



**OTRP** *online*  
office of teaching resources in PSYCHOLOGY

## Psychology 215: Learning and Memory

### Who is my instructor?

Welcome to Learning and Memory! Before we get into what will be covered in this course, I want to introduce myself. I am Dr. Jessica LaPaglia (you can call me Dr. L). I am originally from Minnesota and I went to a small liberal arts college (not unlike Morningside) for my bachelor's degree. I loved the small class sizes and the opportunity to get to know my professors, so I made it my goal to become a psychology professor at a small school. I later received my Master's and Ph.D. in psychology from Iowa State University and I have been teaching at Morningside since 2013. I have a rambunctious one year old daughter who keeps me on my toes. Don't be surprised if I show pictures of all my babies (I also have a dog and two cats) in class. I look forward to getting to know you this semester!

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Individual assistance is also available by appointment (appointment calendar: [tinyurl.com/lapagliaappt](http://tinyurl.com/lapagliaappt)).

I look forward to seeing you during these hours.

### What is this course all about?

In this course we will examine human learning and memory processes at both a theoretical and empirical level. In the first unit, we will examine simple forms of learning such as habituation and conditioning. We will also begin to look at ways to improve your learning in this class and beyond (a theme that will carry throughout the semester). Unit 2 focuses on short-term and explicit forms of memory. In the final unit (my favorite unit!), we will examine extraordinary cases of memory and forgetting as well as everyday memory errors. I hope you will enjoy learning about human learning and memory as much as I love teaching it!

Class Meeting Time: MWF 1:45-2:50

Class Location: SC 120

### What are the course requirements? (See the last two pages of the syllabus for the course schedule)

**Readings:** There is no required book to purchase for this course. Articles and online readings will be assigned and posted on Moodle.

**Software:** Please download JASP (<http://jasp-stats.org>) before class begins. This is a free and user-friendly statistical program. We will use this software to analyze data collected from memory experiments.

**Exams:** There is one exam over each unit (3) and a final exam. Each exam includes multiple choice and short answer questions. For the unit exams, you have the option of taking the multiple choice portion a second time to improve your score. While you do have the full 65 minutes to complete each exam, students typically finish in 30-45 minutes. The final exam is cumulative. Please contact me as soon as possible if you need to schedule a make-up exam.

**Quizzes:** There will be an open-note quiz over the material covered in class at the very end of nearly every class. You may only use hand-written notes on the quizzes. Taking a quiz outside of class without my permission is cheating. If you miss a quiz due to an excused absence, you may do an alternative make-up assignment. These quizzes are used as both an assessment and learning tool (see below under “testing”). Bumped because you didn’t perform well on a quiz? No worries! I will drop your two lowest scores.

**Research Project:** It is so much more fun (and challenging) to learn by *doing* rather than seeing or hearing. The purpose of this project is for you to see first-hand how psychology research is conducted. This project allows you to get creative and apply the course material to new situations. In groups of 3-4 students, you will design and conduct a memory study. You will then write an APA style research report summarizing your findings. During the final exam time, all groups will present the results of their research study. While I know that not everyone enjoys public speaking (getting up in front of a class used to terrify me)—think of the presentation as a way for you to discuss (and show off) this project that you created from scratch.

**Reflective Papers:** I used to think self-reflection was a “fluffy” learning technique; however, after trying reflection out myself, I have learned more about myself and my experiences as a teacher. Since integrating reflection into my courses, I have noticed that students will often have these awesome “A-ha!” moments during written reflection (whether it be seeing something from a different perspective or applying information to their lives). Throughout the semester you will reflect on skills you’ve learned and how learning and memory concepts are used in this class and other classes to improve your learning. I use these reflections to assess your ability to apply the material and so that I can receive feedback on the teaching techniques that I use in this course.

**Additional assignments:** To prepare you for the design and data collection of your research project, I will assign a short research methods assignment in which you will describe and analyze data collected in class. Don’t be too concerned with that dreaded four-letter word—math. Each student is coming in with different levels of statistical knowledge and I am always available in- and outside of class to help. There will also be readings (which can all be found on Moodle) and associated forum post questions over these readings. The readings are meant to give you a little taste of the course content before we dive in deeper during class.

		Grade Breakdown:	
4 Exams (100 points each)	400	93 – 100%	A
Quizzes	75	73 – 76.9%	C
Research Project (all components)	200	90 – 92.9%	A-
Learning Reflections	100	87 – 89.9%	B+
Activity/reading forum posts	75	83 – 86.9%	B
Additional assignments	60	80 – 82.9%	B-
		77 – 79.9%	C+
			70 – 72.9%
			C-
			67 – 69.9%
			D+
			63 – 66.9%
			D
			60 – 62.9%
			D-
			0 – 59.9%
			F
Total: 910			

### What are the learning objectives?

1. Identify and describe basic principles and theories of human learning and memory.
2. Apply learning and memory techniques to your life.
3. Design and implement methodologically sound memory research.
4. Draw inferences from statistical analysis of data.

Unit I: Learning Objectives	Course Objectives	Assignments
1. Describe concepts and research related to human and animal learning.	1	Forum Posts, Quizzes, Unit 1 Exam, and Final Exam
2. Describe and design methodologically sound research.	3	Research Methods Assignment, Research Report, Unit 1 Exam, and Final Exam
3. Analyze data using t-tests and interpret the results.	4	Research Methods Assignment, Unit 1 Exam, and Research Report

4. Apply learning and memory techniques to studying for exams.	2	Learning Reflection #1
Unit 2: Forms of Memory Objectives	Course Objectives	Assignments
1. Describe concepts and research related to short-term memory, working memory, and explicit forms of memory.	1	Quizzes, Annotated Bibliography, Unit 2 Exam, and Final Exam
2. Apply learning and memory techniques to other classes.	2	Learning Reflection #2
Unit 3: Memory Triumphs and Failures Objectives	Course Objectives	Assignments
1. Describe concepts and research related to emotion and memory, exceptional memory, amnesia, forgetting, and false memories.	1	Forum Posts, Quizzes, Unit 3 Exam, and Final Exam
2. Evaluate learning and memory techniques used in this class.	2	Learning Reflections #2 and #4
3. Identify confounding variables and ways of addressing them.	3	Research Report
4. Draw inferences from project data and evaluate the statistical validity of those data.	4	Research Report
5. Apply learning and memory techniques to the group project.	2	Final Reflective Essay

### What do you do to improve student learning?

In this class I use empirically supported techniques to improve your learning and memory of the material. Below I describe the techniques that I have built into the class to improve your learning and I have included [real student comments](#) about the effectiveness of these methods.

1. **Testing:** Don't like quizzes? Well, they can be extremely beneficial to your learning. Decades of research has shown that testing/quizzing is a very powerful memory enhancer (when compared to re-study; Karpicke & Roediger, 2008). At the end of most class periods, there will be a 5 point quiz over the material covered that day. Handwritten notes can be used to help you through the quiz in case you are test-anxious.

[“The quizzes we took every day were a great reminder of the main things that we learned in that certain class period and gave me landmarks to study that day for that particular lesson.”](#)

2. **Hand-Written Notes:** Believe it or not, hand writing (as opposed to typing) your notes leads to a better understanding of the material (Mueller & Oppenheimer, 2014). Laptops are not allowed (unless the class activity requires it) and notes should be taken by hand. Refrain from writing what is on the board verbatim—try to put the material into your own words. This method, although more effortful, can really help you grasp the material. And if I am ever going too fast for you to take quality hand-written notes, let me know and I'll slow down!

[“Without the distraction of the computer in front of me, I was also more attentive while hand writing my notes.”](#)

3. **Self-Correcting Exams:** Ever complete an exam only to look over your notes later and exclaim, “I knew that!” In this class, you will have the opportunity to increase your test grade. The multiple-choice portion of each exam will be taken once in class and again at home for a chance to improve your score. This self-correcting method has been shown to improve student learning because students spend more time reviewing the material during the second attempt (Gruhn & Cheng, 2014).

“The self-correcting exams made me realize the little mistakes I made [...] it also made me realize the area of studies that I wasn't quite grasping.”

4. **Distributed Practice:** At the beginning of each class period, I will review material from the class period before. Students have found this method to be most helpful in their learning in this class. Distributed practice helps connect the material and improves retention of information by creating multiple memory traces (Cepeda et al., 2006).

“[Distributed practice] helped to connect the material together so that I had a better understanding of how the two topics are associated. It also helped with improving retention of information by providing another opportunity to review and learn the information.”

5. **Elaborative Processing:** Relating the information learned in class and from the readings to your own life can improve learning ( Craik & Tulving, 1975). We will discuss concepts in many different formats (e.g., video, activities, lecture, group projects, and discussion) to help students with varying learning preferences. Reflections, in-class activities, experiments, and the group project reinforce a deeper understanding of concepts in the readings and lecture.

“Elaborative processing is one of the best techniques when it comes to my personal learning. If I am relating information to something that I have personally experienced I tend to remember the information much better.”

6. **Collaborative Review Sessions:** Incorporating both testing and elaborative processing during review sessions increases student understanding of the material by providing an initial retrieval opportunity followed by immediate feedback from peers (Maxwell, McDonnell, & Wieman, 2015). In the collaborative review sessions, you will attempt to retrieve information on a practice test and discuss the answers with your peers.

“[Collaborative review] is beneficial for me since I learn very well when I teach information to my peers.”

### How can I succeed in this course?

1) In order for you to receive feedback and build on previous knowledge and skills learned throughout the semester, it is important that you **turn in assignments in a timely manner**. There is a penalty of 10% each day for late assignments. I do not accept assignments that are more than two days late unless there are extenuating circumstances. I understand that the unexpected can happen, so please talk to me if something comes up that inhibits your ability to complete an assignment on time.

2) **Class attendance** is crucial for success in this course. Although I post the PowerPoint's from each class period, much of the information will not be included on the slides. If you miss class, speak with other students, share notes, and feel free to come to me with any clarification questions. If you miss class because of illness, emergency, or school-related event, please let me know as soon as you can and we can discuss make-up quizzes.

3) **Laptops and cell phones** are a distraction in the classroom. Please silence your phone during class and put it in your bag. Research indicates that even seeing your phone can be a distraction (Faires et al., 2014). Laptops will be used for several classroom activities (e.g., all quizzes are on Moodle), but notes should be taken by hand.

4) **Studying for exams** can be a daunting task. We'll talk about how to improve your study habits more in-depth in class, but for now just remember these three easy steps: test yourself over the material, distribute your study sessions over several days/weeks, and think deeply about the material (e.g., come up with your own examples).

5) It should go without saying, but I'll say it anyway: **cheating and plagiarism** are bad. Any form of cheating or plagiarism will be directly confronted and handled on an individual basis. Our Academic Honesty Policy can be found in the College Catalog and the Student Handbook.

### How can I best communicate with you and my peers?

Please do not hesitate to contact me if you are having problems with any aspect of the course. I am in my office (a lot) and I am always willing to help. The easiest way to reach me is through e-mail, but you can feel free to call or stop by my office as well. If you need to meet with me outside of office hours, it is often best to contact me a few days in advance to set up a meeting time. You may also choose to use my appointment calendar to set up a meeting (link on the first page of this syllabus). I will respond to email messages within 24 hours during weekdays and 48 hours on weekends. Please include the course number in the subject line (PSYC 215) of any class-related email so that I can give your email priority. To avoid missing any pertinent course information, please check your Morningside email daily at a minimum.

It can often be difficult to convey your intentions and tone in an electronic format (e.g., email and forum discussions). To best get your message across, it may be helpful to use “Netiquette”:

1. Use clear and concise language
2. Correct spelling and grammar
3. Avoid slang terms and texting abbreviations such as “u” instead of “you”
4. Use easy-to-read fonts such as Times New Roman and use a size 12 font
5. Avoid using the caps lock feature AS IT CAN BE INTERPRETED AS YELLING
6. Limit the use of emoticons such as :)
7. Be cautious when using humor or sarcasm as tone is sometimes lost in an email or discussion post and your message might be taken seriously or offensive
8. Be careful with personal information
9. Always be respectful of others’ opinions even when they differ from your own and express your differing opinion in a respectful, non-critical way
10. Do not make personal or insulting remarks, be open-minded

### What support services are available?

**Academic Support Services:** As a Morningside College student, you have access to academic support services such as tutoring, disability services, writing center, and library resources. These support services can be accessed at: <http://library.morningside.edu/services.html>.

**IT Support:** For all technology assistance, please call the Help Desk at 800.831.0806, x5544, or 712.274.5544. The Help Desk is available from 8:00 a.m. until 5:00 p.m. (Central time) Monday through Friday. If you are experiencing issues after hours, you must notify me by email immediately.

**Moodle Support:** If you are having technical difficulties with accessing Moodle, contact [eClass4learning](#) at [800.408.4935](tel:800.408.4935), [x.6](#) for help.

**Advising Support:** The advising center is a great resource for your advising needs:

<https://morningside.edu/academics/krone-advising-center/>

If you ever want to talk about becoming a psychology major or minor and future job prospects within the realm of psychology, I'm always available to chat!

### References:

- Cepeda, N. J., Pashler, H., Vul, E., Wixted, J. T., & Rohrer, D. (2006). Distributed practice in verbal recall tasks: A review and quantitative synthesis. *Psychological Bulletin*, *132*, 354-380.
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- Faires, A., Robbins, M., Rollins, E., & Thornton, B. (2014). The mere presence of a cell phone may be distracting: Implications for attention and task performance. *Social Psychology*, *45*, 479-488.
- Gruhn, D., & Cheng, Y. (2014). A self-correcting approach to multiple choice exams improves students' learning. *Teaching of Psychology*, *41*, 335-339.
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Maxwell, E. J., McDonnell, L., & Wieman, C. E. (2015). An improved design for in-class review. *Journal of College Science Teaching*, 44, 48-52.

Mueller, P. A., & Oppenheimer, D. M. (2014). The pen is mightier than the keyboard: Advantages of longhand over laptop note taking. *Psychological Science*, 25, 1159-1168.

### What does my semester look like?

Orange = No Class

Blue = Exam

Green = Research Teams

UNIT 1: Learning			
Date	Topic	Readings (to be completed before this class)	Assignments (to be completed before this class)
24-Aug	Introductions		
26-Aug	Research Methods	Research Designs Reading	Research Designs Forum Post Syllabus Quiz
29-Aug	Research Methods	Statistical Thinking Reading	Statistical Thinking Forum Post
31-Aug	Improving Memory	Note-taking Article	Note-taking Forum Post
2-Sep	Habituation		Research Methods Assignment
5-Sep	No class – Labor day!		
7-Sep	Classical Conditioning	Conditioning Part 1 Reading	Conditioning Part 1 Forum Post
9-Sep	Classical/Operant Conditioning	Conditioning Part 2 Reading	Conditioning Part 2 Forum Post
12-Sep	Operant Conditioning		
14-Sep	Skill Learning	Implicit Learning Experiment	Implicit Learning Experiment Forum Post
16-Sep	Skill Learning		
19-Sep	Review		
21-Sep	Unit 1 Exam		
UNIT 2: Types of Memory			
Date	Topic	Readings	Assignments
23-Sep	Short-term and Working Memory	Working Memory Capacity Experiment	Unit 1 Exam Second Attempt Working Memory Capacity Experiment Forum Post
26-Sep	Short-term and Working Memory		Learning Reflection #1
28-Sep	Episodic Memory		
30-Sep	Episodic Memory		
3-Oct	Research Teams - developing team charters		
5-Oct	No class – Into the Streets Event!		

7-Oct	Research Teams - develop project	Read articles to inform your project over the next several weeks	
10-Oct	Semantic Memory		Team Charter Research Plan
12-Oct	Episodic and Semantic Retrieval		Learning Reflection #2
14-Oct	No class – Fall break!		
17-Oct	Research Teams - Data Collection		
19-Oct	Research Teams - Data Collection		
21-Oct	Research Teams - Writing a research report		Annotated Bibliography
24-Oct	Prospective Memory		
26-Oct	Review		
28-Oct	Unit 2 Exam		
<b>UNIT 3: Memory Triumphs and Failures</b>			
<b>Date</b>	<b>Topic</b>	<b>Readings</b>	<b>Assignments Due</b>
31-Oct	Research Teams - Data Analysis		All data coded Unit 2 Exam Second Attempt
2-Nov	Forgetting	Forgetting Reading	Forgetting Forum Post
4-Nov	Amnesia		Learning Reflection #3
7-Nov	Amnesia	Amnesia Reading	Amnesia Forum Post
9-Nov	Exceptional Memory	Exceptional Memory Article	Exceptional Memory Forum Post
11-Nov	Research Teams - paper conferences		Full draft of Paper
14-Nov	Research Teams - paper conferences		
16-Nov	Research Teams - paper conferences		
18-Nov	False Memory	False Memory Reading	False Memory Forum Post
21-Nov	False Memory		
23-Nov	No class – Happy Thanksgiving!		
25-Nov	No class – Happy Thanksgiving!		
28-Nov	Emotion and Memory	Flashbulb Memory Article	Flashbulb Memory Forum Post
30-Nov	Emotion and Memory		Learning Reflection #4
2-Dec	Review		Final Draft of Paper
5-Dec	Unit 3 Exam		
7-Dec	Research Teams - How to present research		Unit 3 Exam Second Attempt
9-Dec	Final Exam		
14-Dec	Presentations (3pm)		Final Reflective Essay

Use of Student Coursework:

Student assignments and coursework may be retained by me for the following uses:

1. as examples to guide future semesters' assignments
2. course evaluation
3. programmatic evaluation
4. educational research