

Attention!

This is a *representative* syllabus.

The syllabus for the course when you enroll may be **different**.

Use the syllabus provided **by your instructor** for the most up-to-date information. Please refer to your instructor for more information for the specific requirements for a given quarter.

PSYCH 601 - Learning & Memory
2012-13: Undergraduate Version
Credits: 3

Dr. Derick Lindquist
Dept. of Psychology
Office: Room 49, Psychology Building
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Pre-Requisites: Psych 100 and Jr. or Sr. in Standing.

Lecture Time/Room: W/M/F; Time and Room TDB

Office hours: TBD

COURSE OVERVIEW: This course will introduce students to the governing principles of learning and memory. The field of learning and memory research has undergone enormous change over the last decade or so, primarily owing to developments in neuroscience. Better understanding of the neurobiological bases of behavior has diminished the boundary separating biological and psychological approaches to the study of learning and memory. The discovery of basic biological mechanisms common to all species has also launched a unified approach to animal learning and human memory behavioral studies. Finally, recent advances have produced dramatic changes in clinical practice. New treatment options have been developed to aid in the diagnosis and treatment of the clinical disorders of learning and memory, including Alzheimer's disease, Parkinson's disease, schizophrenia, and more. The current course will integrate coverage of animal learning and human memory and focus on three key components of the field: behavioral processes, brain systems, and clinical perspectives.

TEXTBOOK: Learning and Memory: From Brain to Behavior. Gluck, Mercado, Myers, 1st Ed., Worth Publishers, 2008.

EXAMS: There will be two Midterm Exams during the semester and one Final Exam during the final week. All are closed-book and consist of multiple choice and short-answer questions. The exams are not cumulative, except that the topics covered in the second and third segments of the course depend on concepts and facts introduced in the previous segments. No make-up exams will be given, except in the case of documented illness or emergency. In the event of a last-minute emergency, you *must* call the instructor or the office associate for the behavioral neuroscience area *on the same day as the exam*, preferably before the exam begins. Acceptable excuses for missing an exam are a death in your family, personal illness or the illness of your child or spouse, and unforeseen accidents like your car breaking down or getting stuck in an elevator. Please obtain documented proof of these events should they occur. If you are late for an exam, you will be allowed to take it but you will have to submit your answers by the closing time like everybody else.

QUIZZES: Six unannounced multiple-choice quizzes will be given throughout the quarter. Make-up exams will not be given if missed. *No exceptions.* The top five of six scores will be applied toward the final grade.

GRADE EVALUATION: For the final grade, each of the three exams will be worth 30%. The five (of six) quizzes applied toward the final grade will be worth 2% each.

ACADEMIC ETHICS: All students enrolled in OSU courses are bound by the Code of Student Conduct (http://studentaffairs.osu.edu/resource_csc.asp). The instructor and course assistants are committed to maintaining a fair assessment of student performance in this course. Suspected violations of the Code will be dealt with according to the procedures detailed in the Code. Specifically, any alleged cases of misconduct will be referred to the Committee on Academic Misconduct. It is the responsibility of the Committee on Academic

Misconduct to investigate or establish procedures for the investigation of all reported cases of student academic misconduct. The term "academic misconduct" includes all forms of student academic misconduct wherever committed; illustrated by, but not limited to, cases of plagiarism and dishonest practices in connection with examinations. Instructors shall report all instances of alleged academic misconduct to the committee (Faculty Rule 3335-5-487). For additional information, see the Code of Student Conduct.

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For good, concise, plain-English advice on how to stay out of academic trouble, see Ten Suggestions for Preserving Academic Integrity at <http://oaa.osu.edu/coam/ten-suggestions.html>

ACCOMODATIONS FOR STUDENTS WITH SPECIAL NEEDS: The policy of The Ohio State University is to provide every reasonable, appropriate, and necessary accommodation to qualified disabled students. The University's colleges and academic centers evaluate and judge applications on an individual basis and no categories of disabled individuals are automatically barred from admission. The privacy rights of each disabled person are honored to the fullest extent possible. The University's interest in a student's disabilities are only for the purpose of accommodating his/her specific disability, thereby providing an academically qualified disabled student access to programs and activities accorded all other qualified students. Whenever generally accessible facilities do not adequately accommodate a specific disability, the University makes every reasonable accommodation and program or facility adjustment to assure individual access. These policies are fully supported and practiced in this class. If you have a disability documented with the Office of Disability Services (<http://www.ods.ohio-state.edu>, 150 Pomerene Hall, 614-292-3307), please contact the instructor privately by the end of the second week of classes so that any accommodations can be made.

READING/LECTURE SCHEDULE: This schedule is preliminary and subject to change. Chapters may be added or dropped, which in turn will affect the material covered in each Exam.

COURSE OUTLINE:

Date	Chapter	Topic
Week 1	1	Psychology of Learning and Memory
	1	Psychology of Learning and Memory
	2	Neuroscience of Learning and Memory
Week 2	2	Neuroscience of Learning and Memory
	2	Neuroscience of Learning and Memory
	3	Episodic and Semantic Memory: Memory for Facts and Events
Week 3	3	Episodic and Semantic Memory: Memory for Facts and Events
	3	Episodic and Semantic Memory: Memory for Facts and Events
	4	Skill Memory: Learning by Doing
Week 4	4	Skill Memory: Learning by Doing
	4	Skill Memory: Learning by Doing
	5	Working Memory and Executive Control
Week 5	5	Working Memory and Executive Control
	5	Working Memory and Executive Control
		Exam 1
Week 6	6	Non-Associative Learning: Learning about Repeated Events
	6	Non-Associative Learning: Learning about Repeated Events
	6	Non-Associative Learning: Learning about Repeated Events
Week 7	7	Classical Conditioning: Learning to Predict Important Events

	7	Classical Conditioning: Learning to Predict Important Events
	7	Classical Conditioning: Learning to Predict Important Events
Week 8	7	Classical Conditioning: Learning to Predict Important Events
	8	Instrumental Conditioning: Learning the Consequences of Behavior
	8	Instrumental Conditioning: Learning the Consequences of Behavior
Week 9	8	Instrumental Conditioning: Learning the Consequences of Behavior
	8	Instrumental Conditioning: Learning the Consequences of Behavior
		Exam 2
Week 10	9	Generalization, Discrimination, and the Representation of Similarity
	9	Generalization, Discrimination, and the Representation of Similarity
	9	Generalization, Discrimination, and the Representation of Similarity
Week 11	10	Emotional Learning and Memory
	10	Emotional Learning and Memory
	10	Emotional Learning and Memory
Week 12	11	Observational Learning: Watching, Listening, Remembering
	11	Observational Learning: Watching, Listening, Remembering
	11	Observational Learning: Watching, Listening, Remembering
Week 13	12	Learning and Memory Across the Lifespan
	12	Learning and Memory Across the Lifespan
	12	Learning and Memory Across the Lifespan
Week 14	13	Language Learning: Communication and Cognition
	13	Language Learning: Communication and Cognition
	13	Language Learning: Communication and Cognition
Finals Week		Exam 3

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PSYCH 601 - Learning & Memory

2012-13: Graduate Version

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QUIZZES: Six unannounced multiple-choice quizzes will be given throughout the quarter. Make-up exams will not be given if missed. *No exceptions.* The top five of six scores will be applied toward the final grade.

ARTICLES: In addition to the main textbook, the course is organized around nine *target articles*. Some of them are classic publications in the research literature that have stood the test of time and are recognized to have lasting value and importance in cognitive science. Other target articles are recent reviews or reports of cutting-edge research. You are required to read three target articles and write a ~2 page summary. The articles will be due at the end of the fourth, eighth, and twelfth weeks of the semester.

GRADE EVALUATION: For the final grade, each of the three exams will be worth 25% (75% total). The five (of six) quizzes applied toward the final grade will be worth 2% each (10% total). Each of three summary papers is worth 5% (15% total).

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	3	Episodic and Semantic Memory: Memory for Facts and Events
	4	Skill Memory: Learning by Doing
Week 4	4	Skill Memory: Learning by Doing
	4	Skill Memory: Learning by Doing

	5	Working Memory and Executive Control; <i>First Summary Paper Due</i>
Week 5	5	Working Memory and Executive Control
	5	Working Memory and Executive Control
		Exam 1
Week 6	6	Non-Associative Learning: Learning about Repeated Events
	6	Non-Associative Learning: Learning about Repeated Events
	6	Non-Associative Learning: Learning about Repeated Events
Week 7	7	Classical Conditioning: Learning to Predict Important Events
	7	Classical Conditioning: Learning to Predict Important Events
	7	Classical Conditioning: Learning to Predict Important Events
Week 8	7	Classical Conditioning: Learning to Predict Important Events
	8	Instrumental Conditioning: Learning the Consequences of Behavior
	8	Instrumental Conditioning: Learning the Consequences of Behavior; <i>Second Summary Paper Due</i>
Week 9	8	Instrumental Conditioning: Learning the Consequences of Behavior
	8	Instrumental Conditioning: Learning the Consequences of Behavior
		Exam 2
Week 10	9	Generalization, Discrimination, and the Representation of Similarity
	9	Generalization, Discrimination, and the Representation of Similarity
	9	Generalization, Discrimination, and the Representation of Similarity
Week 11	10	Emotional Learning and Memory
	10	Emotional Learning and Memory
	10	Emotional Learning and Memory
Week 12	11	Observational Learning: Watching, Listening, Remembering
	11	Observational Learning: Watching, Listening, Remembering
	11	Observational Learning: Watching, Listening, Remembering
Week 13	12	Learning and Memory Across the Lifespan
	12	Learning and Memory Across the Lifespan
	12	Learning and Memory Across the Lifespan; <i>Third Summary Paper Due</i>
Week 14	13	Language Learning: Communication and Cognition
	13	Language Learning: Communication and Cognition
	13	Language Learning: Communication and Cognition
Finals Week		Exam 3

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