

Unit 2 - Biopsychology Domain (2020)

Content Area: **Social Studies**
Course(s): **Psychology**
Time Period: **October**
Length: **1**
Status: **Published**

Enduring Understandings:

- Biological factors interacts with the environment and experience
- Understanding the structure and function of the nervous system is vital to understanding human and non-human behavior
- The endocrine system influences human behavior and development
- Sensation and perception interact and allow us to understand the outside world
- Perceptions are determined by and interaction between the person and their environment
- Sleep is an altered forms of consciousness consisting of many stages

Essential Questions:

- What is genetic transmission and how does heredity interact with the environment?
- How do evolved tendencies influence behavior?
- What are the major divisions and subdivisions of the nervous system?
- What are the parts of a neuron and how does neural transmission occur?
- What are the structures and functions of the major parts of the central nervous system?
- How do lateralization and plasticity affect brain function?
- How is the endocrine system linked to the nervous system and how do hormones affect behavior and mental processes?
- How do sensation and perception interact and how are these processes influenced by thresholds and adaptation?
- What are the structures and function of the following sensory systems: vision, audition, olfaction, gustation, and somethesis?
- What roles do organization principles, depth perception, constancies, experience, and expectations play in shaping perception?
- What is the nature of attention?
- How does sleep alter your level of consciousness?

Lesson Titles:

- Nature and Nurture
- Neurons
- Neural Communication
- The Neural Chain
- The Nervous System
- The Endocrine System

- Brain Myths
- The Brain and the Tools of Discovery
- Lower Level Brain Structures
- The Cerebral Cortex
- Hemispheric Differences
- Brain Plasticity
- Sensation and Thresholds
- Subliminal Stimulation
- Detection, Adaptation, and Attention
- Vision
- Color Vision
- Audition
- Sound Localization and Deafness
- Taste and Smell
- Touch and the Body Senses
- Perception and Perceptual Organization
- Depth Perception
- Motion and Perceptual Constancies
- Perceptual Set and Context
- Illusions
- Extrasensory Perception
- Consciousness and Sleep
- Sleep Stages
- Dreams
- Sleep Issues

21st Century Skills and Career Ready Practices:

- Health Literacy
- Creativity and Innovation
- Information Literacy
- Critical Thinking and Problem Solving
- Media Literacy
- Life and Career Skills
- Communication and Collaboration

CAEP.9.2.12.C.1

Review career goals and determine steps necessary for attainment.

CAEP.9.2.12.C.3

Identify transferable career skills and design alternate career plans.

Inter-Disciplinary Connections:

- Health & PE
- Science
- English Language Arts

LA.RH.11-12.1	Accurately cite strong and thorough textual evidence, (e.g., via discussion, written response, etc.), to support analysis of primary and secondary sources, connecting insights gained from specific details to develop an understanding of the text as a whole.
LA.RH.11-12.4	Determine the meaning of words and phrases as they are used in a text, including analyzing how an author uses and refines the meaning of a key term over the course of a text (e.g., how Madison defines faction in Federalist No. 10).
LA.RH.11-12.7	Integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., visually, quantitatively, qualitatively, as well as in words) in order to address a question or solve a problem.
LA.RST.11-12.1	Accurately cite strong and thorough evidence from the text to support analysis of science and technical texts, attending to precise details for explanations or descriptions.
LA.RST.11-12.2	Determine the central ideas, themes, or conclusions of a text; summarize complex concepts, processes, or information presented in a text by paraphrasing them in simpler but still accurate terms.
LA.RST.11-12.4	Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to grades 11-12 texts and topics.
LA.RST.11-12.7	Integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., quantitative data, video, multimedia) in order to address a question or solve a problem.
LA.RST.11-12.10	By the end of grade 12, read and comprehend science/technical texts in the grades 11-CCR text complexity band independently and proficiently.
LA.WHST.11-12.1	Write arguments focused on discipline-specific content.
LA.WHST.11-12.1.A	Introduce precise, knowledgeable claim(s), establish the significance of the claim(s), distinguish the claim(s) from alternate or opposing claims, and create an organization that logically sequences the claim(s), counterclaims, reasons, and evidence.
LA.WHST.11-12.1.C	Use transitions (e.g., words, phrases, clauses) to link the major sections of the text, create cohesion, and clarify the relationships between claim(s) and reasons, between reasons and evidence, and between claim(s) and counterclaims.
LA.WHST.11-12.1.D	Establish and maintain a style and tone appropriate to the audience and purpose (e.g., formal and objective for academic writing) while attending to the norms and conventions of the discipline in which they are writing.
LA.WHST.11-12.1.E	Provide a concluding paragraph or section that supports the argument presented.
HPE.2.1.12.A.CS1	Developing and maintaining wellness requires ongoing evaluation of factors impacting health and modifying lifestyle behaviors accordingly.
HPE.2.3.12.B.1	Compare and contrast the incidence and impact of commonly abused substances (such as tobacco, alcohol, marijuana, inhalants, anabolic steroids, and other drugs) on individuals and communities in the United States and other countries.
HPE.2.3.12.C.2	Analyze the effectiveness of various strategies that support an individual's ability to stop abusing drugs and remain drug-free.
SCI.HS-LS4-4	Construct an explanation based on evidence for how natural selection leads to adaptation of populations.
SCI.HS-LS3-1	Ask questions to clarify relationships about the role of DNA and chromosomes in coding the instructions for characteristic traits passed from parents to offspring.

Instructional Strategies, Learning Activities, and Levels of Blooms/DOK:

- Teacher Instruction - Behavior Genetics, Evolutionary Psychology (Blooms: Remember, Understand,

Apply)

- Question/Answer - Summer work (Blooms: Remember, Understand, Apply)
- Guided reading - Genetics (Blooms: Remember, Understand)
- In-class demonstration - reaction time (Blooms: Apply)
- Teacher Instruction - Neural Communication (Blooms: Understand, Apply, Analyze)
- Graphic Organizer - Nervous System (Blooms: Remember, Understand, Apply, Analyze)
- Independent Work - Endocrine System (Blooms: Remember, Understand, Apply)
- Brain Details - Myth or Fact (Blooms: Understand, Apply)
- Note Outline - Older Brain Structures (Blooms: Remember, Understand, Apply, Analyze)
- Guided Reading - Hypothalamus (Blooms: Apply, Analyze)
- Note Outline - Cerebral Cortex (Blooms: Remember, Understand, Apply)
- Group Collaboration - Cerebral Cortex/Diagram (Blooms: Analyze, Evaluate, Create)
- In-class demonstration - Divided Brain (Blooms: Apply, Analyze, Evaluate)
- Kahoot Review Game - Brain/Nervous System (Blooms: Remember, Understand, Apply)
- Bottom Up vs. Top Down Demonstrations (Blooms: Understand, Apply, Analyze)
- Student input from HW - Inattentional Blindness (Blooms: Remember, Understand, Apply, Analyze)
- Teacher Instruction - Subliminal Stimulation (Blooms: Apply, Analyze, Evaluate)
- Student input from HW - Influences on Perception (Blooms: Remember, Understand, Apply)
- Teacher Instruction - Coin Flip Demonstration (ESP) (Blooms: Understand, Apply)
- Student input from HW - Eye anatomy (Blooms: Remember, Understand, Apply)
- Question/Answer - Visual Processing (Blooms: Apply, Analyze)
- Student input from HW - Form, Depth, Motion (Blooms: Analyze, Evaluate)
- Independent Work - Ear Anatomy (Blooms: Remember, Understand)
- Note Outline - Other Senses (Blooms: Understand, Apply)
- Rubber Hand Demonstration - Sensory Interaction (Blooms: Analyze, Evaluate)
- Sensation/Perception Review (Blooms: Remember, Understand, Apply)
- Independent Study - States of Consciousness (Blooms: Analyze, Evaluate, Create)
- Delsea One
- SWAG

Modifications

Formative Assessment:

Warm-Ups:

- Fill-Ins - Neurons
- Question - Sensation vs. Perception
- Question - Subliminal Stimulation
- Question - Gestalt

- Question - Tree in a Forest

Anticipatory Set:

- Video Clip - Genetics
- Brain Myths
- Divided Brain Demonstration
- Video Clip - Prosopagnosia
- Perceptual Set Demonstration
- HW Review - Color Vision
- Afterimage Demonstration
- Binocular Vision Demonstration

Closure:

- Whip Around
- Fill-Ins - Brain Research
- Name the Depth Cues
- Exit Ticket
- Random Sampling
- Homework Assignments
- Classnote revisions

Summative Assessment:

- Open-Note Test - Genetics, Evolutionary Psychology
- Chapter Test - Brain and Nervous System
- Open-Note Quiz - Eye Anatomy
- Chapter Test - Sensation and Perception
- Online Test - Consciousness
- Marking Period Assessment - aligned to unit

Benchmark (Assessments):

Skills-based assessment

Reading responses

Writing responses

Alternative Assessment(s):

Performance tasks

Project-based assignments

Problem-based assignments
Presentations
Reflective pieces
Concept maps
Case-based scenarios
Portfolios

Resources & Materials:

- Thinking About Psychology, 4e
- Textbook companion website
- Textbook Test Generator
- Inside Out Video - Genetics
- Dictionary of Psychology, Reber
- You Tube: Domesticated Russian Foxes
- Supplemental Reading - Gender Differences in Sexual Behavior
- Nervous System flow chart
- Brain Details - Secret Life of the Brain
- Video - Secrets of the Mind
- Video - Stress, Trauma, and the Brain
- Supplemental Reading - Phineas Gage
- Kahoot Review - Neuroscience
- Quizlet - Brain and Nervous System
- You Tube: Sensation and Perception
- Video - 60 Minutes (Prosopagnosia)
- Inattentional/Change Blindness Clips
- Discovering Psychology DVD - Perception
- Kahoot - Sensation/Perception
- Quizlet - Sensation/Perception
- You Tube - Consciousness
- Google Classroom
- Google Docs - aligned to unit
- Google Forms - aligned to unit