Unit 8: Sensation and Perception (6-8%)

Reading Guide and Quiz 1 Due:

Notecards and Quiz 2 Due:

*Everything that organisms know about the world is first encountered when stimuli in the environment activate sensory organs, initiating awareness of the external world. Perception involves the interpretation of the sensory inputs as a cognitive process.*

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| **Learning Objectives** | **Notecard Terms** |
| • Discuss basic principles of sensory transduction, including absolute threshold,  difference threshold, signal detection, and sensory adaptation.  • Explain the role of top-down processing in producing vulnerability to illusion.  • Discuss the role of attention in behavior.  • Identify the major historical figures in sensation and perception (e.g., Gustav Fechner, David Hubel, Ernst Weber, Torsten Wiesel).  • Describe sensory processes (e.g., hearing, vision, touch, taste, smell, vestibular,  kinesthesis, pain), including the specific nature of energy transduction, relevant  anatomical structures, and specialized pathways in the brain for each of the senses.  • Explain common sensory disorders (e.g. visual and hearing impairments)  • Describe general principles of organizing and integrating sensation to promote  stable awareness of the external world (e.g., Gestalt principles, depth perception).  • Discuss how experience and culture can influence perceptual processes (e.g.,  perceptual set, context effects).  • Challenge common beliefs in parapsychological phenomena. | 1. Transduction 2. sensory adaptation 3. selective attention (ex: Cocktail Party Phenomenon) 4. sensation 5. cornea 6. pupil 7. iris 8. lens (include accommodation) 9. retina 10. rods 11. cones 12. optic nerve 13. blind spot 14. David Hubel and Torsten Wiesel 15. trichromatic theory 16. opponent-process theory 17. Eardrum 18. The ossicles 19. cochlea (include basilar membrane) 20. pitch theories (include and explain both) 21. Gate Control Theory 22. vestibular sense 23. kinesthetic sense 24. perception 25. absolute threshold 26. difference threshold (JND) 27. Weber’s Law 28. signal detection theory 29. Perceptual Set 30. top-down processing 31. bottom-up processing 32. Gestalt Rules (grouping) 33. perceptual constancy (include types) 34. Phi Phenomenon 35. visual cliff experiment 36. binocular cues (include retinal disparity and convergence) 37. monocular cues 38. Muller-Lyer Illusion 39. Synesthesia |