STUDY GUIDE: UNIT III – BIOLOGICAL BASES OF BEHAVIOR
AP Psychology

In addition to the information in this study guide, you are also responsible for all of the content in textbook, all information from class notes/discussions, all handouts, diagrams, and graphic organizers. It’s AP – it’s all fair game 😊

Terms & Concepts
All terms & concepts from Modules 9-15: listed on the back of the October calendar & on p. 145 of your textbook.

Module 9
9-1: What is biological psychology & what do biological psychologists study?
9-2: What are neurons, and how do they transmit information?
   ✓ Parts of neuron
   ✓ Action potential
9-3: How do nerve cells communicate with other nerve cells?
   ✓ What is a synapse?
   ✓ What is reuptake?
   ✓ How is a flushing toilet like a neuron firing?
9-4: How do neurotransmitters influence behavior, and how do drugs and other chemicals effect neurotransmitters?
   ✓ What is an agonist and an antagonist?

Module 10
10-1: What are the functions of the nervous system’s main divisions?
   ✓ Central Nervous System
   ✓ Peripheral Nervous System & its divisions
10-2: How does the endocrine system transmit its messages?
   ✓ Hormones
   ✓ Pituitary Gland

Module 11
11-1: How do neuroscientists study the brain’s connections to behavior and mind?
   ✓ EEG, CT, PET, MRI, fMRI
11-2: What are the functions of important lower-level brain structures?
   ✓ Brainstem & its parts
   ✓ Cerebellum
11-3: What are the limbic system’s structures and functions?
   ✓ Amygdala, hypothalamus
Module 12
12-1: What are the functions served by the various cerebral cortex regions?
- Brain parts & regions
- Motor cortex & sensory cortex
- Phineas Gage & association areas
12-2: To what extent can a damaged brain reorganize itself?
- Brain plasticity
- Neurogenesis

Module 13
13-1: What do split brains reveal about functions of our two brain hemispheres?
- Corpus callosum & split brains
- Right-left differences in the intact brain
13-2: The biology of Consciousness
- Cognitive neuroscience
- Dual processing

Module 14
14-1: What are genes and how do behavior genetics explain our individual differences?
- Behavior Genetics
- DNA, genes, genomes
- Twin & adoption studies
14-2: Molecular genetics
14-3: What is hereditability and how does it relate to individuals and groups?
- Nature & nurture
14-3: What is the promise of molecular genetics research?
14-4: How do heredity & environment work together?
- Interaction
- Epigenetics

Module 15
15-1: How do evolutionary psychologists use natural selection to explain behavior tendencies?
- Natural selection & adaptation
15-2: How might an evolutionary psychologist explain gender differences in sexuality and mating preferences?
- Natural selection & mating preferences
15-3: Biopsychosocial approach to individual development