Unit 12: Cognition (8-10%)

Barron’s Chapter 7 and Textbook Chapter 7 / Intelligence is Barron’s Chapter 11

Cognition Quiz: Intelligence Quiz:

Reading Guide Due: Exam and Notecards:

*In this unit students learn how humans convert sensory input into kinds of information. They examine how humans learn, remember, and retrieve information. This part of the course also addresses problem solving, language, and creativity.*

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| Learning Objectives | Key Terms |
| * Compare and contrast various cognitive processes:

— effortful versus automatic processing; — deep versus shallow processing; — focused versus divided attention.* Describe and differentiate psychological and physiological systems of memory (e.g., short-term memory, procedural memory).
* Outline the principles that underlie effective encoding, storage, and construction of memories.
* Describe strategies for memory improvement.
* Synthesize how biological, cognitive, and cultural factors converge to facilitate acquisition, development, and use of language.
* Identify problem-solving strategies as well as factors that influence their effectiveness.
* List the characteristics of creative thought and creative thinkers.
* Identify key contributors in cognitive psychology (e.g., Noam Chomsky, Hermann Ebbinghaus, Wolfgang Köhler, Elizabeth Loftus, George A. Miller).
* Explain how psychologists design tests, including standardization strategies and other techniques to establish reliability and validity.
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* Define intelligence and list characteristics of how psychologists measure intelligence:

— abstract versus verbal measures;— speed of processing.* Discuss how culture influences the definition of intelligence.
* Compare and contrast historic and contemporary theories of intelligence (e.g., Charles Spearman, Howard Gardner, Robert Sternberg).
* Describe relevant labels related to intelligence testing (e.g., gifted, cognitively disabled).
* Debate the appropriate testing practices, particularly in relation to culture-fair test uses.
* Identify key contributors in intelligence research and testing (e.g., Alfred Binet, Francis Galton, David Wechsler).
 | 1. Memory
2. Three Box/Information-Processing Model
3. sensory memory
4. Iconic vs. Echoic Memory
5. Encoding
6. short-term memory
7. storage
8. George A. Miller
9. chunking
10. mnemonic device
11. method of loci
12. rehearsal
13. long-term memory (include episodic, semantic, and procedural)
14. explicit memory vs. implicit memory
15. eidetic memory
16. Levels of Processing Model
17. recall vs. recognition
18. serial position effect
19. Hermann Ebbinghaus
20. retrieval
21. flashbulb memory
22. mood-congruent memory
23. state-dependent memory
24. Elizabeth Loftus
25. proactive interference
26. retroactive interference
27. anterograde amnesia
28. retrograde amnesia
29. concept
30. prototype
31. algorithm
32. heuristic: availability and representativeness
33. insight
34. mental set
35. functional fixedness
36. framing
37. standardization
38. Types of reliability (split-half, equivalent form reliability, test-retest)
39. Types of validity (face, content, criterion, construct)
40. Aptitude Test
41. Achievement Test
42. Spearman – The “g” factor
43. Gardner - Multiple Intelligences
44. Goleman – Emotional Intelligence (EQ)
45. Sternberg – Triarchic Theory of Intelligence
46. Alfred Binet
47. Intelligence Quotient (IQ)
48. David Wechsler
49. Flynn Effect
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