Psychology 263  
Midterm Exam #2 Study Guide  
March 2009

The second midterm exam will take place on March 26th, 2009 from 9:30 – 10:45. It will consist of 60 multiple choice questions covering the lecture material and readings since the last exam. Though everything is fair game there is a heavier emphasis on lecture materials relative to things that are in the book. Given the amount of material to study, I have put together this study guide, the purpose of which is to suggest the material you should be putting a strong focus on studying. This is not an exhaustive list but it is fairly comprehensive and you can expect exam questions on all of the below-mentioned materials. It is important that you understand concepts/definitions and how they would apply to alternate scenarios, and to understand experimental results and what they mean.

Also, make sure you study the sample MC questions on the website, as many of them will make a reappearance on the exam with answers scrambled.

**Working Memory/Attention and Memory**

In the first lecture in this section of the course, we went over Baddelays’s model of working memory, how it differs from short term memory, what working memory is important for, and how attention/working memory influence long term memory. From this lecture, you should know definitions and applications of the following things (note that I have place in parentheses the relevant slides and sections of the second edition of the textbook so if you have the first edition the numbers may be off…I’ve provided slide numbers rather than page numbers since there are both 3 slide per page and 6 slide per page options…if I messed up on a slide number please don’t email and complain since you should be able to track this down yourself with a little effort…also note that the provided slide numbers are from the day the info was supposed to be covered, meaning sometimes info appears in the slides for the next day also when we didn’t get to it at the end of that class):

- The three components of Baddelay’s model of working memory (the central executive and the slave system)...you should know what they are and how they work, what each system is responsible for (slides 5-27, text pages 154-163)
- Articulatory suppression: what is it, why we use it, how it influences processing (slides 11-14, text pages 158-159)
- The word length effect: what is it and what is it evidence for (slides 13-14, text page 157)
- The visual similarity effect: what is it and what is it evidence for (slide 26)
- Working memory span: what is it, how is it tested, and what is the influence of working memory span on other cognitive tasks (slides 28-35)
- You should know the evidence that was inconsistent with the original notion of short term-memory and how working memory can account for this evidence (slides 36-41)
- What is the influence of dividing attention on memory? At encoding? At retrieval? (slides 47-53)
Memory failure

In our second lecture, we covered real-world forgetting and how it differs from Ebbinghaus’ famous forgetting curve. We then went over various theories of forgetting and the findings that are consistent with each theory and watched some videos on the relationship between sleep and memory.

-Real world studies of forgetting: what are the findings and how do they compare to Ebbinghaus’ forgetting curve (slides 5-18)
-What are the three main theories of forgetting? What is the evidence for each, what are the criticisms/problems with each (slides 19-49)
-Perseveration, what is it? (slides 20-21)
-You should know how sleep influences memory (slides 23-26 + in class video)
-Proactive and retroactive interference: what they are and how they influence memory (slides 32-37, text pages 147-148, 152-153, 263-264)
-The suggested causes of interference and forgetting according to McGeoch (slide 38)
-State-dependent memory and encoding specificity, what they are (slide 47-48, text pages 218-221, 234)

Knowledge, Semantic Memory, False memory

In lecture 3, we looked at how semantic knowledge is stored in the mind, how it helps attention/comprehension/memory, and how it can conversely hurt attention/comprehension/memory.

-know the distinction between episodic and semantic memory (slide 3, text pages 187-191)
-the dictionary definition, family resemblance, and prototype theories of semantic knowledge: the predictions each theory make, evidence for/against the theories, and criticisms of the theories (slides 4-13, text pages 286-295)
-prototypes, what are they, how we test whether something is prototypical
-what is a node, what does it represent (slides 8-13, text pages 288-295)
-the spreading activation and hierarchical network models of semantic memory: what they are, what they predict, and what the evidence is that is consistent with each model (slides 14-25, text pages 295-307)
-cognitive economy, what is it (slide 16, text page 301)
-Schemas, what are they and how do they influence perception/attention/comprehension/memory (slides 29-41, text pages 256-257)
-Bransford and Johnson’s studies regarding how context/knowledge influence comprehension/memory (slide 40, text pages 205-208)
-False memory and the DRM paradigm (slides 57-64)

Levels of Processing/Organization
In lecture 4 we discussed levels of processing and how it influences memory.

-what is the influence of distributed practice on memory…what about massed practice? (slides 8-14, text pages 223-224)
-what is maintenance rehearsal and how does it influence memory (slides 17-18, text pages 197, 221)
-what is the levels of processing theory, how does level of processing influence memory? (slides 19-26, text pages 197, 233)
- What is a deep level of processing and what is a shallow level of processing? (slides 22-26)
-You should know the effects of distinctiveness and organization on memory (slides 34-39, text pages 204-207, 222-223)
-Transfer-appropriate processing: what is it and how does it influence memory (slides 41-44, text pages 200-202)
-Encoding specificity: what is it and how does it influence memory (slides 45-51, text pages 218-220, 234)

**Autobiographical Memory and Emotion**

In this lecture we focused on Autobiographical memory and then ended off talking about various influences of emotion on memory

-types of autobiographical memory (slides 4-6, text pages 238-254)
-the reminiscence bump: what is it (slide 7)
-Bartlett’s “War of the Ghosts” study, how did people’s memory change for the source material (slides 8-10, text pages 250-251)
-ways of testing autobiographical memory and what each technique entails (slides 12-13, text pages 240-242)
-flashbulb memory: what is it, how accurate is it (slides 14-20, text pages 242-249)
-the misinformation effect, what is it (slides 21-25, text pages 261-264)
-What are the five theories of how emotion and cognition interact (slides 34-43)
-Weapon focus, what is it and how is attention/memory influenced by it (slide 46)
-The nude effect: what causes it and the typical pattern of memory results associated with it (slides 47-53)
-The three main elements of repression according to Holmes (slide 59)

**Cognitive Development**

Justin did a guest lecture on cognitive development that took a lot of what you learned from attention and memory and discussed these issues as they related to children as they age. Because the core of this material was covered in some other lectures as well as on the previous exam, there will not be too many questions on cognitive development.

-Which aspects of cognition change as children grow older (slides 11-12)
 Implicit Learning

Implicit learning was the last lecture prior to the exam and we started off with a brief discussion of Alzheimer’s…I’ll try not to ask too much about this topic given the shorter duration of this lecture

Implicit memory: what is it, what are its defining characteristics (slides 8-21)
Implicit learning: what is it, problems with measuring it – sensitivity and information criterion; slides 22-37)

Video: Aging, Memory and Dementia

There will be a limited number of questions about this video on the exam…as long as you watched it and paid attention, you shouldn’t have any problem with these