

**Advanced Cognitive Psychology****Instructor:** Dr. Claudia Stanny**Office Hours:** by appointment**Psychology: Room 214 / Building 41****Center for University Teaching, Learning, and Assessment: Room 210 / Building 53****Phone:** 857-6355**E-mail:** cstanny@uwf.edu**Class Meets:** 1:00 PM - 3:55 PM Wednesday  
Room 115 / Building 41**Required Text:**Goldstein, E. B. (2008). *Cognitive Psychology: Connecting mind, research, and everyday experience* (2<sup>nd</sup> edition). Thomson/Wadsworth.**Additional Readings:**Lewandowsky, S., Little, D., & Kalish, M. L. (2007). Knowledge and expertise. In F. T. Durso (Ed.), *Handbook of Applied Cognition* (2<sup>nd</sup> ed.) (pp. 83-109). Chichester: Wiley.Winter, R. J., & Greene, E. (2007). Juror decision-making. In F. T. Durso (Ed.), *Handbook of Applied Cognition* (2<sup>nd</sup> ed.) (pp. 739-761). Chichester: Wiley.Wright, D. B., & Davies, G. M. (2007). Eyewitness testimony. In F. T. Durso (Ed.), *Handbook of Applied Cognition* (2<sup>nd</sup> ed.) (pp. 763-786). Chichester: Wiley.**COURSE CATALOG DESCRIPTION****Prerequisite:** EXP 3082 and EXP 4404 or equivalent courses.

Students will develop a broad understanding of current research and theorizing in the various topics of memory and cognition, including attention, memory systems and processes, representation of knowledge, metamemory, language, problem solving, expertise, decision making, and creativity. Emphasis will be placed on current research and theory in human memory cognition. Students will develop an in-depth understanding of a selected topic in cognition and will write a literature review paper discussing current research and theory in this topic.

**Student Learning Outcomes**

Students who successfully complete this course should exhibit competence in the following areas:

- Describe the historical development of cognitive psychology.
- Identify, describe, and discriminate among the different theoretical approaches to memory.
- Outline the various models of attention and discuss neural correlates of attention.
- Explain the relation between perceptual process and other cognitive processes.
- Discuss the research and current models of short-term and working memory.
- Describe and explain the role of encoding and retrieval processes in long-term retention.
- Describe the role of knowledge and expertise in the acquisition, retention, and use of information.
- Describe the mechanisms that contribute to forgetting, distortions, and other memory inaccuracies.
- Evaluate the limitations of memory accuracy for the recall of personal events in applications such as eyewitness testimony and report of significant personal events during therapy.
- Describe metacognitive processes and explain how these might be used to improve skill in memory or cognition.
- Describe the encoding, representation, and retrieval of visual and spatial information.
- Outline the models for the representation of general knowledge.
- Discuss the development and use of language.
- Describe heuristics and biases that influence judgment and decision making.
- Discuss developmental issues in cognition, both in early and late life.
- Demonstrate an extended knowledge of a topic of research related to memory and cognition by reviewing current research in the primary literature and integrating these new findings with models discussed during class.

**UNIVERSITY POLICY ON ACADEMIC CONDUCT**

The University of West Florida is dedicated to the highest principles and standards of academic integrity. An academic violation by a student can negatively impact a class, program and/or college in ways that are

unique to each discipline. Therefore, the University believes that the severity of an academic infraction is best evaluated by the faculty of the institution. The University seeks to offer students an opportunity to respond to allegations of academic misconduct before a decision is rendered. This regulation/rule seeks to provide faculty and students with a fair process for adjudicating allegations of academic misconduct.

Academic integrity is closely related to professional ethics and requires that students honestly acknowledge their use of the ideas, words, and written work produced by any other individual, institution or source. Failure to acknowledge properly the use of another's intellectual output constitutes a form of academic misconduct. (Quoted from the UWF Academic Misconduct Policy. The entire policy can be downloaded at: <http://uwf.edu/academic/policies/misconduct/misconduct.cfm>)

Academic dishonesty is a serious offense and will be taken seriously. Please refer to the UWF Student Handbook for information about procedures that will be followed with cases of academic dishonesty.

### **ASSISTANCE FOR STUDENTS WITH SPECIAL NEEDS**

Students with special needs who require specific accommodations for examinations or other course activities should contact the Student Disability Resource Center (SDRC) (web address: <http://www.uwf.edu/SDRC>, telephone: 474-2387). SDRC will provide the student with a letter for the instructor that will specify recommended accommodations for individual students.

### ***Textbook Chapter Review Assignment***

Each student will be asked to select one chapter from Goldstein and review similar chapters in two textbooks on cognitive psychology. You will be asked to submit a comparison of the three chapters (Goldstein's and chapters from 2 additional books) at the time that the chapter in Goldstein is discussed in class. You will also contribute to the class discussion on this chapter. A sign-up sheet will be circulated during the first class meeting time to schedule chapter assignments. I have a selection of text books on memory and cognition that can be consulted for this assignment.

When comparing Goldstein's chapter to other text book chapters, you should address the following issues:

- ***Completeness of information.*** Do these chapters review similar topics? If the choice of topics varies, discuss the strengths and weaknesses associated with the choice of topics. Does one text neglect a topic that you think is important? (Support your assertion with evidence of the importance of the neglected topic.)
- ***Accuracy.*** Are these authors accurate in their portrayal of the research reviewed? Identify any inaccuracies or inconsistencies in the way different text authors present the same research.
- ***Currency of information.*** Is the research presented up to date?
- ***Readability.*** Compare the writing quality of the chapters. Does the writing engage your interest? Describe the level of expertise expected of the typical reader. Would this text be suitable for a mid-level undergraduate course, and advanced undergraduate course, or a graduate seminar? Explain and support your judgments.
- ***Pedagogical elements of the chapter.*** Compare the use of pedagogical devices (side bars, definitions, summaries, questions, additional readings, vocabulary items, etc.) used in each chapter. Which ones seem to be effective? Which ones do not seem to be useful? Justify your judgments.

### ***Take-Home Essay Exams***

There will be **2 take-home essay exams**. These will be distributed in class on the dates designated in the schedule of lecture topics. You will have one week to work on these exams. Answers to essay exam questions should be typed, double-spaced, using 1 inch margins and 10-12 point font. Clearly identify the question number (from the exam) for each response. You may use your books, class notes, and other print resources to prepare answers to these questions. You may not consult with any other student or faculty member when preparing your responses.

**Include a statement on the title page for you exam indicating that you wrote your responses without consulting any other students or faculty members.**

A rubric describing the criteria used in evaluating the quality of your responses to exam questions will be distributed with the exam questions.

### ***Chapter Paper: Contemporary Issues in Cognitive Research***

Imagine that you have been asked to write a chapter for an edited book (*Contemporary Issues in Cognitive Research*) intended for graduate students in a cognitive psychology program. Each student in the class will select a topic for his or her chapter. I will provide a list of topics during the first week of the term. Approximately one third of each chapter should summarize the basic findings and models in this research area. The remainder of the chapter will be devoted to research findings and development of theories and models during in the **most recent 5 years**. Thus, the paper will be based on **primary** research literature (i.e., empirical studies published in peer-reviewed journals and edited books).

However, some material may be based on theoretical or research monographs (scholarly books), meta-analyses or review articles or chapters (e.g., articles published in *Psychological Bulletin*, *Psychological Review*, *Annual Review of Psychology*, or similar publications). Your chapter should describe and discuss current research findings and integrate them into a cohesive picture of current understanding of the research area addressed by your chapter.

All class members will provide one another with copies of their papers when the papers are due, so you will have such an edited book, written by the class, at the end of the term. The chapter paper should include the following components:

A **brief** historical and/or theoretical overview that places the topic of research in the proper context of the larger field of memory and cognition. For example: What are the historical origins of the current research topic? What are the important larger theoretical issues in memory or cognition that make this topic interesting and important?

Describe and discuss basic findings, theories, and models that characterize the area of research.

Present a discussion of the current theoretical debate that is driving current research. Describe the important current theoretical positions taken by researchers in this area. Describe any important methodological issues and/or controversies that are currently under discussion. Describe the strengths and weaknesses of these positions. Always support your assertions with relevant empirical research. Describe clearly why this research supports your assertion. The review of current research literature should be thorough and complete. When presenting research, you should provide enough information to allow the reader to understand what was done to generate the data, what the important findings were, why they are important, and how they are related to the research area for your chapter. This section should be based on **research published in the most recent 5 years**.

Provide a **synthesis of the research area** in the form of **conclusions and recommendations for future research**. For example, can current controversies be resolved? If so, what sort of evidence would resolve them? What is the likely direction that future research should take?

Write **3 end-of-chapter questions** that could be used by an instructor to evaluate a graduate student's knowledge and understanding of the material presented in the chapter.

The paper is expected to be **20-25 pages** in length. Papers should be prepared using APA format. Include only your paper title, your name, and class information on the title page. Use APA format for overall editorial style (use of language, use of numbers versus numerals, capitalization and abbreviation, etc.), citation of references in the body of your paper, and general page format (margins, spacing, type font). **You will not need to include an abstract**. Use headings as needed to organize sections within the paper. **Include a 1-3 word page header and page numbers so that students who bind their collections of chapters for future reference will have clear identifiers on each page for individual chapters**. For the reference section, use hanging indentations with single spacing within a reference and double-spacing between references to conserve paper.

A complete rubric describing the criteria for the allocation of points will be distributed as a separate handout.

### **Class Discussion**

This class will be conducted in a seminar format. This means that the quality of class discussion will depend greatly on the quality of student preparation and the quality of student contributions to class discussion.

### **Grading**

Exams, class participation, and the Chapter Paper will be assigned percentage scores (points earned/points possible) and weighted as follows:

Take-Home Essay Exams (2)	25% (each) – 50% total
Chapter Review Assignment	10%
Class Participation:	10%
Research Literature Review Paper:	30%

Letter grades will be assigned as follows:

93% or better	A	77% to 79%	C +
90% to 92%	A -	73% to 76%	C
87% to 89%	B +	70% to 72%	C -
83% to 86%	B	60% to 69%	D
80% to 82%	B -	50% or less	F

**Advanced Cognitive Psychology  
Schedule of Lecture Topics, Assigned Readings, and Exams**

**NOTE: Dates are provided only for the day on which an exam is scheduled or discussion of a new topic begins. Classes will meet on all scheduled meeting days**

<b>Lecture Topics, Assigned Readings, and Exams</b>		
<b>Date</b>	<b>Lecture Topics / Exams</b>	<b>Assigned Reading</b>
Jan 9	Course Mechanics; History & Research Methods Students select chapters for <i>textbook review assignment</i>	Syllabus; Chapter 1, Goldstein
Jan 16	Cognition and the Brain	Chapter 2, Goldstein
Jan 23	Perception Students select topics for <i>Contemporary Issues</i> Chapter Paper	Chapter 3, Goldstein
Jan 30	Attention	Chapter 4, Goldstein
Feb 6	Short-Term and Working Memory	Chapter 5, Goldstein
Feb 13	Long-Term Memory	Chapter 6, Goldstein
<b>Feb 13</b>	<b>Questions for Take-Home Exam 1 distributed</b>	
Feb 20	Everyday Memory and Memory Errors	Chapter 7, Goldstein Wright & Davies (2007)
<b>Feb 23</b>	<b>Take-Home Exam 1 Due (noon)</b>	
Feb 27	Knowledge	Chapter 8, Goldstein
March 5	Visual Imagery	Chapter 9, Goldstein
March 12	Problem Solving	Chapter 10, Goldstein
	<b>Spring Break – March 17 – 21</b>	
March 26	Reasoning and Decision Making	Chapter 11, Goldstein Winter & Greene (2007)
April 2	Deductive Reasoning & Decision Making	Chapter 12, Goldstein
April 9	Expertise	Lewandowsky, Little, & Kalish (2007)
<b>April 9</b>	<b>Chapter Papers Due: <i>Send an electronic copy of your paper to all classmates and to me</i></b>	
April 16	Student Presentations	TBA
<b>April 16</b>	<b>Questions for Take-Home Exam 2 distributed</b>	
April 23	Student Presentations	TBA
<b>April 25</b>	<b>Take-Home Exam 2 Due (noon)</b>	