

MEMORY AND STRESS

JANET METCALFE, PROFESSOR

Week 1 Sept 6 Introduction

Week 2 Sept 11 Sept 13 traditions; Basic Memory Processes. Serial position curves, stream of consciousness, episodic memory/explicit memory. Animal memory.
Schacter Chapters 1 and 2

Week 3 Sept 18 Sept 20 Mnemonics; Levels of processing, encoding specificity,
Schacter Chapter 3.

Week 4 Sept 25 Sept 27 State Dependence; systems of memory *Schacter Chapter 4*

Week 5 Oct 2 Concept formation, Prototypes, reconstructive memory, Bartlett, Posner & Keele, Exemplar models

Oct 4 TEST 1.

Week 6 Oct 9 , 11 Signal Detection Theory; False memories. *Roediger & McDermott*
Eyewitness memory;
Loftus ; Schacter Chapter 5

Week 7 Oct 16 and 18 Implanting memories. The alternative view. *McCloskey & Zaragoza*
Source memory. *Lindsay & Johnson; Schacter Chapter 6*

Week 8 Oct 23 and 25 Metacognition--knowing about knowing. *TBA*

Week 9 Oct 30 Amnesia *Squire* Nov1 More Amnesia, Hippocampal, amygdala dissociation *Bechera; Schacter Chapters 7 & 8*

Week 10 Nov 6 Academic holiday

Nov 8 TEST 2

Week 11 Nov13 15 Repression; selective forgetting *Breuer & Freud ; Bjork*
Thought suppression *Wegner*

Week 12 Nov 20 22 Attention and consciousness, Yerkes Dodson, Easterbrook.
Weapon focus. *Sapolsky chapters TBA*

Week 13 Nov 27 , 29 Stress, *Sapolsky chapters TBA* More weapon focus, War on the mind *Burke et al. ; LeDoux; Cahill.*

Week 14 **Dec 4 TEST 3**

Dec 6 Glucocorticoids *McNally* Parachute jumping; marathon running

Week 15 Dec11 Review Hot/cool *Jacobs & Nadel, Metcalfe & Jacob*

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 symptomatology 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.

Students will be expected to participate in an active way in these classes. A research paper on a topic of their choice that is relevant to this course is required. There will be three term tests and a two-hour final examination. The evaluation is as follows: 25% for the final exam and 20% for each of the three term tests, and 15% for a term paper which is due on the last day of class.

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 :

Searching for Memory: The Brain, the Mind, and the Past, by Daniel L. Schacter,

and

Why Zebras Don't get Ulcers, by Robert Sapolsky,

and will subsidize these books with readings.

Professor Metcalfe will be available for consultation by appointment

Office: 401B Schermerhorn
Phone: 854-7971
E-mail: jm348@columbia.edu

Teaching Assistant: Patricia Wilson
Phone: 854-8785
E-mail: pwilson@psych.columbia.edu

Ms. Wilson will be available for consultation by appointment, and will conduct two tutorials before each test, as well as having scheduled office hours after each test.