events in a more confidential setting you are encouraged to make an appointment with the MSU Counseling Center.

## Accommodations for Students with Disabilities

<u>From the Resource Center for Persons with Disabilities</u> (RCPD): Michigan State University is committed to providing equal opportunity for participation in all programs, services and activities. Requests for accommodations by persons with disabilities may be made by contacting the Resource Center for Persons with Disabilities at 517-884-RCPD or on the web at <u>rcpd.msu.edu</u>. Once your eligibility for an accommodation has been determined, you will be issued a Verified Individual Services Accommodation ("VISA") form. Please present this form to me at the start of the term and/or two weeks prior to the accommodation date (test, project, etc.). Requests received after this date will be honored whenever possible.

If you require testing accommodations (additional time, less disruptive room, etc.) you must contact me and present your VISA at least two weeks before the exam date to schedule an alternative exam. Typically, I will schedule for you to take the exam during a special exam session offered by the Psychology Department. Those exams occur in small group settings and are offered every Tuesday at 5:00pm and Friday at 9:00am in Giltner 346. If you are unable to make either of those times, or that option does not meet your VISA accommodations, you may be able to schedule to take your exam at the RCPD office. In either case, the exam must be scheduled well in advance, so you need to adhere to the two-week prior notification requirement.

## **Disruptive Behavior**

Article 2.III.B.4 of <u>Student Rights and Responsibilities</u> for students at Michigan State University states: "The student's behavior in the classroom shall be conducive to the teaching and learning process for all concerned." Article 2.III.B.10 states that "The student and the faculty share the responsibility for maintaining professional relationships based on mutual trust and civility." <u>General Student Regulation 5.02</u> states: "No student shall . . . obstruct, disrupt, or interfere with the functions, services, or directives of the University, its offices, or its employees (e.g., classes, social, cultural, and athletic events, computing services, registration, housing and food services, governance meetings, and hearings)." Students whose conduct adversely affects the learning environment may be subject to disciplinary action through the Student Judicial Affairs office.

## Attendance

Students whose names do not appear on the official class list for this course may not attend this class. Students who fail to attend the first four class sessions or class by the fifth day of the semester, whichever occurs first, may be dropped from the course.