PSY 322 COGNITIVE PSYCHOLOGY

Spring 2023

Instructor: Dr. Jennifer McCabe (she/her)

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Drop-in times

(office hours): TU 2-3pm & TH 9-10am →→

Class time: TU & TH 11:30-1:20pm

Julia Rogers (JR) G52

Come visit me! Student meetings can take place in my office (JR G20) or via <u>Teams</u> or <u>Zoom</u>. You can drop in during office hours or

schedule appointments via email or Navigate.

The brain is limited.

There are gaps in our attention.

The mind contrives to make those gaps invisible to us. We think we know things we don't. We think we are safe when we are not.

-- Michael Lewis, The Undoing Project, p. 346

OVERVIEW: What is Cognitive Psychology, and why should you learn about it?

The science of *Cognitive Psychology* explores how the human mind processes information, including what the human mind is, how it evolved, how it develops through the lifespan, how it accomplishes the extraordinary achievements necessary for day-to-day living, and what happens when something goes wrong. Some topics in this class include perception, attention, memory, imagery, language, problem solving, and decision-making. This course examines some theories about what makes the human mind special, and why we think the way we do. I cannot think of a more exciting and relevant topic, and I hope you will feel the same way!

PEDAGOGY: What can you expect of the class experience?

First, you should know that I LOVE teaching *Cognitive Psychology* and I am SO HAPPY you are here! I value what each of you contributes with regard to diverse backgrounds, perspectives, and experiences. Our classroom is a place where *everyone* should feel welcome, and all voices are heard and respected. This is when the best learning happens, and I look forward to partnering with you in this endeavor. If there is anything I can do to better support these goals, do not hesitate to let me know.

So, what's going to happen in this class? You can expect a variety of teaching and learning strategies including lectures, demonstrations, retrieval practice, written work, discussions, and exams. You will learn about the field of Cognitive Psychology from a textbook as well as two popular press books; from me *and* from each other. Most days we will begin class with in-class retrieval practice (see below), then move into lecture interspersed with demonstrations and discussions. PowerPoints are not posted, but I distribute chapter outlines to guide your reading, organize your note-taking, and preview upcoming topics. This course is designed to maximize evidence-based strategies for effective learning, including testing/retrieval, spacing, interleaving, elaboration, generation, and metacognitive reflection. This is a complex and challenging topic; your investment in these strategies will pay off in better learning and academic outcomes. I look forward to going on this journey with you. I am available via email, phone, in person, or Zoom. In addition, there is an anonymous survey link on Canvas that will stay open all semester for any questions or feedback.

STUDENT LEARNING OUTCOMES: What should you be able to do by the end of this course?

- 1. Describe how the human mind works, from lower- to higher-level processes.
- 2. Understand and critically evaluate the major theories of human cognition.
- 3. Apply the adaptationist approach to understanding the human mind.
- 4. Interpret and critique research findings as they relate to cognitive theories and the real world.
- 5. Examine issues of equity, diversity, and social justice in relation to contemporary cognition research.
- 6. Improve your metacognitive skills (knowing what you know, learning how to learn).

Ultimately, by the time you leave this class, you should *talk*, *think*, and *write* like a cognitive psychologist!

REQUIREMENTS: What do you need for this course?

Prerequisite: PSY 105 *Introduction to Psychology* (or equivalent)

Required Texts: (also on reserve at the Library for 2-hour borrowing for the duration of the semester)

- Goldstein, E. B. (2019). Cognitive psychology: Connecting mind, research, and everyday experience (5th Edition). Cengage.
- Brown, P. C., Roediger, H. L., & McDaniel, M. A. (2014). *Make it stick: The science of successful learning.* The Belknap Press of Harvard University.
- Ariely, D. (2008). Predictably irrational: The hidden forces that shape our decisions. Harper Collins.

ASSESSMENTS: How will your learning be measured?

You can generally expect to receive feedback on assessments within 72 hours of the due date.

<u>Introductory Activities (5 points)</u>: At the start of the semester, complete two activities designed to help you get to know the course, and for us to get to know each other: (1) *Student Survey* (private and submitted to me) (2 pts); and (2) *Introduction Video* (submitted using Canvas Studio on a class-wide discussion board) (3 pts).

<u>Retrieval Practice (60 points total):</u> A central principle of "Make It Stick" is that *frequent, effortful, low-stakes, cumulative, spaced (distributed) retrieval practice (RP)* produces durable learning <u>and</u> improves *metacognition,* or knowing what you know. This principle is applied in two ways:

- In-Class RP (24 points): At the start of most class periods, and often in the middle and at the end, you will answer questions about past and current course topics. For each day of class, in hard copy or on a blank Word or Google document begin a page labeled, "Retrieval Practice DATE FULL NAME", on which you write/type the answers to questions posed during the class period. Without referencing your notes or other course materials, you should think through each question and attempt to retrieve the answer. Effort is more important than accuracy; indeed, errors are welcome because they create optimal conditions for subsequent learning! As we discuss the answers, use a different colored pen/font to correct, update, or elaborate on your responses. Submit each Retrieval Practice (RP) page at the end of the class period, preferably via Canvas by: (1) uploading the RP doc; or (2) uploading a photo of your hard copy RP page You can also submit the hard copy RP page to me before you leave class. Only your effort is graded; complete submissions (answers + feedback) earn 1 point per day (see course schedule). There are no make-ups for in-class RPs, but you may miss TWO without penalty; and, if you are absent, you may submit answers for half credit. RP questions will be pasted into a running document on Canvas after each class.
- Canvas RP (36 points): For each chapter, there are two sets of retrieval practice questions (multiple
 choice and short essay, to mimic the exam structure) on Canvas. Only the MCRPs are required.
 - Multiple Choice Retrieval Practice (MCRP) (36 points): Complete each untimed 15-question MCRP at least once on your own time, though you can (and should!) take it multiple times. The questions and answers will shuffle each time, and only your highest grade will be recorded. I recommend using this as a pre-test before we begin each chapter (research suggests previewing the terms and ideas in a chapter helps with subsequent learning from the text and lectures) and as a learning and study tool as you prepare for exams. Truly practicing retrieval means no short-cuts: Although MCRPs are open-book/open-notes, try to answer from your long-term memory first without consulting course materials. Put in the effort to think about each one. In addition to choosing a correct answer, consider why the incorrect choices are incorrect. You will get feedback on your performance, which you can use to improve your score for the next time (this is metacognition!). Space out your practice take each RP several times with several days in between. These combined strategies will provide excellent preparation for the exams. At the end of the semester, your highest grade on each RP will be factored into your course grade. There are 12 chapters, and so there are 12 RPs, each worth up to 3 points.
 - Short Essay Retrieval Practice (OPTIONAL but recommended): Think through, answer, and/or discuss these with classmates as a learning tool to prepare for exams.

Exams (325 points): Exams are designed to assess your *understanding* and *application* of the concepts, principles, theories, and empirical findings in cognitive psychology (and to help strengthen your learning further, given every retrieval event is a learning event. They are progressively cumulative, meaning that you are responsible for all information from the course up until the exam day (though recent course information will be more prevalent). The first two exams are worth 100 points each, and the final exam is 125 points. You can expect a combination of multiple choice and short essay questions covering material from lectures, textbook chapters, and any other required readings/videos. The Final Exam will contain a longer integrative essay you can prepare ahead of time. To prepare, you should utilize the multiple-choice retrieval practice (MCRP) for each chapter on Canvas (see below) along with the practice resources in the Goldstein textbook. Apply the *Make It Stick* strategies (especially spacing, elaboration, and testing/retrieval)!

Each exam is completed during class time via Canvas. You are on your honor to only have the Canvas exam open on your computer during this time. [Notify me as soon as possible if you have extenuating circumstances impacting your ability to complete an exam on time.]

"Make It Stick" (MIS) Reflection Posts (40 points): This book (subtitled "The Science of Successful Learning") presents the most effective ways to enhance your learning and memory in classroom and other settings – and how to improve your metacognition. For the MIS assignment, submit four sets of discussion board posts and replies in your assigned virtual learning community in response to the book Make It Stick. Each is worth 10 points. The 1st post is a reflection based on Ch. 1. For the 2nd post, based on your assigned chapter (Ch. 2, 3, or 4), write a post describing highlights and questions/critiques to teach your classmates about what you read (and you will learn about the other chapters from their posts). The 3rd post is similar but based on your assigned chapter from the next part of the book (Ch. 5, 6, or 7). The 4th post is based on the final chapter (Ch. 8). On each of the four MIS discussion boards, submit a substantive original post (8 points) and reply to at least two of your classmates' posts (2 points). Each of these should support your metacognition. During the class day before Exam 1 we will have an opportunity to discuss the book (through Ch. 7) in person and as applied to the upcoming test.

<u>Diversity in Cognition (DivCog) Project (40 points)</u>: Much of the course examines the ways in which cognitive processes are similar across people. The purpose of the "DivCog" assignment is to encourage you to explore diversity in relation to cognitive psychology research. Use PsycINFO and/or Google Scholar to select a recent (past 10 years) peer-reviewed primary source research article that speaks to some aspect of diversity (e.g., culture, age, sex/gender, race/ethnicity, psychological disorder) and has potential implications for social justice and equity issues. After having your article approved (5 points), thoroughly read the article then submit an article summary and reflection form on Canvas (25 points). Then, on the class day set aside for DivCog article sharing (see course schedule), prepare a one-slide summary (10 points) of your article to help you teach your classmates about what you have learned.

"Predictably Irrational" (PI) Letter (20 points): Near the end of the semester, you will read parts of the book "Predictably Irrational: The Hidden Forces that Shape Our Decisions" (pdf on Canvas), which expands on the course topic of "Judgment, Decisions, and Reasoning" (Goldstein Ch. 13). Based on your assigned chapters (Introduction and Ch. 13 Beer and Free Lunches, plus one additional chapter), write a letter to a friend or family member highlighting the most important, interesting, and/or applicable parts of the book, connections to course material, and reactions or critiques. Post this on a discussion board in your assigned virtual learning community (15 points) and submit at least two substantive replies to classmates' letters (5 points). During our final class day, we will discuss the book in small groups.

Attention, Participation, and Professionalism (10 points): I care about your learning and want to create the best possible conditions for this to occur in our classroom. Class attendance is necessary, but not sufficient. You should come to class ready to engage in the learning process, having read and, more importantly, thought about the assigned materials. Some ways I evaluate this category is to consider your attention during lectures and your active participation in discussions (e.g., asking and answering questions, contributing opinions). Professionalism, respect, and maturity is expected during all of our interactions. A pattern of self-imposed distraction (e.g., extensive phone use, off-task chatting) will impact points earned in this category. See the Laptops and Cell Phone policy below.

COURSE GRADES

Your final grade is based on the following point system, totaling **500 points**.

Introductory Activities (Survey + Video)	5 points
Retrieval Practice (RP) (In-Class + Canvas)	60 points
Exams (2 in-class + Final Exam)	325 points
Make It Stick" Reflection Posts	40 points
Diversity in Cognition Project	40 points
Predictably Irrational Letter	20 points
Attention, Participation, and Professionalism	10 points

Grading Scale:

465-500 (93-100%) = A	450-464 (90-92.9%) = A-	435-449 (87-89.9%) = B+
415-434 (83-86.9%) = B	400-414 (80-82.9%) = B-	385-399 (77-79.9%) = C+
365-384 (73-76.9%) = C	350-364 (70-72.9%) = C-	335-349 (67-69.9%) = D+
315-334 (63-66.9%) = D	300-314 (60-62.9%) = D-	0-299 (<60%) = F

POLICIES

Academic Honor Code: All Goucher students are bound by the standards of the Academic Honor Code, found at www.goucher.edu/documents/General/AcademicHonorCode.pdf. Suspected violations of the Honor Code will be referred to the Academic Honor Board. You will be asked to agree to the Honor Code as part of the introductory Student Survey on Canvas.

Attendance: Please do your best to attend all classes and arrive on time. Learning is an active process; therefore it important to attend and participate in class. Yet we all know that life is complicated, and situations do arise that may necessitate missing class. If you are going to be absent or late, notify me *in advance when possible*, or as soon as you can. It is your responsibility to get notes from a classmate, and then contact me if you have questions or concerns. *Important:* If you need to miss multiple classes due to health issues, in addition to notifying me as soon as possible, you should follow the *Absence Due to Medical Emergency* policy. [FYI: Find info about all Goucher policies here.]

Electronic Devices: Please plan to bring a laptop or comparable device to class each day. Though we will use technology during class, please put a system in place to restrict tech use to on-task activities. Quick phone checks are welcome, but you should not be engaged in extensive phone activity—during class time (note you will get a 5-minute break in the middle of the class period). Given extensive research (and plenty of anecdotal evidence) showing high levels of distraction (to yourself and to your peers) from off-task tech use during class, and given that attention is an essential prerequisite for deep and durable learning, I expect that you self-monitor your tech use to minimize these distractions, thereby maximizing the potential for learning for all. Let's make this a class where we are truly present together.

Late Work: For all assignments (other than in-class RPs, for which there are no make-ups but you can miss two without penalty; see above), strive for timely submission by the due dates noted below and on Canvas. Notify me as soon as possible if you will need an extension so we can discuss the situation. I reserve the right to impose a 10% penalty (one letter grade) per day an assignment is late.

Canvas & Goucher Email: On Canvas (canvas.goucher.edu) you will find everything you need for a successful course experience, including schedule, daily modules, assignments, exam information, and grades. You are expected to regularly check Canvas and your Goucher email for updates and announcements. Please read the Canvas page on "Netiquette" about expectations for behavior during online communication, email, and discussion boards. I expect us all to respect these guidelines.

Academic Accommodations: For documented accommodations, please ensure that the Office of Accessibility Services (OAS) contacts me with this information early in the semester so that we can communicate promptly about how this may impact your participation in the class. If you have not yet established services through OAS, but have a disability or temporary situation that requires accommodations visit <u>Accommodations and Services</u> and <u>Academic Accommodations</u> as soon as possible to make a request and submit documentation. More information below in the <u>Accommodations</u> and <u>Services</u> section.

Religious Observance: If you anticipate missing class or an assignment deadline due to a religious observance, complete and submit the <u>Religious Observance Form</u> as early as possible.

Navigate: Throughout the semester (and especially during the 5th and 8th weeks), you will receive feedback via Navigate regarding your academic performance. You can view this feedback by logging in or using the app. You will be sent an email if I or any of your professors are concerned about your performance in this class. (Positive feedback is found solely on the Navigate website.) Navigate allows me to (1) request that you schedule an appointment by going to Navigate, (2) share information regarding your course progress with your advisors (faculty and staff) or other support offices, and (3) recommend that you contact a specific campus resource (e.g., ACE, Writing Center, QR center). You may also be contacted directly by one of these services.

Goucher Psychology Program Statement on Classroom Etiquette

We are committed to supporting you in your holistic development as a student and as a citizen of the world. You can expect that we will support you along your path toward personal, academic, and professional growth, but you also have responsibility and accountability in this process with regard to your professional behavior. You are an undergraduate student, but you are also an emerging scholar and a representative of the field of psychology. We expect that you will make decisions to actively contribute to a learning environment that promotes education and growth for all, both inside and outside the classroom. With regard to this course, this includes, but is not limited to:

- Preparing for each class period by completing all reading and other assignments.
- Arriving to class on time for every meeting, and ready to focus and learn.
- Entering and exiting the classroom while class is in session only for emergencies, and in a non-disruptive manner.
- Eliminating distractions that you have control over during class (e.g., phone use, chatting).
- Actively participating (and actively listening) in class discussions and activities.
- Being respectful and mature at all times this includes being accepting and open to others in the room and to the educational process itself.
- Appropriately judging the personal information that you may choose to disclose about yourself, before you share.
- Waiting until the conclusion of the class meeting before starting to pack your books and other materials.
- Submitting class assignments on time; and if an assignment will be late due to unforeseen circumstances, communicating with your instructor about the situation as soon as possible.

SUPPORT SERVICES FOR GOUCHER STUDENTS

(full list with links on Canvas)

Academic Center for Excellence (ACE): ACE is an academic and advising support center that includes Academic Success Coaching, the Office of Accessibility Services, and Success Advising. ACE provides academic success coaching sessions and academic skills workshops to all Goucher students on various topics, including time management, organizational skills, research-based study strategies, and reading and note-taking skills.

Accessibility Services: Goucher College seeks to provide equal educational opportunities for qualified students with disabilities. This is consistent with our Community Principle of Inclusion, which states that we will acknowledge and embrace the unique gifts and differences of our community members. We are committed to compliance with Section 504 of the Rehabilitation Act of 1973, the Americans with Disabilities Act (ADA), and

other relevant state and federal legislation. The Office of Accessibility Services (OAS) works with faculty, staff and students to provide appropriate accommodations so that students have an equal opportunity to participate inside the classroom and in college programs and activities. If you have not yet established services through OAS, but have a disability that requires accommodations or temporary impairment (conditions include but are not limited to; mental health, attention-related, learning, vision, hearing, physical or health impacts), please visit the Accommodations and Services and Academic Accommodations sections on the Accessibility Services webpage to make a request and submit documentation. Address general inquiries to access@goucher.edu.

Center for Race, Equity and Identity: The Center for Race, Equity and Identity (CREI) invites all students to engage in educational and co-curricular opportunities dealing with social justice, intersectionality and Critical Race Theory (CRT). CREI seeks to foster an environment in which marginalized and oppressed community members feel affirmed and comfortable exploring and expressing their identities. From individual advising to group support and workshops open to the public, many services are offered to help build community and support your success.

<u>Library</u>: Our librarians help students through the entire research process: from choosing a research topic to publishing that senior thesis, and everything in between. There is a lot of information out there and librarians can help you find, organize, and contextualize it. Get started with your research by visiting the library <u>homepage</u>, the <u>FAQ page</u>, texting your question to <u>410-609-5539</u>, requesting a research appointment, or directly <u>emailing a librarian</u>.

<u>Student Counseling Center</u>: The Student Counseling Center offers a variety of services to support the emotional wellness and academic success of students. In addition to psychoeducational outreach, workshops, and groups, confidential individual psychotherapy services (typically 1-12 sessions) are available at no charge, as well as referral to community providers for students needing longer term or specialized services. Students also have free, 24/7 phone access to licensed mental health clinicians by calling 855-236-4278. For more info or to schedule an appointment, call 410-337-6481.

<u>Title IX Office</u>: Goucher College seeks to provide an environment that is free of bias, discrimination, and harassment. If you have been the victim of discrimination/sexual harassment/misconduct/assault, we encourage you to report this. If you report this to a faculty member, they must notify our Title IX coordinator about the basic facts of the incident including your name. Go to the <u>Title IX site</u> for more information about your options. Additionally, there are confidential resources available to you on campus who do not have to share your disclosure with the college:

- Health and Counseling Services: 410-337-6050 for Health Center appointments; 410-337-6481 for Counseling Center appointments,
- Chaplain Maeba Jonas: 410-337-6048 or chaplain@goucher.edu
- Rabbi Josh Snyder: 410-337-6545
- Peer listeners: extensively trained students, to listen about whatever students need to talk about; contact information will be available soon
- Survivor Advocates: Post Bac students trained in trauma-informed listening

Writing Center: The Writing Center serves the Goucher community by offering one-on-one consultations on any issue related to writing, from brainstorming ideas to polishing drafts. We believe that all writers need readers; therefore, each one of our tutoring sessions is a collaboration between the student and the tutor, individually designed to help meet their particular needs. In addition to writing support, we offer speaking sessions for English language learners, and we can be a practice audience for oral and group presentations. Drawing from the strengths of our curriculum, our tutors represent a variety of disciplines and receive extensive training in both the theoretical and practical aspects of tutoring and learning. While the Center mainly operates on an appointment-based schedule, we also offer walk-in hours. We look forward to working with you! Please email us if you have any questions or need help scheduling your appointment.

PSY 322 COURSE SCHEDULE Spring 2023

Subject to change with advance notice. Any changes will be announced via email and posted on Canvas.

Wk	Date	Topic & Assigned Materials	Due
1	TU 1/31	Welcome & Overview	Survey & Intro Video ASAP In class: RP1
	TH 2/2	Preface to Students (pp. xxix-xxx) Goldstein Ch. 1 <i>Introduction to Cognitive Psychology</i> (pp. 1-22)	In class: RP2
2	TU 2/7	Goldstein Ch. 2 Cognitive Neuroscience (pp. 25-38)	In class: RP3
	TH 2/9	Goldstein Ch. 2 Cognitive Neuroscience (pp. 38-57)	In class: RP4 Make It Stick (MIS) Post 1 by FR 2/10 (replies by Mon 2/13)
3	TU 2/14	Goldstein Ch. 3 Perception (pp. 59-78)	In class: RP5
	TH 2/16	Goldstein Ch. 3 Perception (pp. 78-90)	In class: RP6 MIS Post 2 by Fri 2/17 (replies by Mon 2/20)
4	TU 2/21	Goldstein Ch. 4 Attention (pp. 93-109)	In class: RP7
	TH 2/23	Goldstein Ch. 4 Attention (pp. 110-126)	In class: RP8 MIS Post 3 by Fri 2/24 (replies by Mon 2/27)
5	TU 2/28	Make It Stick Discussion Exam 1 Preparation	In class: RP9
	TH 3/2	EXAM 1 (Ch. 1-4)	Canvas MCRPs for Goldstein Ch. 1-4
6	TU 3/7	Goldstein Ch. 5 Short-Term & Working Memory (pp. 129-142)	In class: RP10
	TH 3/9	Goldstein Ch. 5 Short-Term & Working Memory (pp. 143-158)	In class: RP11
7	TU 3/14	Goldstein Ch. 6 Long-Term Memory: Structure (pp. 161-170)	In class: RP12
	TH 3/16	Goldstein Ch. 6 Long-Term Memory: Structure (pp. 170-189)	In class: RP13
8	3/18 - 3/26	**SPRING BREAK – NO CLASS**	
9	TU 3/28	Goldstein Ch. 7 Long-Term Memory: Encoding, Retrieval, & Consolidation (pp. 191-202)	In class: RP14 DivCog Article Sign-Up / Approval by WED 3/29
	TH 3/30	Goldstein Ch. 7 Long-Term Memory: Encoding, Retrieval, & Consolidation (pp. 202-222)	In class: RP15 MIS Post 4 by Fri 3/31 (replies by MON 4/3)
10	TU 4/4	Goldstein Ch. 8 Everyday Memory & Errors (pp. 225-241)	In class: RP16
	TH 4/6	Goldstein Ch. 8 Everyday Memory & Errors (pp. 242-259)	In class: RP17 DivCog Form by FR 4/7
11	TU 4/11	Diversity in Cognition Discussion Exam 2 Preparation	In class: RP18 DivCog Slide by class time
	TH 4/13	EXAM 2 (Ch. 1-8)	Canvas MCRPs for Goldstein Ch. 5-8

12	TU 4/18	Goldstein Ch. 10: Visual Imagery (pp. 297-310)	In class: RP19
	TH 4/20	Goldstein Ch. 10: Visual Imagery (pp. 310-318)	In class: RP20
13	TU 4/25	Goldstein Ch. 11: Language (pp. 321-330)	In class: RP21
	TH 4/27	Goldstein Ch. 11: Language (pp. 331-352)	In class: RP22
14	TU 5/2	Goldstein Ch. 12: Problem Solving & Creativity (pp. 355-374 & 381-391)	In class: RP23
	TH 5/4	Goldstein Ch. 13: <i>Judgment, Decisions, Reasoning</i> (pp. 393-404)	In class: RP24
15	TU 5/9	Goldstein Ch. 13: <i>Judgment, Decisions, Reasoning</i> (pp. 404-425)	In class: RP25
	TH 5/11	Predictably Irrational (PI) Discussion Final Exam Preparation	PI Letter by class time (11:30am) (replies by FR 5/12) In class: RP26
FE	TU 5/16	Final Exam 12-2pm, JR G52	Canvas MCRPs for ALL Goldstein chapters by 12pm