

MEMORY & STRESS

0. sept. 8. Introduction
1. sept 13 Improving memory: RPL; generation; spacing; interleaving; testing
2. sept 15 Basic memory processes, steam of consciousness and history
3. sept 20 Encoding specificity; state dependence; is stress a state?
4. sept 22 Attention: change blindness
5. sept 27 Skill and perception and memory: perception and memory in chess; stress and attention working memory Aging and attention: is it like stress?
6. sept 29 Working memory: and IQ, enhancing. Jonides task The one back task, enhancing memory; Exercise and enhancing working memory ; Attention in aging.

oct 4 test 1

7. oct 6 Two systems: implicit Explicit, learning, memory
Remember/know conscious/unconscious/ declarative/procedural
homework: watch *Memento*
8. oct 11 Physiological and Psychological Trauma: Amnesia-- different kinds of impairments
homework: watch *Unknown White Male*
9. oct 13 Categorization: Which kind of memory gives rise to stereotypes, prototypes, memory binding
10. oct 18 Memory selection effects in decisions: The accessibility and availability heuristics; Biased decision-making and memory. Bayes theorem
11. oct 20 Eyewitness memory, Misleading info; Biased lineups.
12. oct 25 Jury behavior; Confession and false confession; Source memory
13. oct 27 Metacognition
14. Nov 3: pathologies: Learning disabilities metacognition and error free learning; Source memory pathologies.

Nov 8: Test 2.

15. Nov 10: Stress and repression; Selective forgetting; inhibition; what happens with stress itself?

16. Nov 15: Thought Suppression

17. Nov 17: Emotional memory -- amygdala, fear conditioning, appetitive conditioning versus hippocampus, declarative memory

18. Nov 22: Reconsolidation: erasing traumatic memories
homework: watch The Eternal Sunshine of the Spotless Mind

19. Nov 24: Extreme stress; Combat stress and memory

20. Nov 29 : Hot/cool framework of memory and self-control (i.e., willpower).

Dec 1 Test 3

21. Dec 6: Sensory deprivation, stress and cognitive complexity

22. Dec 8 : Developmental; Gergeley, Developmental hippocampus, frontal, language, amnesia.

23. Dec 13: Stress in early life, and recovery Neurogenesis in hippocampus; review

Memory and Stress

Janet Metcalfe, Professor

In this course we shall investigate the effects of stress on human memory. Topics investigated include the basis of human memory and the psychological and physiological effects of stress on human memory; a critical examination of the idea that repressed memories that initially occurred under stress may later be uncovered; the role of two different memory systems, one, a 'cool' memory system based in the hippocampus and one, a 'hot' emotional system based in the amygdala, may have differential roles as a function of stress; the symptomology of post-traumatic stress disorder; the concept of repression itself; the concept and empirical data related to suggestibility; the relation of source amnesia and confabulation to normal memory; and, an investigation of the implications of memory research in this area to admissibility of evidence in cases of uncovered memories; false confession; the implications of how memory biases decisions.

Students will be expected to participate in an active way in these classes. There will be three term tests, which are non-cumulative, and a two-hour final examination which is cumulative. The evaluation is as follows: 25% for the final exam, 25% for each of three term tests. Students will have the option of replacing the lowest of the three term test grade with that grade achieved on an optional paper, that is due the last day of class. However, no excuses will be accepted for missing any test. If a test is missed it will be assigned a zero, and count as the lowest test the grade of which the student may replace by writing the paper .

This is a topic of current concern both in the field of the academic study of human memory and in the society at large, and the literature and the issues of concern are rapidly evolving.

We will use two books plus readings that will be posted on Courseworks. The books are:

1. Searching for Memory: The Brain, the Mind, and the Past, by Daniel L. Schacter,
2. Why Zebras Don't get Ulcers, by Robert Sapolsky.

Professor Metcalfe will be available for consultation by appointment

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