

**** Preliminary Syllabus****

Episodic Memory and Episodic Future Thinking

PSY 418/ PSY 518

TBA (Time and location)

Instructor: Çağla Aydın

Office: FASS 2020

Hours: By appointment

TA: Selma Berfin Tanış

Course Description

This advanced undergraduate / graduate seminar provides a thorough examination of episodic memory and episodic future thinking, encompassing both current research in the field and practical applications. The course integrates theoretical frameworks with empirical evidence, employing a multidisciplinary approach to understanding the complexities of memory and imagination processes. Key focal points include the development of episodic memory, the impact of aging on remembering, memory and imagination in social contexts, the connection between emotion and memory, the accuracy of memory, neurological perspectives on memory, the various functions of memory, and the practical implications derived from memory research.

Teaching Methodology

The course employs a seminar format, combining lectures, discussions, and student presentations. Readings encompass seminal and current literature in the field, fostering critical analysis and discussion.

Assessment

Students will be evaluated through active participation, presentations, critical reviews of research papers, and a final project that encourages the application of memory concepts to real-world scenarios.

Target Audience

Senior undergraduate students and graduate students in psychology, neuroscience, or related fields with an interest in advanced memory research

Prerequisites

A foundational understanding of cognitive psychology and basic memory concepts is recommended. Optimal preparation for the course would include not only the required introductory psychology and cognitive neuroscience, memory courses, but also courses in research design and statistics.

Course Text

We will read original research reports and theoretical papers relevant to the topics above. These readings will be made available on a weekly basis on SUCourse by the instructor. The final list of topics and readings will be determined in part by the interests of the class members. Readings must be completed by the assigned date.

During and after completing this course you should be able to:

- Define and explain the key concepts related to episodic memory, including encoding, storage, retrieval, consolidation, and reconsolidation.
- Evaluate and compare various theoretical models of episodic memory, such as the dual-process theory, multiple trace theory, and constructive memory models.
- Critically assess the methodologies used in episodic memory research, including behavioral paradigms, neuroimaging techniques (fMRI, EEG), and patient studies, understanding the strengths and limitations of each.
- Trace the historical development of research on episodic memory, identifying key milestones, influential studies, and paradigm shifts in understanding.
- Summarize and discuss recent advances and cutting-edge research in episodic memory, including emerging technologies and methodologies.
- Examine the relationship between episodic memory and memory disorders, such as Alzheimer's disease, amnesia, and related conditions, considering both theoretical implications and practical applications.
- Investigate individual differences in episodic memory performance, considering factors such as genetics, personality, and cognitive strategies.
- Synthesize information from various domains (neuroscience, psychology, cognitive science) to form a comprehensive and integrated understanding of episodic memory.

Course Requirements and Grading

- Regular attendance and full participation in seminar discussions are essential requirements. You must carefully, thoroughly and thoughtfully complete all reading and writing assignments prior to each class.
- Each week, two students (depending on the size of the course) will serve as discussants (one for each assigned paper). This means they will have read, digested and mastered the assigned papers, read additional material (for example, the optional readings), each asked questions germane to their presentations, and each prepared a PowerPoint slide series.
- Additionally, each of the non-discussants will prepare a conceptual/theoretical brief essay (no more than one double-spaced page in length) that summarizes and points out what they believe to be the theoretical importance of the three assigned readings. These essays will also serve to alert the discussants to points they may want to cover in their presentation of the papers. These short essays will also be useful for each of the non-discussants to bring up in class on the day the papers are discussed.
- All essays are to be posted two days prior to class (on Monday by 12 AM) on SuCourse. Class presentations should be short and to the point.
- In addition to the requirement for contributions during class, there will be a mid-term written and oral presentation of an outline of your ideas for a critical and theoretical review of an area (within the purview of the seminar's subject matter) of your choosing and, based on this, a final paper (with Introduction, Review, and Discussion). There will be a final oral presentation of your review paper during the last two classes of the semester.

These various components of your class performance will contribute to your grade as follows:

Grading

Class participation	15%
Exam	25%
Theoretical, brief essays	15%
Leading discussions of readings	20%
Research Review	15%
Initial written and oral review	5%
In-class presentation of the review	5%
Final written paper	5%

Key Topics Covered

Episodic Memory Development:

Exploration of the cognitive processes involved in the development of episodic memory. Examination of key theories and empirical studies on how episodic memory evolves across the lifespan.

Aging and Remembering:

Analysis of the impact of aging on episodic memory, including cognitive and neural changes. Evaluation of strategies and interventions to enhance memory performance in older adults.

Remembering and Imagining in Social Context:

Investigation into the social aspects of memory, exploring how interpersonal relationships and societal factors influence remembering and imagining events. Examination of social cognition in relation to memory processes.

Emotion and Memory:

In-depth study of the intricate relationship between emotion and memory. Analysis of emotional modulation on memory formation, consolidation, and retrieval.

Memory Accuracy:

Critical examination of factors influencing the accuracy of memory, including misinformation, source monitoring, and false memories. Exploration of real-world implications and applications, such as eyewitness testimony reliability.

Neurological Perspectives:

Overview of neuroscientific approaches to understanding episodic memory, including brain regions involved and neural mechanisms.

Integration of neuroimaging findings with behavioral data to enhance our understanding of memory processes

Memory Functions:

Comprehensive exploration of various functions of memory, including its role in decision-making, problem-solving, and creativity.

Application of memory research to real-world scenarios and practical implications.