Psychology P561

"Human Memory"

Course Description:

This introductory course will provide an overview of the current field of human memory. Human memory is concerned with how people encode, store, retrieve and use information, knowledge and prior experiences. In this survey course, we will examine the underlying neurocognitive processes, mechanisms and structures that are involved in sensory memory, short-term memory/working memory and long-term memory. Specific areas to be covered in this course include topics such as: perception and pattern recognition, coding and capacity limitations of immediate memory, working memory dynamics and cognitive control processes, levels of processing, retention and forgetting, interference and decay, implicit and explicit memory, amnesia, visual imagery and verbal coding, memory schemas and memory illusions, prospective memory, mnemonics and memory aids. We will also briefly consider several current global models of memory.

Required Textbooks:

P.J. Hilts, Memory's Ghost, Simon & Schuster, 1996 (paperback)
A. Baddeley, M.W. Eysenck & M.C. Anderson, Memory 2nd edition, Psychology Press, 2015 (paperback)
L. C. Katz & M. Rubin, Keep Your Brain Alive, Workman Publishing Company, 1999 (paperback)

Examinations and Grading Policy:

Final grades in P561 will be based on **two examinations, a research project proposal**, **and homework assignments**. Each **exam** will count for 25% of your final grade. All exams will be based on the lecture material presented in class, material covered in the textbook and additional required reading assignments for each topic. You will also be required to hand in a **research proposal** towards the end of the semester outlining a novel experiment you wish to carry out based on some problem or issue you uncovered in the class lectures or reading assignments. Your research proposal counts for 30% of your final grade. You will also be required to give a short summary of your research project proposal to the class during the last week of the semester. **Homework assignments** will count for the remaining 20% of your grade.

You are responsible for everything in this course. Most of the lectures are based on information that is in the textbook and reading assignments. There will also be several homeworks involving the collection and interpretation of experimental data. **You are "personally responsible" for the content of the lectures, the assigned reading material in the textbook and the additional assigned readings as well as the homeworks and your final research project proposal.**

Each of the exams will consist of true/false and short-answer questions, a "graph question" and a take-home "essay question" which is due a week before each of the exams. This format is used in order to provide you with every opportunity to demonstrate your knowledge and understanding of the relevant materials and major concepts covered in this course. The final research project proposal must be an original piece of research designed by you that is based on the class lectures and reading assignments covered in the course. Your project proposal must be "preapproved" by me before you begin writing it up for submission at the end of the semester. You cannot use any previous research you have carried out for another course to satisfy this requirement. You proposed research project must be based on something you came up with based on material in this course.

Exam and Research Project Proposal Dates:

Exam I – (25% of Final Grade)
Final Exam – (25% of Final Grade)
Research Project Proposal – (30% of Final Grade)

"P561 Human Memory"

P561 Lecture Topics and Assigned Readings

WEEK:	LECTURE TOPIC:	ASSIGNED READINGS:
1.	Introduction: What is Memory?	Memory's Ghost - (Book about "HM") Memory (BEA Text) - Chapts 1, 17 & **Readings** Keep Your Brain Alive – Read Whole Book
2.	Sensory Memory	Memory (BEA Text) - Chapt 2 & **Readings**
3.	Short-term Memory	Memory (BEA Text) - Chapt 3 & **Readings**
4.	Working Memory	Memory (BEA Text) - Chapt 4 & **Readings**
5.	Learning & Episodic Memory	Memory (BEA Text) - Chapts 5,6 & **Readings**
6.	**Exam I and Review of Exam I**	Exam I on Tuesday: Review Exam on Thursday
7.	Semantic Memory	Memory (BEA Text) - Chapt 7 & **Readings**
8.	Imagery & Visual-Spatial Coding	Memory (BEA Text) - Chapt 7, 4 & **Readings** Nova Video —"Stranger in the Mirror"
9.	Retrieval and Remembering	Memory (BEA Text) - Chapts 8 & **Readings**
10.	Recognition Memory	Memory (BEA Text) - Chapts 8 & **Readings**
11.	Forgetting and Memory Loss	Memory (BEA Text) - Chapts 9, 10 & **Readings**
12.	Autobiographical Memory	Memory (BEA Text) - Chapt 11 & **Readings**
13.	Eyewitness Testimony; "Fake News" Implanted/False Memories	Memory (BEA Text) - Chapt 12 & **Readings** Nova Video – Alan Alda & Dan Schacter
14.	Prospective/Adaptive Memory; Memory and Aging; Amnesia	Memory (BEA Text) – Chapt 13 & **Readings** Memory (BEA Text) – Chapt 15 & **Readings**
15.	Amnesia; Mnemonics & Memory Aids Memory Models; Course Wrap-Up	Memory (BEA Text) – Chapt 16,17 & **Readings**
16.	**FINAL EXAMINATION:**	

OUTLINE FOR P561 RESEARCH PROJECT PROPOSALS

1. Cover Page - This page should include a title, name and affiliation of author and a running head. (Limit 1 page)

2. Abstract Page - For your proposal, the abstract should be an informative technical summary of the proposed work about 50-100 words in length. (Limit 1 page)

3. Introduction - The introductory section of the proposal should provide the background for the research to be conducted, the theoretical rationale and the motivation for undertaking the study. Why are you doing this research? (Limit 5 pages)

4. Purpose and Goals - What is the purpose of this research? What do you expect to learn from the study? State the specific hypotheses to be tested. Describe the independent and dependent variables, if appropriate. (Limit 4 pages)

5. Experimental Design - Where appropriate, provide a detailed technical description of the experimental design to be used in your study, including within vs. between subject variables, experimental conditions, etc. (Limit 2 pages)

6. Methods and Procedures - Briefly describe the experimental procedures to be followed. Describe the subjects, setting, stimulus materials, apparatus, and the specific procedural details of the experiment. (Limit 4 pages)

7. Data Analysis - What kind of data will be collected? How will the data be analyzed? What statistical tests will be conducted? Indicate possible graphs, figures, tables to be included. (Limit 2 page)

8. Expected Results - Assume that your experiment works out the way you have planned. What are the expected results? (Limit 2 pages)

9. Significance - Why are your results theoretically important? How are they related to the issues discussed in the introduction? How will the findings of your project contribute to the general issues covered in this course? What are the limitations of your proposed experiment? (Limit 2 pages)

10. References - Include a list of relevant literature cited in your proposal.