Topics in Philosophy of Memory

Instructor: David Colaço
Meeting Time: Summer 2023, Tuesdays 16:00-18:00
Office Hours: By appointment

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Course Description: The study of memory stands as a cornerstone of the study of the mind and brain. This course will cover issues in philosophy of memory, tying in concerns from cognitive science and philosophy of science. This course will proceed through three sections. *Section 1* will address accounts of the nature of memory and the rivalry between accounts that shapes the dominant debates in philosophy of memory. *Section 2* will address how memory is explained in terms of the mind and brain. *Section 3* will address the taxonomy of memory and how it is demarcated from other cognitive (and perhaps non-cognitive) capacities.

As this course takes a naturalist approach to memory, we will address core scientific research on memory as well as the philosophical insights drawn from this research. This course will address cases and primary sources from outside of philosophy. However, prior familiarity with the science is not a requirement for the course; the relevant scientific details will be covered in class.

Materials:

Course readings will be available digitally. I will expect that you have done required readings before the session for which they are assigned. If you need any help locating the readings, please let me know.

Course Assessment:

You may choose to submit a term paper at the end of the semester or give a presentation and submit an accompanying essay. In either case, you must register to do so on LSF during the registration period (26.06 to 07.07) and submit by 22.09. If you present, you should submit a 2500-word essay engaging with the class discussion about your presentation. If you choose to write a term paper, it should be about 5000 words and engage with the philosophical literature. I will grade your submissions according to quality of thesis, research, evaluation, and organization via this rubric:

	4.0	**3.0**	**2.0**	**1.0**
Quality of Thesis	Thesis is unclear	Thesis is stated	Thesis is clearly stated	Thesis and stakes are clearly stated
Research	Little engagement with relevant literature	Engagement with some relevant literature	Engagement with important relevant literature	Command of relevant literature
Execution	Arguments unclear or not present	Some arguments for main claim	Strong arguments for main claim	Detailed and original argumentation
Organization	Unclear structure	Identifiable structure	Orderly structure	Orderly sections that flow from one to the next

Tentative Schedule of Topics:

Section 1: Accounts of the Nature of Memory

18.04: Introduction and The Causal Theory of Memory

Required Reading:
- Martin & Deutscher, Remembering

25.04: Criticisms of the Causal Theory

Required Reading:
- Debus, Accounting for epistemic relevance: A new problem for the causal theory of memory

Recommended Reading:
- Squires, Memory unchained

02.05: Alternatives to the Causal Theory

Required Reading:
- De Brigard, Is memory for remembering? Recollection as a form of episodic hypothetical thinking

Recommended Readings:
- Schacter & Addis, The cognitive neuroscience of constructive memory: Remembering the past and imagining the future
- Roediger & McDermott, Creating false memories: Remembering words not presented in lists

09.05: Dealing with (perceived) Memory Errors

Required Readings:
- Bernecker, A causal theory of mnemonic confabulation
- Michaelian, Towards a virtue-theoretic account of confabulation

Recommended Readings:
- Boyle, The mnemonic functions of episodic memory

Section 2: Explanations of Memory

16.05: Memory Deficits (Virtual Session)

Required Readings:
- Scoville & Milner, Loss of recent memory after bilateral hippocampal lesions
- Squire, The legacy of patient H.M. for neuroscience

Recommended Reading:
- Vakil & Greenstein, Dissociations of memory processes: The contribution of research on memory impairment following traumatic brain injury (TBI) – A focused review

23.05: Multiple Memory Systems

Required Reading:
- Sherry & Schacter, The evolution of multiple memory systems

Recommended Readings:
- Nadel, Multiple memory systems: What and why
- Squire, Memory and brain systems: 1969-2009

06.06: Mechanistic Explanation and Synaptic Plasticity

Required Reading:
- Craver, Interlevel experiments and multilevel mechanisms in the neuroscience of memory

Recommended Readings:
- Takeuchi, Duszkiewicz, & Morris, The synaptic plasticity and memory hypothesis: Encoding, storage, and persistence
- Craver, The making of a memory mechanism

13.06: Memory Traces and the Engram

Required Readings:
- Robins, The 21st Century Engram
- Moscovitch, Memory: Why the engram is elusive

Recommended Readings:
- De Brigard, The nature of memory traces
- Eichenbaum, Still searching for the engram

20.06: Non-Synaptic Explanations of Memory

Required Readings:
- Ginsburg & Jablonka, Evolutionary transitions in learning and cognition
- Gold & Glanzman, The central importance of nuclear mechanisms in the storage of memory

Recommended Reading:
- Gershman, The molecular memory code and synaptic plasticity: A synthesis

Section 3: The Unity of Memory

27.06: Memory in (Non-Human) Animals (Virtual Session)

Required Reading:
- Boyle, Learning from the past: Epistemic generativity and the function of episodic memory

Recommended Readings:
- Neven, Events, narrative, and memory
- Crystal, Episodic-like memory in animals

04.07: Distributed Memory

Required Reading:
- Barnier, Sutton, Harris, & Wilson, A conceptual and empirical framework for the social distribution of cognition: The case of memory

Recommended Reading:
- Heersmink, Distributed selves

11.07: Memory in "Unconventional" Systems

Required Reading:
- Gershman, Balbi, Gallistel, & Gunawardena, Reconsidering the evidence for learning in single cells

Recommended Readings:
- Sims & Kiverstein, Externalized memory in slime mould and the extended (non-neuronal) mind
- Gagliano, Vyazovskiy, Borbely, Grimonprez, & Depczynski, Learning by association in plants

18.07: Memory and Natural Kinds

Required Reading:
- Colaço, What counts as a memory? Definitions, hypotheses, and "kinding in progress"

Recommended Readings:
- Rupert, Memory, natural kinds, and cognitive extension: or, Martians don't remember, and cognitive science is not about cognition
- Michaelian, Is memory a natural kind?
- Cheung & Werning, What is episodic memory if it is a natural kind?
- Tulving, Are there 256 different kinds of memory?