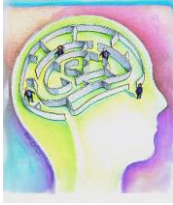




OTRP *online*
office of teaching resources in PSYCHOLOGY



PSY 235

COGNITIVE PSYCHOLOGY

Spring 2016



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Student hours: *M & Th 2:30-4pm & By Appt*
Class Time: *TF 1:40-3:05PM; Th 12:40-1:35pm*
Julia Rogers G46

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

The science of *Cognitive Psychology* explores how the human mind processes information. This includes studying 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 major topics in this class include: perception, attention, memory, imagery, language, problem solving, and decision-making. This course examines some of the basic 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 by the end of the course.

Pedagogy: *What can you expect of the learning experience?*

This course encompasses a variety of pedagogical strategies, including lecture, demonstrations, active learning exercises, retrieval practice, exams, written work, and small and large group discussions. You will learn about *Cognitive Psychology* from a traditional textbook as well as two popular press books and research articles; from your instructor and from each other.

STUDENT LEARNING OBJECTIVES

- Develop a model for how the human mind works, from lower- to higher-level processes.
- Apply the adaptationist approach to understanding the human mind.
- Understand and critically evaluate the major theories of human cognition.
- Interpret and critique research findings as they relate to cognitive theories and the real world.
- Improve your metacognitive skills (*knowing what you know, learning how to learn*), through traditional book learning and through practice and reflection.

REQUIREMENTS

Prerequisite: PSY 111/112 (*Introduction to Psychology Lecture and Laboratory*)

Required Texts:

Goldstein, E. B. (2015). *Cognitive Psychology: Connecting Mind, Research, and Everyday Experience (4th Edition)*. Belmont, CA: Wadsworth.

Brown, P. C., Roediger, H. L., & McDaniel, M. A. (2014). *Make It Stick: The Science of*

Successful Learning. Cambridge, Massachusetts: The Belknap Press of Harvard University.

Ariely, D. (2009). *Predictably Irrational: The Hidden Forces That Shape Our Decisions (Revised and Expanded Edition)*. New York, NY: Harper Collins.

GoucherLearn: On this site (learn.goucher.edu) you will find announcements, the syllabus, lecture outlines, assignment information, supplemental readings/videos, retrieval practice, exam information, and your grades. You should check this site regularly. In addition, you are expected to regularly check your Goucher email for course updates and announcements.

Lecture Outlines: A 'skeleton' lecture outline for each chapter, in *Microsoft Word*, will be posted on *GoucherLearn* prior to discussion of the chapter. The outline can be a preview for your chapter reading, and an aide during the lecture for note-taking and organization. However, the outlines are NOT sufficient for learning the material. You will need to take additional notes during class. I recommend printing and re-formatting the outline to allow space for note-taking and comments.

ASSESSMENTS

Exams (325 points): There will be two cumulative exams (100 pts each) during class time, consisting of a combination of multiple choice and short essay questions covering material from lectures, textbook chapters, and any other required readings/videos. Exams are designed to assess your understanding and application of the concepts, principles, theories, and empirical findings in cognitive psychology. The final exam is also cumulative, and thus you may expect at least one essay question designed to integrate material and themes from the entire course. The final exam is weighed heavier in your course grade (125 points). To prepare, you should utilize the retrieval practice for each chapter on GoucherLearn (see below). You should also attend the weekly Supplemental Instruction (SI) sessions. You can earn *one bonus point* for each SI session you attend leading up to an exam.

Retrieval Practice (40 points): A central principle of "Make It Stick" is that *frequent, effortful, low-stakes, cumulative, spaced (distributed) retrieval practice* produces the most durable learning. Retrieval practice also improves your *metacognition*, or knowing what you know. This principle is applied in two ways:

1. **In-Class RP (25 points):** At the start of most class periods, and often in the middle and at the end, you will answer questions from prior and current lectures or book chapters. For each day of class, you will begin a page labeled, "*Retrieval Practice – DATE – FULL NAME*," on which you will write the answers to all questions posed during the class period. It is less important that you answer correctly than that you carefully think through and consider the question, attempting to retrieve the answer. Errors are part of learning. Submit each *Retrieval Practice* page at the end of the class period. Only your effort will be graded; complete submissions will earn 1 point per day (see course schedule).
2. **GoucherLearn RP:** For each chapter, there are two sets of retrieval practice questions (multiple choice and short essay, to mimic the exam structure) on GoucherLearn.
 - **Retrieval Practice – Multiple Choice (required; 15 points):** You are required to take each (untimed) multiple choice RP at least once, though you can take it multiple times and only your highest grade will be recorded. The questions will shuffle each time. 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 also as a learning and study tool as you prepare for exams. Truly practicing retrieval means no short-cuts: Answer the questions without looking up the answer in your book. 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 responses at the end of the quiz. Use the feedback to correct any errors the next time you take it. Space out your practice: take the quiz 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 as follows: There are 13 chapters, and so there are 13 RPs, each worth up to 1 point (100% = 1 point; 75% = .75 points, etc.). There is a 2-point “bonus” at the end of the semester for completing all the RPs at least once.

- **Retrieval Practice - Short Essay Questions (recommended):** I recommend thinking through, answering, and/or discussing these as a learning tool to prepare for exams.

“Make It Stick” Reflection Papers (5 points each; 40 total): For each class period in which a chapter of “Make It Stick” is assigned (see course schedule), you will type and bring to class a reflection paper. The content and style of the paper is open, just be sure to demonstrate that you have thought deeply and carefully about the topic; in particular, consider how it connects to your life experiences, to your habits and plans/intentions, and to course material (especially when we reach the memory chapters). Also include any questions you still have, and/or other personal reactions to the chapter. These are all forms of *elaboration*, an effective learning strategy discussed in “Make It Stick.” Each paper should be 1 single-spaced page, and will be collected following class discussion of the chapter. You will submit 8 reflection papers during the semester, each worth up to 5 points based on the above criteria.

Research Article Summaries/Reflections (10 points each; 30 points total): For each of three *Article Discussion* days (see course schedule), you will read and write a summary and reflection for one article relating to chapter(s) we have been discussing. Before class, you will read the article carefully (asking questions ahead of time if you have them), complete a typed *Article Summary and Reflection Form* (available on GoucherLearn), print both the article and the completed form, and bring these materials to class on the designated day. We will engage in small and large group discussion of these articles during class, then you will submit your articles/forms at the conclusion of class. Each “round” of this assignment is worth up to 10 points, for a maximum of 30 points for this assignment.

“Predictably Irrational” Assignment (50 points): Near the end of the semester, you will read the book *“Predictably Irrational” (Revised and Expanded edition)* by Dan Ariely (2009), which connects to the course topic of “Decision Making” (Goldstein Ch. 12). We will spend 3 class periods discussing the book. Components of the assignment include: reading the book, posing questions and comments/critiques about the chapters, reading and summarizing an empirical article by Ariely discussed in the book, actively participating in small- and large-group class discussions about the book, and writing a letter to Dan Ariely with your reactions and questions. Additional details are available on *GoucherLearn*.

Attendance, Attention, & Participation (15 points): Class attendance is necessary, but not sufficient. You are expected to come to class ready to engage in the learning process, having read and, more importantly, *thought about* the assigned readings. I assess this by evaluating your attention during lectures and participation in discussions (e.g., asking and answering questions, contributing opinions). **A lack of attention (e.g., use of electronic devices, chatting, other off-task activities) and/or lack of active participation will severely impact the points you earn.**

COURSE GRADES

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

| | |
|--|------------|
| Exam 1 (Chapters 1-4) | 100 points |
| Exam 2 (Chapters 1-8) | 100 points |
| Cumulative Final Exam (Chapters 1-12) | 125 points |
| In-Class Retrieval Practice | 25 points |
| GoucherLearn Retrieval Practice | 15 points |
| “Make It Stick” Reflection Papers | 40 points |
| Research Article Summaries/Reflections | 30 points |
| “Predictably Irrational” Assignment | 50 points |
| Attendance, Attention, & Participation | 15 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 |

COURSE POLICIES

Electronic Device Policy: I care about your learning. *Because there is strong evidence suggesting that the use of personal electronic devices during class time negatively impacts the learning experience of both you and your fellow students, the use of cell phones, laptops, and other electronic devices is prohibited during class unless otherwise instructed.* Please silence all and put away all devices at the start of each class period. If you have a case for special approval, please notify me.

Attendance Policy: You are required to arrive on time and attend all classes. Learning is an active process; therefore it is critical to participate in and attend class. Attendance will be taken at the start of each class period. You are expected to stay seated during class unless there is an emergency. If you are sick or have an excused absence (special event), notify me of this absence *in advance when possible* and return to class as soon as possible. It is your responsibility to get the class notes from a classmate, and to contact me if you have questions or concerns.

Exam Policies: You will have an opportunity to review your graded exams during class time. Please be aware of two important policies: (1) Specific questions or comments about test items, grading, or overall performance must be discussed with me individually, in my office and outside of class time. (2) All graded exams will be collected and will remain in my office for the duration of the semester and beyond. Even though I have 'custody', you have 'visitation rights' to your exam(s) at any time (i.e., you can borrow them for review, but they must stay in Julia Rogers). I welcome one-on-one discussion about your exam (and course) performance.

Make-Up and Late Policy: Make-up exams are offered for legitimate excuses and are offered at the convenience of the instructor. Unless there are documented extenuating circumstances, you must contact me prior to (ideally), or at most within 24 hours, of the missed exam.

- ***Missed retrieval practice pages may not be made up. Please do not ask.***
- *All written assignments are due by the stated deadline. One letter grade will be subtracted from an assignment for every day it is late.*

Academic Honor Code: All 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.

PSY 235 COURSE SCHEDULE Spring 2016*(Subject to change with advance notice. Any changes will be posted on GoucherLearn.)*

| Wk | Date | Topic & Reading | Due |
|----|-------------------|--|---|
| 1 | T 1/26 | Welcome & Overview | |
| | Th 1/28 | Preface to Students Goldstein Ch. 1: <i>Intro to Cognitive Psychology</i> | |
| | F 1/29 | Goldstein Ch. 1: <i>Intro to Cognitive Psychology</i> | In class: Retrieval Practice |
| 2 | T 2/2 | Goldstein Ch. 2: <i>Cognitive Neuroscience</i> <i>Make It Stick</i> Ch. 1 | In class: Retrieval Practice Reflection paper on MIS Ch. 1 |
| | Th 2/4 | Goldstein Ch. 2: <i>Cognitive Neuroscience</i> | In class: Retrieval Practice |
| | F 2/5 | Goldstein Ch. 2: <i>Cognitive Neuroscience</i> <i>Make It Stick</i> Ch. 2 | Reflection paper on MIS Ch. 2 |
| 3 | T 2/9 | Goldstein Ch. 3: <i>Perception</i> | In class: Retrieval Practice |
| | Th 2/11 | Goldstein Ch. 3: <i>Perception</i> | In class: Retrieval Practice |
| | F 2/12 | Goldstein Ch. 3: <i>Perception</i> <i>Make It Stick</i> Ch. 3 | Reflection paper on MIS Ch. 3 |
| 4 | T 2/16 | Goldstein Ch. 4: <i>Attention</i> | In class: Retrieval Practice |
| | Th 2/18 | Goldstein Ch. 4: <i>Attention</i> | In class: Retrieval Practice |
| | F 2/19 | Goldstein Ch. 4: <i>Attention</i> <i>Research Article Discussion</i> | Article Form |
| 5 | T 2/23 | EXAM 1 (Ch. 1-4) | Complete Multiple Choice Retrieval Practice on GL for Ch. 1-4 |
| | Th 2/25 | <i>Make It Stick</i> Ch. 4 | Reflection paper on MIS Ch. 4 |
| | F 2/26 | Goldstein Ch. 5: <i>Short-Term & Working Memory</i> | In class: Retrieval Practice |
| 6 | T 3/1 | Goldstein Ch. 5: <i>Short-Term & Working Memory</i> | In class: Retrieval Practice |
| | Th 3/3 | Goldstein Ch. 6: <i>Long-Term Memory: Structure</i> | In class: Retrieval Practice |
| | F 3/4 | Goldstein Ch. 6: <i>Long-Term Memory: Structure</i> <i>Make It Stick</i> Ch. 5 | Reflection paper on MIS Ch. 5 |
| 7 | T 3/8 | Goldstein Ch. 7: <i>Long-Term Memory: Encoding, Retrieval, & Consolidation</i> | In class: Retrieval Practice |
| | Th 3/10 | Goldstein Ch. 7: <i>Long-Term Memory: Encoding, Retrieval, & Consolidation</i> | In class: Retrieval Practice |
| | F 3/11 | Goldstein Ch. 7: <i>LTM: E, R, & C</i> <i>Make It Stick</i> Ch. 6 | Reflection paper on MIS Ch. 6 |
| 8 | M 3/14- F 3/18 | NO CLASS – SPRING BREAK | |
| 9 | T 3/22 | Goldstein Ch. 8: <i>Everyday Memory & Errors</i> | In class: Retrieval Practice |
| | Th 3/24 | Goldstein Ch. 8: <i>Everyday Memory & Errors</i> | In class: Retrieval Practice |
| | F 3/25 | Goldstein Ch. 8: <i>Everyday Memory & Errors</i> <i>Make It Stick</i> Ch. 7 | Reflection paper on MIS Ch. 7 |
| 10 | T 3/29 | Goldstein Ch. 9: <i>Knowledge</i> | In class: Retrieval Practice |
| | Th 3/31 | Goldstein Ch. 9: <i>Knowledge</i> | In class: Retrieval Practice |
| | F 4/1 | <i>Research Article Discussion</i> | Article Form |
| 11 | T 4/5 | EXAM 2 (Ch. 1-9) | Complete Multiple Choice Retrieval Practice on GL for Ch. 5-9 |
| | Th 4/7 | <i>Make It Stick</i> Ch. 8 | Reflection paper on MIS Ch. 8 |

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|----|---------|---|--|
| | F 4/8 | Goldstein Ch. 10: <i>Visual Imagery</i> | In class: Retrieval Practice |
| 12 | T 4/12 | Goldstein Ch. 10: <i>Visual Imagery</i> | In class: Retrieval Practice |
| | Th 4/14 | Goldstein Ch. 11: <i>Language</i> | In class: Retrieval Practice |
| | F 4/15 | Goldstein Ch. 11: <i>Language</i> | In class: Retrieval Practice |
| 13 | T 4/19 | Goldstein Ch. 12: <i>Problem Solving</i> | In class: Retrieval Practice |
| | Th 4/21 | Goldstein Ch. 12: <i>Problem Solving</i> | In class: Retrieval Practice |
| | F 4/22 | Goldstein Ch. 13: <i>Judgment, Decisions, and Reasoning</i> | In class: Retrieval Practice |
| 14 | T 4/26 | Goldstein Ch. 13: <i>Judgment, Decisions, and Reasoning</i> | Electronic: Article Form (Ariely) In class: Retrieval Practice |
| | Th 4/28 | <i>Research Article Discussion</i> | Article Form |
| | F 4/29 | “Predictably Irrational” (Ariely) Ch. 1-5 | In class: PI Chapter Comments/?s |
| 15 | T 5/3 | “Predictably Irrational” (Ariely) Ch. 6-10 | In class: PI Chapter Comments/?s |
| | Th 5/5 | “Predictably Irrational” (Ariely) Ch. 11-15 | In class: PI Chapter Comments/?s |
| | F 5/6 | <i>Course Wrap-Up</i> | Electronic: Ariely Letter In class: Retrieval Practice |
| 16 | TBA | CUMULATIVE FINAL EXAM (Ch. 1-13) | Complete Multiple Choice Retrieval Practice on GL for Ch. 10-13 [To earn the maximum points for online multiple choice RP, complete Ch. 1-13.] |