

# **Master Course Syllabus**

For additional course information, including prerequisites, corequisites, and course fees, please refer to the Catalog: https://catalog.uvu.edu/

Semester: Spring Year: 2025

Course Prefix: PSY Course and Section #: 3420-X05

Course Title: Cognitive Psychology Credits: 3

## Course Description

Introduces the core concepts, theoretical perspectives, empirical findings, and historical trends in cognitive psychology. Includes perception, attention, memory, and higher cognitive processes. Explores animal as well as human research.

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- ☐ General Education Requirements
- ☐ Global/Intercultural Graduation Requirements
- ☑ Discipline Core Requirements in Program
- ☑ Elective Core Requirements in Program

☐ Open Elective

Other: Click here to enter text.

# Instructor Information

Instructor Name: Rachel Larsen

# **Student Learning Outcomes**

- Explain the major concepts, theoretical perspectives, empirical findings, and historical trends in cognitive psychology.
- Solve problems related to thinking and behavior.
- Apply psychological principles to personal, social, and organizational issues.
- Compose disciplinarily-appropriate texts related to cognitive psychology.

### Course Materials and Texts

Course materials are a combination of open educational resources and journal articles.

# Course Requirements

Course Assignments, Assessments, and Grading Policy

Course assignments include:

Preparation Activities: Course orientation quiz, getting to know you discussion, and a midterm review activity.

Exploration activities: During the learning week in each module, you will complete a set of activities that allow you to explore interesting cognitive phenomena and research. The activities ask you to visit other websites to participate in demos and experiments and then return to Canvas for a quiz to demonstrate your understanding of the activity.

Practice Questions: During each module, you will complete practice quizzes to test your understanding of the material and improve your metacognition. Each set of practice questions consists of 10 multiple-choice questions about the readings and activities within the module. As you will learn in this course, an effective way to study and improve long-term memory is to space practice (that is, have multiple short study sessions rather than one giant cram session).

Midterm Exam: After Module 5 you will complete a midterm exam that covers content from Modules 1, 2, 3, 4, and 5. You have an entire week to prepare for and complete the exam.

Applied Problems: During the application week, you will solve real-world problems using cognitive psychology. Each applied problem assignment will give you two options to choose from. You only have to complete one of the applied problems.

Working on Writing Assignments: Throughout the application weeks, there will be short assignments to help you improve your writing skills. These assignments cover topics from understanding rubrics to using APA style and visiting the writing center. There are 5 assignments throughout the semester and none will be dropped.

Final Applied Problem or Exam: For the final, you have a choice for how to show what you've learned in class for the final.

Grade	Percent
A	94-100
A-	90-93
B+	87-89
В	83-86
B-	80-82
C+	77-79

Grade	Percent
С	73-76
C-	70-72
D+	67-69
D	63-66
D-	60-62
Е	0-59

## **Required or Recommended Reading Assignments**

Module 1: Introduction to Cognitive Psychology

Overono, A.L., Hill, J. C., & Kopp, K. (2020). "Introduction to Cognitive Psychology." Cognitive Psychology, edited by A. Overono. Self-published. 2024 Update.

Biswas-Diener, R. (2023). The brain and nervous system. In R. Biswas-Diener & E. Diener (Eds), Noba textbook series: Psychology. Champaign, IL: DEF publishers..

## Module 2: Perception

Overono, A.L. (2023). "Introduction to Sensation and Perception." Cognitive Psychology, edited by A. Overono. Self-published.

Privitera, A. J. (2023). Sensation and perception. In R. Biswas-Diener & E. Diener (Eds), Noba textbook series: Psychology. Champaign, IL: DEF publishers..

Overono, A.L. (2023) "Processes of Perception." Cognitive Psychology, edited by A. Overono. Self-published.

#### Module 3: Attention

Friedrich, F. (2022). Attention. In R. Biswas-Diener & E. Diener (Eds), Noba textbook series:

Psychology. Champaign, IL: DEF publishers. Retrieved from http://noba.to/uv9x8df5.

.Simons, D. (2022). Failures of awareness: the case of inattentional blindness. In R. Biswas-Diener & E. Diener (Eds), Noba textbook series: Psychology. Champaign, IL: DEF publishers. Retrieved from http://noba.to/cemagjuw.

.Laurent Itti (2007) Visual salience. Scholarpedia, 2(9):3327. Remixed by Acacia Overoye (2020).

Module 4: Short-Term Memory & Working Memory

Pilegard, C. (2019). Overview of Short Term Memory and Working Memory. In Cognitive Foundations. Remixed By Acacia Overoye (2022) Download Pilegard, C. (2019). Overview of Short Term Memory and Working Memory. In Cognitive Foundations. Remixed By Acacia Overoye (2022)

Adams, E. J., Nguyen, A. T., & Cowan, N. (2018). Theories of working memory: Differences in definition, degree of modularity, role of attention, and purpose. Language, Speech, and Hearing Services in Schools, 49(3), 340-355. Download Adams, E. J., Nguyen, A. T., & Cowan, N. (2018). Theories of working memory: Differences in definition, degree of modularity, role of attention, and purpose. Language, Speech, and Hearing Services in Schools, 49(3), 340-355.

Sweller, J. (2011). Cognitive load theory. In Psychology of learning and motivation (Vol. 55, pp. 37-76). Academic Press. Download Sweller, J. (2011). Cognitive load theory. In Psychology of learning and motivation (Vol. 55, pp. 37-76). Academic Press.

Module 5: Long-Term Memory

Walinga, J., & Stagnor, C. (2014). 9 Remembering and Judging. In Introduction to Psychology 1st Canadian Edition..

Weapons Focus and Cross-Race Bias. Provided by: Cognitive Psychology.. License: CC BY 4.0

Module 6: Language

Mark Aronoff (2007) Language. Scholarpedia, 2(5):3175. Some content adapted/added by Acacia Overoye (2020).

Multiple Authors. (2018). Neurocognition of Language/Speech Comprehension and Speech Production. In Neurocognition of Language. Wikibooks..

Josias, A. (2019). Psycholinguistics: The process of language production. Download Josias, A. (2019). Psycholinguistics: The process of language production. Retrieved from https://www.academia.edu/39981796/PSYCHOLINGUISTICS\_THE\_PROCESS\_OF\_LANGUAGE\_P RODUCTION BY ARTUR JOSIAS.

Module 7: Problem Solving, Creativity, Judgement, & Decision Making Dumper, K., Jenkins, W., Lacombe, A., Lovett, M., and Perimutter, M. (2019). 7.3 Problem-Solving. In Introduction to Psychology, edited by S. Swindell. PressBooks..

Bazerman, M. H. (2022). Judgment and decision making. In R. Biswas-Diener & E. Diener (Eds), Noba textbook series: Psychology. Champaign, IL: DEF publishers. Retrieved from http://noba.to/9xjyvc3a.

Simonton, D. K. (2022). Creativity. In R. Biswas-Diener & E. Diener (Eds), Noba textbook series: Psychology. Champaign, IL: DEF publishers. Retrieved from http://noba.to/nwzd6yuc

Overoye, A.L. (2022). "Knowledge." In Cognitive Psychology, edited by A. Overoye. Self-published.

## General Description of the Subject Matter of Each Lecture or Discussion

Introduction to Cognitive Psychology

- 1. Define cognition and the scope of cognitive psychology
- 2. Outline the history of cognitive psychology
- 3. Compare different behavioral and psychophysical methods
- 4. Identify the function of key brain anatomy

### Perception

- 1. Differentiate between sensation and perception
- 2. Recognize the function and basic anatomy of each of our senses
- 3. Outline the basic steps of perception (selection, organization, interpretation)
- 4. Compare different theoretical approaches to perception (indirect and direct)

#### Attention

- 1. Differentiate between types of attention and attentional lapses
- 2. Identify factors that influence visual attention
- 3. Compare late, early, and attenuation models of attention
- 4. Summarize how attention influences our behavior and other cognitive processes

### Short-Term Memory & Working Memory

- 1. Differentiate between short-term memory and working memory
- 2. Identify the components and structure of standard models of STM & WM
- 3. Compare modern models of working memory
- 4. Summarize factors that increase cognitive load

#### Long-Term memory

- 1. Differentiate between long-term memory, short-term memory, and working memory
- 2. Categorize different types of long-term memory (explicit vs implicit, episodic vs semantic, etc)
- 3. Compare different theories of encoding (including considerations for consolidation and reconsolidation)
- 4. Summarize factors that influence retrieval

### Knowledge

- 1. Differentiate between different representations of knowledge (semantic, propositional, analog)
- 2. Identify the strengths and weaknesses of various approaches to categorization.
- 3. Compare semantic and neural networks
- 4. Summarize methods used to study knowledge (categorization and mental imagery)

#### Language

- 1. Define language and it's key characteristics
- 2. Identify the major challenges to language comprehension and how they are overcome
- 3. Compare different types of speech errors and slips of the tongue.
- 4. Summarize the process of language production

### Problem Solving, Creativity, and Decision Making

- 1. Differentiate between types of problem solving, judgments, and decision making
- 2. Identify challenges associated with problem solving.
- 3. Compare different strategies people use to solve problems
- 4. Summarize different heuristics and when they are applied

# Required Course Syllabus Statements

#### Generative AI

Easily accessible tools powered by Artificial Intelligence (AI) are growing in popularity. In this class if you want to use AI tools, I want you to be able to use these tools in an effective and ethical way. My goal is for you to learn and develop critical thinking and creative skills and AI doesn't need to work against that goal. For work in this class, if you use AI you will be required to add a short AI disclosure statement see the **AI Disclosure** pages for more details! We are using a plagiarism checker that includes screening for AI. These tools are notoriously inaccurate, but if your assignment gets flagged I will let you know and remind you to include a disclosure if it is applicable.

## **Using Remote Testing Software**

 $\square$  This course does not use remote testing software.

⊠ This course uses remote testing software. Remote test-takers may choose their remote testing locations. Please note, however, that the testing software used for this may conduct a brief scan of remote test-takers' immediate surroundings, may require use of a webcam while taking an exam, may require the microphone be on while taking an exam, or may require other practices to confirm academic honesty. Test-takers therefore shall have no expectation of privacy in their test-taking location during, or immediately preceding, remote testing. If a student strongly objects to using test-taking software, the student should contact the instructor at the beginning of the semester to determine whether alternative testing arrangements are feasible. Alternatives are not guaranteed.

## Required University Syllabus Statements

#### Accommodations/Students with Disabilities

Students needing accommodations due to a permanent or temporary disability, pregnancy or pregnancy-related conditions may contact UVU <u>Accessibility Services</u> at <u>accessibilityservices@uvu.edu</u> or 801-863-8747.

Accessibility Services is located on the Orem Campus in BA 110.

Deaf/Hard of Hearing students requesting ASL interpreters or transcribers can contact Accessibility Services to set up accommodations. Deaf/Hard of Hearing services can be contacted at DHHservices@uvu.edu

DHH is located on the Orem Campus in BA 112.

### **Academic Integrity**

At Utah Valley University, faculty and students operate in an atmosphere of mutual trust. Maintaining an atmosphere of academic integrity allows for free exchange of ideas and enables all members of the community to achieve their highest potential. Our goal is to foster an intellectual atmosphere that produces scholars of integrity and imaginative thought. In all academic work, the ideas and contributions of others must be appropriately acknowledged and UVU students are expected to produce their own original academic work.

Faculty and students share the responsibility of ensuring the honesty and fairness of the intellectual environment at UVU. Students have a responsibility to promote academic integrity at the university by not participating in or facilitating others' participation in any act of academic dishonesty. As members of the academic community, students must become familiar with their <u>rights and responsibilities</u>. In each course, they are responsible for knowing the requirements and restrictions regarding research and writing, assessments, collaborative work, the use of study aids, the appropriateness of assistance, and other issues. Likewise, instructors are responsible to clearly state expectations and model best practices.

Further information on what constitutes academic dishonesty is detailed in <u>UVU Policy 541: Student Code of Conduct</u>.

## **Equity and Title IX**

Utah Valley University does not discriminate on the basis of race, color, religion, national origin, sex, sexual orientation, gender identity, gender expression, age (40 and over), disability, veteran status, pregnancy, childbirth, or pregnancy-related conditions, citizenship, genetic information, or other basis protected by applicable law, including Title IX and 34 C.F.R. Part 106, in employment, treatment, admission, access to educational programs and activities, or other University benefits or services. Inquiries about nondiscrimination at UVU may be directed to the U.S. Department of Education's Office for Civil Rights or UVU's Title IX Coordinator at 801-863-7999 – <u>TitleIX@uvu.edu</u> – 800 W University Pkwy, Orem, 84058, Suite BA 203.

### **Religious Accommodation**

UVU values and acknowledges the array of worldviews, faiths, and religions represented in our student body, and as such provides supportive accommodations for students. Religious belief or conscience broadly includes religious, non-religious, theistic, or non-theistic moral or ethical beliefs as well as participation in religious holidays, observances, or activities. Accommodations may include scheduling or due-date modifications or make-up assignments for missed class work.

To seek a religious accommodation, a student must provide written notice to the instructor and the Director of Accessibility Services at <a href="mailto:accessibilityservices@uvu.edu">accessibilityservices@uvu.edu</a>. If the accommodation relates to a scheduling conflict, the notice should include the date, time, and brief description of the difficulty posed by the conflict. Such requests should be made as soon as the student is aware of the prospective scheduling conflict.

While religious expression is welcome throughout campus, UVU also has a <u>specially dedicated</u> <u>space</u> for meditation, prayer, reflection, or other forms of religious expression.