

**Saint Leo University**  
**PSY 412 COGNITIVE PSYCHOLOGY**

**Course Description:**

An examination of higher level thought processes including such topics as attention and perception, memory, language, reasoning, concept formation, and problem solving. Theories of cognitive functions are examined with an emphasis on research findings and methodologies.

**Prerequisite:**

PSY 305 completed or taken concurrently

**Textbook(s):**

The book information which appears on our Saint Leo Follett Bookstore order site is as follows:  
Reisberg, Daniel. (2018). *Cognition: Exploring the Science of the Mind* (7th ed.) W.W. Norton & Company. (E-book with Zaps Lab). ISBN#: 9780393691207

The custom edition above was created using the following national text:

Reisberg, Daniel. (2018). *Cognition: Exploring the Science of the Mind* (7th ed.) W.W. Norton & Company. Print ISBN#: 9780393665079

**Learning Outcomes:**

1. Integrate information about major historical antecedents of the development of cognitive psychology to modern research across examinations and research paper.
2. Recall, recognize, and distinguish between the major brain areas involved in cognition and to report their functions on examinations.
3. Illustrate cognition as a constructive process in online/in-class discussions.
4. Distinguish between and recognize the strengths and weaknesses of the major theoretical models within the areas of attention, perception, memory, representations of knowledge, language, imagery, decision-making, and problem-solving on examinations and class presentation.
5. Apply the results of major experimental findings in the area of cognitive psychology to predict the outcomes of hypothetical scenarios within a research paper and online/in-class discussion.
6. Summarize and critically evaluate the research in a particular area of cognitive psychology in written (APA style paper) and/or oral form (presentation).

**Core Value:**

*Personal Development:* Saint Leo University stresses the development of every person's mind, spirit, and body for a balanced life. All members of the Saint Leo University community must demonstrate their commitment to personal development to help strengthen the character of our community.

**Evaluation:**

Assessment	Total Percentage
Discussion/Participation (8)	10%
Labs (10)	15%
Term Paper (1)	30%
Presentation (1)	15%
Quizzes (8)	30%

In the on-ground program on the main campus we use four examinations, a term paper with in-class presentation, and class participation in determining a student's grade.

The following distribution will be used in assigning grades (decimal points will be rounded to the nearest whole number at semester's end) (IOR may not alter):

Grade		Percentage
A	Exceptional	94% to 100%
A-	Superior	90% to 93%
B+	Excellent	87% to 89%
B	Very Good	84% to 86%
B-	Good	80% to 83%
C+	Above Average	77% to 79%
C	Average	74% to 76%
C-	Below Average	70% to 73%
D+	Marginal	67% to 69%
D	Poor	60% to 66%
F	Failure	Below 60%

**Quizzes**

Tests can be a combination of multiple-choice, true-false, matching, short answer and essay. Students should be asked to provide descriptions of phenomena, theories attempting to explain these phenomena, and research evidence supporting and/or refuting these theories. In addition some objective questions or identifications might be included as well. Tests should represent approximately 40-50 % of the final grade.

**Term Paper**

Because this is 400 level course, a term paper (following a literature review) should be included. The term paper should be aimed at a critical evaluation of research supporting and/or refuting one of the theoretical positions currently under investigation in the areas of cognitive psychology. Alternatively, this paper may take the form of a research proposal including a more specific literature review leading to a detailed description of a proposed experiment designed to test that theoretical position. (Note - this would be only a proposal for a research project, which would not actually be carried out, due to time constraints and the requirement that all research be pre-approved by the Saint Leo Institutional Review Board.) An in-class presentation of the paper is an option that should be considered. The paper should represent approximately 15-35% of the final grade.)

**Presentation**

Illustrate through demonstration, video project, or presentation the practical applications of cognitive theory in everyday life (e.g., memory/formgetting, decision-making, problem solving, etc.). Presentations should include an annotated bibliography of all sources and be constructed through Powerpoint or other presentation multimedia software. Students may also choose to create a video or, for on ground class, a demonstration. The presentation should represent approximately 10-15% of the final grade.

**Discussion/Participation**

Discussion/Class participation may also be considered as a part of the evaluation criteria, counting for between 15-25% of the student's final grade.

**Assessment of the Learning Outcomes:**

Course Learning Outcome	Assessment Method
1	Quizzes and Research Paper, Discussion
2	Exams, Discussion
3	Research Paper and Presentation, Discussion
4	Quizzes, Research Paper, and Presentation, Discussion
5	Research Paper and Presentation, Discussion
6	Research Paper and Presentation, Discussion

**Course Schedule:****Module 1 Cognitive Psychology – History and Today**

**Objectives** When you complete this module, you should be able to:

- Integrate information about major historical antecedents of the development of cognitive psychology to modern research across examinations and research paper.
- Recall, recognize, and distinguish between the major brain areas involved in cognition and to report their functions on examinations

**Readings** Chapters 1 & 2

**Assignments**

Items to be Completed:	Due No Later Than:
Post an introduction to the class	Thursday 11:59 PM EST/EDT
Post an initial response to the discussion question	Thursday 11:59 PM EST/EDT
Post responses to at least two classmates	Sunday 11:59 PM EST/EDT
Paper Writing: Overview & Topic	Sunday 11:59 PM EST/EDT
ZAPS Lab 1	Sunday 11:59 PM EST/EDT
Complete Quiz 1	Sunday 11:59 PM EST/EDT

## Module 2 Visual Perception and Object Recognition

**Objectives** When you complete this module, you should be able to:

- Distinguish between and recognize the strengths and weaknesses of the major theoretical models within the areas of visual processing
- Compare and Contrast processing theories for word, object, and facial recognition
- Explore the sensation process for vision and its relationship to perception

**Readings** Chapters 3 & 4

### Assignments

<b>Items to be Completed:</b>	<b>Due No Later Than:</b>
Post an initial response to the discussion question	Thursday 11:59 PM EST/EDT
Post responses to at least two classmates	Sunday 11:59 PM EST/EDT
ZAPS Lab 2	Sunday 11:59 PM EST/EDT
Complete Quiz 2	Sunday 11:59 PM EST/EDT

## Module 3 Attention and Working Memory

**Objectives** When you complete this module, you should be able to:

- Distinguish between and recognize multiple theories of attention, its neural connections, and ways in which attention manipulates our experience of the world
- Distinguish between and recognize the strengths and weaknesses of the major theoretical models for the manipulation of information across theories of working memory

**Readings** Chapters 5 & Chapter 6 (pages 213 & 214)

### Assignments

<b>Items to be Completed:</b>	<b>Due No Later Than:</b>
Post an initial response to the discussion question	Thursday 11:59 PM EST/EDT
Post responses to at least two classmates	Sunday 11:59 PM EST/EDT
ZAPS Lab 3	Sunday 11:59 PM EST/EDT
Complete Quiz 3	Sunday 11:59 PM EST/EDT

## Module 4 Long-Term Memories

**Objectives** When you complete this module, you should be able to:

- Explore the process and systems used to create long-term memories through the roles of elaboration, connecting to meaning, and organization
- Distinguish between theories of acquisition and retention, factors that influence this connection, and the influence of stored information on the process of perception

**Readings** Chapters 6 & Chapter 7 (first half of page 254)

### Assignments

<b>Items to be Completed:</b>	<b>Due No Later Than:</b>
Post an initial response to the discussion question	Thursday 11:59 PM EST/EDT
Post responses to at least two classmates	Sunday 11:59 PM EST/EDT
ZAPS Lab 4a	Sunday 11:59 PM EST/EDT
ZAPS Lab 4b	Sunday 11:59 PM EST/EDT
Complete Quiz 4	Sunday 11:59 PM EST/EDT

## Module 5 Recall, Remembering, and Forgetting

**Objectives** When you complete this module, you should be able to:

- Differentiate Explicit and Implicit memory systems and their impact on the creation, instantiation, and preservation of memory.
- Differentiate between forms of memory impairment and deficit
- Distinguish between types and processes for memory errors.
- Differentiate and explain theories for the process of forgetting material.
- Explore concepts within autobiographical memory.

**Readings** Chapter 7 (second half of page 255)

### Assignments

<b>Items to be Completed:</b>	<b>Due No Later Than:</b>
Post an initial response to the discussion question	Thursday 11:59 PM EST/EDT
Post responses to at least two classmates	Sunday 11:59 PM EST/EDT
ZAPS Lab 5	Sunday 11:59 PM EST/EDT
Complete Quiz 5	Sunday 11:59 PM EST/EDT

## Module 6 Concepts, Knowledge, and Language

**Objectives** When you complete this module, you should be able to:

- Distinguish between theories for concept formation and how these concepts connect and interact to form our knowledge base.
- Distinguish between the major components of language and its relationship to conceptual formation and biological processing.
- Explore the interdependent nature of language and cognition.

**Readings** Chapter 9 & 10

### Assignments

<b>Items to be Completed:</b>	<b>Due No Later Than:</b>
Post an initial response to the discussion question	Thursday 11:59 PM EST/EDT
Post responses to at least two classmates	Sunday 11:59 PM EST/EDT
ZAPS Lab 6a	Sunday 11:59 PM EST/EDT
ZAPS Lab 6b	Sunday 11:59 PM EST/EDT
Complete Quiz 6	Sunday 11:59 PM EST/EDT

## Module 7 Judgement, Reasoning, Problem Solving & Intelligence

**Objectives** When you complete this module, you should be able to:

- Distinguish between major theories for judgement and problem solving.
- Explore the role of heuristics in cognitive processing and the biases they can produce.
- Describe the role for logic within decision making.
- Compare and contrast the components within problem solving.
- Distinguish between theories for creative thinking.
- Differentiate between theories of intelligence and the differences between fluid and crystalized intelligence

**Readings** Chapter 12 & 13

### Assignments

<b>Items to be Completed:</b>	<b>Due No Later Than:</b>
Post an initial response to the discussion question	Thursday 11:59 PM EST/EDT
Post responses to at least two classmates	Sunday 11:59 PM EST/EDT
ZAPS Lab 7	Sunday 11:59 PM EST/EDT
Complete Quiz 7	Sunday 11:59 PM EST/EDT
Final Paper	Sunday 11:59 PM EST/EDT

## Module 8 Conscious Thought

**Objectives** When you complete this module, you should be able to:

- Explore the conceptual understandings for conscious and unconscious thought.
- Distinguish between neuroscience models for understanding conscious thought.
- Present Paper Findings

**Readings** Chapter 14

## Assignments

<b>Items to be Completed:</b>	<b>Due No Later Than:</b>
Post an initial response to the discussion question	Thursday 11:59 PM EST/EDT
Post responses to at least two classmates	Sunday 11:59 PM EST/EDT
ZAPS Lab 7	Sunday 11:59 PM EST/EDT
Complete Quiz 7	Sunday 11:59 PM EST/EDT
Paper - Presentation	Sunday 11:59 PM EST/EDT