## Psychology 200-003: Cognitive Psychology Fall Semester 2021 Mondays and Wednesdays, 12:40-2:00 pm – Giltner Hall 146 Online information: D2L course FS21-PSY-200-003 Cognitive Psychology

**Instructors:** Jan Brascamp (course instructor; brascamp@msu.edu), Abhilasha Jagtap (graduate TA; jagtapab@msu.edu), Madison Trolinger, Bella Bankstahl, and Lauren Bresky (undergraduate TAs; psy200officehours@gmail.com).

**Course description and objectives:** This course is an introduction to the field of cognitive psychology and will provide an overview of the major theories, findings and methods of the cognitive approach. 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.

**Prerequisite:** PSY 101.

Online or in-person? Unless there are unforeseen covid-related developments during the semester that require us to change our approach, this is an in-person course. This means that lectures will be in-person, and no lecture videos will be posted online. This course will adhere to the measures that MSU has put in place to improve the safety of in-person interactions on campus (see section 'Face coverings and vaccinations' below). Although no lecture videos will be posted online, this course will offer a substantial proportion of its content via the internet. Namely, all lecture slides (but no lecture videos) will be posted on D2L ahead of lectures, and a study guide will be posted ahead of each exam. Also, and importantly, all quizzes and exams for this course will be offered online through D2L, instead of in the classroom. This means that you will need access to high-speed internet to access D2L to take exams and quizzes. Office hours will be online rather than in-person as well. Finally, as part of this course you will be completing Cognitive Psychology experiments in your browser via the CogLab system. Please see below for details on each of these points.

**Face coverings and vaccinations** This course will adhere to the university-wide directives regarding face coverings and vaccinations. Official information on those directives can be found at this address: <a href="https://msu.edu/together-we-will/directives.html">https://msu.edu/together-we-will/directives.html</a>. Here is a summary of what that means for our class. All instructors and students of our course have to wear a face mask while in the classroom and also elsewhere in the building. Requirements for your face mask are listed at the address above, and include that it must cover both nose and mouth. All instructors and students on campus also need to be fully vaccinated against COVID-19 during the fall semester. Some limited exemptions apply, as specified at the address above. If you are exempt from either of these directives, then please obtain a Verified Individual Services Accommodation ("VISA") form specifying your exemption, and please present this form to me at the start of the semester.

**Communication:** Aside from communication inside the classroom, almost all communication for this course will run through the D2L course page: look for *FS21-PSY-200-003 Cognitive Psychology*. You will need to make sure you receive D2L emails (see next section), and you will find yourself logging into D2L frequently throughout the semester.

**D2L email:** Important course information will be sent to you via D2L email, so make sure you don't miss D2L emails. The best way, which I recommend, is to set up D2L to forward D2L emails to your regular inbox (if you haven't done this at some point already). That way you won't miss important announcements. To set up D2L email

forwarding please log onto D2L and navigate to Help > MSU Documentation > D2L Tools and Tips at MSU > D2L Email Forwarding. You can also view your D2L emails in the D2L interface itself rather than in your normal inbox. To do this please navigate to the email interface in D2L, and make sure the 'Filter By:' field is set to 'All Messages'. Without that filter setting important emails may not show. Did I mention that important information for this course will be sent to you via D2L email?

**Getting help, and online office hours:** For questions that have a short answer, you can come talk to us after class or send an email to the course instructor (brascamp@msu.edu). But: we do not manage the Sona system so for questions about Sona please see the next section. For questions that require more interaction, please visit one of the office hours listed in the table below. The office hours will be offered online rather than in-person. If you plan to visit one of the office hours, please email the email address listed for that time/day and specify what you would like to talk about. You will receive a zoom link to attend the office hour.

| Time and day      | Instructor in attendance     | Address to send email to for zoom link |
|-------------------|------------------------------|--|
| Friday, noon-1 pm | Jan Brascamp                 | brascamp@msu.edu                       |
| Tuesday 1-2 pm    | One of the undergraduate TAs | psy200officehours@gmail.com            |

Questions about Sona: The Sona system is a department-wide system, and the instructors of this particular course don't know all of its details. So for all questions about research participation / the Sona system, please contact the Research Participation Coordinator: Ms. Audra Jeffrey. Her email address is jeffre22@msu.edu.

**Recommended text and assigned reading:** The recommended text is *Cognitive Psychology: Connecting Mind, Research, and Everyday Experience, 4th Edition* by E. Bruce Goldstein. 5<sup>th</sup> edition is also allowed, but the chapter numbering in the Course schedule below follows the order of edition 4. The text is not required. The course schedule below lists recommended reading for each lecture. If you decide to read along, then it is a good idea to keep up with reading at the pace indicated in the course schedule, because the recommended reading will match the material of the associated lectures.

**Attendance:** There will be no attendance credit for this course. Still, it is a good idea to attend the lectures because I will present material in a different way than the textbook and I will present material that is not covered by the textbook. Everything that is discussed in lectures may be part of an exam, whereas material from the textbook that did not feature in lectures will not be part of the exam.

CogLab: You need to have access to the CogLab 5 Online Laboratory. This is an online tool that allows you to get hands-on experience with experiments from cognitive psychology at your own computer. For details on how CogLab works, please see the section labeled 'Quizzes' below. If you bought your text from the bookstore, your access code may have been bundled with the text. If you did not get an access code bundled with your text, you must purchase it separately. You have two options.

- 1. Go to the following link, http://www.cengagebrain.com/shop/isbn/9781285461083 (a credit card is required)
- 2. The bookstore may order some standalone copies of the CogLab access code

Once you have an access code (from a bundled copy or bought as a standalone) you will need to create your online CogLab account. Please go to D2L and access the document *CogLab instructions* under *Practical matters* for detailed instructions on how to do so.

**Exams:** There will be three multiple choice exams: two midterms and a non-cumulative final exam. Each exam will consist of 52 multiple choice questions about material that has been discussed in lectures (since the previous exam). Each exam counts for 26% of your final grade, except for your best exam: that one counts for 30%. Everything that is discussed in lectures and/or shown on the lecture slides may be part of an exam. Material from the textbook that did not feature in lectures will not be part of the exam. Exams will be offered on D2L, and you

will take them at your computer. This means that you will need access to high-speed internet to access D2L to take the exams. At the exam time and date listed in the course schedule below, go onto D2L, open the 'Assessments' dropdown menu and select 'Quizzes'. There you will see the relevant exam listed. More details about how to take the exams will be provided ahead of the exam dates. You are required to complete all exams on your own and without reference material.

Coglab quizzes: This course has three short multiple choice quizzes. Each quiz counts for 5% of your final grade. Each quiz will consist of 10 multiple choice questions about CogLab (please see the section named CogLab to learn what that is). This is how that works: in the course schedule below I have assigned 15 CogLab experiments that are applicable to different course topics. These experiments will familiarize you with behavioral methods that are used to investigate human cognition, and completing them will help you better understand the lectures. You are expected to participate in the assigned CogLab experiments around the time that they are assigned, but your participation in the experiments themselves will not be evaluated directly. Instead, during each of the three quizzes you will be tested on your knowledge of the 5 CogLab experiments that were assigned prior to that quiz, and this knowledge will depend on you having completed those experiments. Beware: the order of the 15 assigned CogLab experiments in the course schedule does not follow the numbering in the online CogLab system, so please pay attention. Like the exams, the quizzes will be offered on D2L, and you will take them at your computer. This means that you will need access to high-speed internet to access D2L to take the quizzes. At the exam time and date listed in the course schedule below, go onto D2L, open the 'Assessments' dropdown menu and select 'Quizzes'. There you will see the relevant quiz listed. More details about how to take the quizzes will be provided ahead of the quiz dates. You are required to complete all exams on your own and without reference material.

**Exam and quiz times, and requesting alternatives:** The times and dates for exams and quizzes are listed in the table labeled 'Test Schedule' below. If you have a good reason why you cannot take an exam or quiz at the assigned time, please send an email to the graduate TA, Abhilasha Jagtap, identifying the issue. The email address is <a href="mailto:jagtapab@msu.edu">jagtapab@msu.edu</a>. For valid requests that come in before the exam/quiz time, we can reschedule the day and/or time for you. Please be sure to review your availability right now: if you miss an exam or quiz and contact the TA after the assigned time has already passed, then there is little we can do to help.

**Technical difficulties during exam or quiz:** If during a test you experience technical difficulties, then please email the graduate TA, Abhilasha Jagtap, to explain the issue. The email address is <a href="mailto:jagtapab@msu.edu">jagtapab@msu.edu</a>. She will work with you to resolve it.

**Subject Pool Participation (HPR/Sona):** 3% of your total grade for this course comes from participation in the subject pool, which is coordinated through the Psychology department's Sona system. This is equivalent to 3 hours of research participation. You may also complete more than 3 hours if you are interested in extra credit (see section 'Extra credit' below). This semester will include a mixture of in-person and online experiments from which you can choose. Please make sure you participate before the final deadline for Sona participation: Friday, December 10. Details for how to create your Sona account are available in the document *Class SONA Instructions\_FS2021.pdf* in the folder *Practical matters* on D2L. For all questions about research participation, please contact the Research Participation Coordinator (Ms. Audra Jeffrey; jeffre22@msu.edu). Here are two further pointers. First, be careful because some experiments posted on Sona compensate with money, not course credit. Second, be sure to sign up for the Psychology department's Sona system; some other departments have their own Sona system but participation in those systems doesn't count for Psychology courses.

**Subject Pool Participation (HPR/Sona) alternative assignment:** If you are under 18 years old and therefore cannot participate in research, you can perform an alternative assignment. Information on this alternative assignment can be found in the document *Class SONA Instructions\_FS2021.pdf* in the folder *Practical matters* on D2L, and for further details please contact the Research Participation Coordinator (Ms. Audra Jeffrey;

jeffre22@msu.edu). If you do not wish to participate in research for any other reason but would still like to get the points, then you can perform the following alternative assignment. Select 15 of the CogLab experiments that are not among the 15 assigned for the course (i.e. not in the schedule below), complete these experiments, and answer *all* the associated questions in the CogLab student manual (log into CogLab and choose 'View student manual'). Your answers must be typed out and emailed to me no later than the final deadline for Sona participation: Friday, December 10, and points will be assigned in proportion to the experiments/questions completed (up to 3% of your grade). If there is evidence that your answers are partially or completely plagiarized/copied from another source (a different student, etc.), then points will be subtracted and you will be reported to the appropriate authorities (see https://ombud.msu.edu/academic-integrity/plagiarism-policy.html).

**Extra credit:** This course has a total of 2% of extra course credit that you can earn. You can earn these 2% of extra credit in one of two ways, but you can select only one of the two (not both). These are the ways:

- 1. You may complete 2 more hours of HPR/Sona experiments, in addition to any points you completed as part of the course's HPR/Sona requirement. This will earn you 2% of extra credit. The same deadline applies as for the standard HPR/Sona experiments (see above).
- 2. You may complete the HPR/Sona alternative assignment listed above, which consists of performing additional CogLab experiments and answering the associated questions. Extra credits will be awarded in proportion to the number of CogLab experiments completed in this way, up to 2% of course credit for 10 completed experiments. Note: if you already performed the HPR/Sona alternative assignment and would like to make use of this second extra credit option, then you need to select different CogLab experiments for the extra credit option (i.e. ones that are neither among the 15 in the schedule below, nor among the ones you selected as an HRP/Sona alternative). The same deadline applies as for the standard HPR/Sona alternative, and the same plagiarism rules apply (see above).

Accommodations for Students with Disabilities: 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 http://rcpd.msu.edu. 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 (exam, quiz, etc.). Requests received after this date may not be honored. If you require testing accommodations (additional time, etc.) please contact me and send your VISA well ahead of the date of the test.

## Final Grade Breakdown

|              | # points   | % of final grade |
|--------------|------------|------------------|
| Best Exam    | 60*        | 30.0%*           |
| Other Exam   | 52         | 26.0%            |
| Other Exam   | 52         | 26.0%            |
| Quiz 1       | 10         | 5.0%             |
| Quiz 2       | 10         | 5.0%             |
| Quiz 3       | 10         | 5.0%             |
| Subject Pool | 6          | 3.0%             |
| Course total | 200 points | 100%             |
|              |            |                  |

<sup>\*</sup>Each exam has 52 questions. In calculating your overall grade, you can treat your best exam as if it contained 60 questions, while keeping your

proportion of correct questions on that exam the same as it was in reality (e.g. 26 out of 52 becomes 30 out of 60).

## Final Grade Scale, unless announced otherwise

| 90½ % and above | 4.0 |
|-----------------|-----|
| 86½ % and above | 3.5 |
| 80½ % and above | 3.0 |
| 76½ % and above | 2.5 |
| 70½ % and above | 2.0 |
| 66½ % and above | 1.5 |
| 60½ % and above | 1.0 |
| Less than 60½ % | 0.0 |

Course schedule: This schedule is tentative. I reserve the right to change it to best suit the course.

| Date     | Lectures                                | Recommended  | Recommended     | Tests this week (see    |
|----------|---|--------------|-----------------|-------------------------|
|          |   | book chapter | CogLab          | Test schedule for exact |
|          |   | accompanying | experiments to  | day and time)           |
|          |   | lectures     | do this week    |                         |
| 9/1/21   | 1. Introduction to the course           | Ch 1         | -Signal         |                         |
|          |   |              | detection       |                         |
| 9/6/21   | (Labor day)                             | Ch 2         | -Simple         |                         |
| 9/8/21   | 2. History of cognitive psychology 1    |              | detection       |                         |
|          |   |              | -Sternberg      |                         |
|          |   |              | search          |                         |
| 9/13/21  | 3. History of cognitive psychology 2    | Ch 2         | -Müller-Lyer    |                         |
| 9/15/21  | 4. Cognitive neuroscience 1             |              | illusion        |                         |
|          |   |              | -Visual search  |                         |
| 9/20/21  | 5. Cognitive neuroscience 2             |              |                 | Quiz 1: first five      |
| 9/22/21  | 6. Cognitive neuroscience 3 + Methods 1 |              |                 | CogLab experiments.     |
| 9/27/21  | 7. Methods 2                            |              |                 |                         |
| 9/29/21  | 8. Review for Midterm 1                 | Ch 3         | -Blind spot     |                         |
| 10/4/21  | (Midterm exam 1)                        | Ch 3         | -Apparent       | Midterm 1: all lectures |
| 10/6/21  | 9. Perception 1                         |              | motion          | till this point.        |
|          |   |              | -Change         |                         |
|          |   |              | detection       |                         |
| 10/11/21 | 10. Perception 2                        | Ch 4         | -Spatial cueing |                         |
| 10/13/21 | 11. Perception 3                        |              | -Stroop effect  |                         |
| 10/18/21 | 12. Perception 4 + Attention 1          | Ch 5 and 6   |                 | Quiz 2: next five       |
| 10/20/21 | 13. Attention 2                         |              |                 | CogLab experiments.     |
| 10/25/21 | (Break day)                             | Ch 7 and 8   | -Partial report |                         |
| 10/27/21 | 14. Attention 3 + Memory 1              |              | -Memory span    |                         |
| 11/1/21  | 15. Memory 2                            |              | -Encoding       |                         |
| 11/3/21  | 16. Memory 3                            |              | specificity     |                         |

| 11/8/21  | 17. Review for Midterm 2              | Ch 9         | -Serial position | Midterm 2: all lectures |
|----------|---------------------------------------|--------------|------------------|-------------------------|
| 11/10/21 | (Midterm exam 2)                      | Ch 10        | -Prototypes      | since previous exam.    |
| 11/15/21 | 18. Conceptual knowledge + Imagery 1  | Ch 10 and 11 |                  | Quiz 3: final five      |
| 11/17/21 | 19. Imagery 2                         |              |                  | CogLab experiments.     |
| 11/22/21 | 20. Language 1                        | Ch 11        |                  |                         |
| 11/24/21 | 21. Language 2                        |              |                  |                         |
| 11/29/21 | 22. Language 3 + Problem solving 1    | Ch 12        |                  |                         |
| 12/1/21  | 23. Problem solving 2                 | Ch 13        |                  |                         |
| 12/6/21  | 24. Judgment, decisions and reasoning |              |                  |                         |
| 12/8/21  | 25. Review for Final exam             |              |                  |                         |
| 12/14/21 | (Final exam)                          |              |                  | Non-cumulative final    |
|          |                                       |              |                  | exam: all lectures      |
|          |                                       |              |                  | since previous exam.    |

**Test schedule:** Although lectures for this course are in-person, all tests will be administered online, through D2L. Please note: for all tests there is a certain time window during which the test can be started on D2L. This window is listed below under 'Starting time window'. Once started, the clock starts ticking toward the time limit, which is listed under 'Test duration'. For information on rescheduling a test, please see the section above that is titled 'Exam and quiz times, and requesting alternatives'.

| Date       | Starting time window | Test duration | Test           |
|------------|----------------------|---------------|----------------|
| 9/20/2021  | 0:01 am-11:59 pm     | 20 minutes    | Quiz 1         |
| 10/4/2021  | 12:40-2:00 pm        | 80 minutes    | Midterm exam 1 |
| 10/18/2021 | 0:01 am-11:59 pm     | 20 minutes    | Quiz 2         |
| 11/10/2021 | 12:40-2:00 pm        | 80 minutes    | Midterm exam 2 |
| 11/15/2021 | 0:01 am-11:59 pm     | 20 minutes    | Quiz 3         |
| 12/14/2021 | 12:45-2:45 pm        | 80 minutes    | Final exam     |

**Distributing lectures:** Students are expected to respect the intellectual property of course instructors. All course materials presented to students are the copyrighted property of the course instructor and are subject to the following conditions of use:

- 1. Students may not post the recordings or other course materials online or distribute them to anyone not enrolled in the class without the advance written permission of the course instructor and, if applicable, any students whose voice or image is included in the recordings.
- 2. Any student violating the conditions described above may face academic disciplinary sanctions.

Academic Honesty: Article 2.III.B.2 of the <u>Student Rights and Responsibilites (SRR)</u> states that "The student shares with the faculty the responsibility for maintaining the integrity of scholarship, grades, and professional standards." In addition, the (insert name of unit offering course) adheres to the policies on academic honesty as specified in General Student Regulations 1.0, Protection of Scholarship and Grades; the all-University Policy on Integrity of Scholarship and Grades; and Ordinance 17.00, Examinations. (See <u>Spartan Life: Student Handbook and Resource Guide</u> and/or the MSU Web site: <u>www.msu.edu</u>.)

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 www.allmsu.com 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 Academic Integrity webpage.)