Unit 2: Biological Bases of Behavior

Overview: Biopsychology will explore the ways in which the brain and the body work together. This unit includes the nervous system, the Endocrine system and the environment. Biopsychology will also explore altered states of consciousness, including sleep, sleep disorders, hypnosis, meditation and biofeedback.

Overview	Performance Expectations	Unit Focus	Essential Questions
Unit 2 Biological Bases of Behavior	IIA-1 IIA-2 IIA-3 IIA-4 IIA-5 IIA-6 IIA-7 IIB-1 IIB-2 IIB-3 IVD-1 IVD-2. IVD-3 IVD-4 IVD-5 WIDA 1, 5	 Describe how information is transmitted and integrated in the nervous system. Identify the structure and function of the major regions of the brain. Explain how technology can be used to analyze brain behavior and disease. Assess the effects of heredity and environment on behavior. In what ways does one's body limit, explain, and enhance one's thoughts and behaviors? How do activities on a cellular level affect the entire body? To what degree are physiological functions area-specific and to what degree are they subject to plasticity? How do psychologists tackle the eternal question of nature versus nurture? Compare theories that explain why we sleep. Compare theories about the use and meaning of dreams. 	 How does the nervous system enable thought, action and emotion? How accurate is our perception of the world? How does perspective influence perception? How do our senses determine our experience of the world? What is consciousness?
Unit 2: Enduring Understandings	 The interaction of the nervous system and endocrine system produce thoughts, actions and feelings. Biological processes and environmental influences combine to create perception. Sensation affects overall functioning, and the problems that result when sensation is damaged. Sleep is critical to normal functioning The physical and psychosocial effects of addiction. 		

	Performance Expectations		P	Pacing	
Curriculum Unit 2			Days	Unit Days	
	11.0 .1	Structure and function of the neuron	4		
T1 .4 3	IIA-1	Structure and function of the neuron	1		
Unit 2:	IIA-2	Organization of the nervous system	1		
Biopsychology	IIA-3	Hierarchical organization of the structure and function of the brain	3		
	IIA-4	Technologies and clinical methods for studying the brain	2		
	IIA-5	Structure and function of the endocrine system	1		
	IIA-6	How heredity interacts with the environment to influence behavior	1		
	IIA-7	How psychological mechanisms are influenced by evolution	1	25	
	IIB-1	Basic concepts explaining the capabilities and limitations of sensory processes	1		
	IIB-2	Interaction of the person and the environment in determining perception	2		
	IIB-3	Nature of attention	1		
	IVD-1	Nature of consciousness	1		
	IVD-2	Characteristics of sleep and theories that explain why we sleep	1		
	IVD-3	Theories used to explain and interpret dreams	1		
	IVD-4	Basic phenomena and uses of hypnosis	1		
	IVD-5	Categories of psychoactive drugs and their effects	3		
		Assessment, Re-teach and Extension	4		

Unit 2			
Core Ideas	Performance Expectations		
Structure and function of the neuron	IIA-1. Using diagrams, models, and/or computer programs to identify the structure and function of		
	different parts of a neuron.		
Organization of the nervous system	IIA-2. Identifying the central nervous system and its component parts. Identifying the peripheral		
	nervous system and its subdivisions.		
Hierarchical organization of the structure	IIA-3. Identifying the regions of the brain by using diagrams and/or computer-generated diagrams.		
and function of the brain	Summarizing the functions of the major brain regions.		
Technologies and clinical methods for	IIA-4. Discussing how the use of the CT scan, PET scan, MRI, fMRI, and EEG provides information		
studying the brain	about the brain.		
Structure and function of the endocrine	IIA-5. Give examples of how hormones are linked to behavior and behavioral problems.		
system			
How heredity interacts with the	IIA-6. Identifying the relationships among DNA, genes, and chromosomes.		
environment to influence behavior			
How psychological mechanisms are	IIA-7. Describe how the environment selects traits and behaviors that increase the survival rate of		
influenced by evolution	organisms.		
Basic concepts explaining the capabilities	IIB-1. Explain the concepts of threshold, adaptation, and constancy. Describe the operation of		
and limitations of sensory processes	sensory systems.		

Interaction of the person and the	IIB-2. Explain Gestalt concepts and principles, such as figure-ground, continuity, similarity, proximity,	
environment in determining perception	closure, and so on. Describe binocular and monocular depth cues.	
Nature of attention	IIB-3. Explain what is meant by attention.	
Nature of consciousness	IVD-1. Discussing various states of consciousness. Differentiate among nonconscious, conscious,	
	preconscious, and conscious awareness.	
Characteristics of sleep and theories that	IVD-2. Describe the sleep cycle. Compare theories that explain why we sleep.	
explain why we sleep		
Theories used to explain and interpret	IVD-3. Comparing different theories about the significance of dreams (e.g., activation-synthesis,	
dreams	psychodynamic, and cognitive theories).	
Basic phenomena and uses of hypnosis	IVD-4. Describe several hypnotic phenomena.	
Categories of psychoactive drugs and their	IVD-5. Charting the names, sources, and uses of narcotic, depressant, stimulant, and hallucinogenic	
effects	drugs. Identifying the potential for physiological and psychological dependence.	

Assessment Plan				
 Graphic Organizer Chart completion and success Graphic Organizer Chart completion and success Timeline completion and success Chapter and/or Section Guided Reading worksheet completion and success Graphic Organizer Web completion and success Graphic Organizer Chart completion and success Outline completion and success Graphic Organizer Chart completion and success Chapter and/or Section worksheet completion and success Unit Assessment Test 	Alternative Assessments: Debate Oral Report Role Playing Think Pair Share Projects Portfolio Presentations Prezi Gallery Walks			
 Myers' Psychology for the AP Course, 2018 HMH Psychology textbook Myers' Psychology for the AP Course 	 Chapter Assessment Quiz Class Notes and Vocabulary Chapter and Section Guided Reading sheet Chapter and/or Section worksheet Unit Assessment Test 			
Instructional Best Practices and Exemplars				
 Identifying similarities and differences Summarizing and note taking Reinforcing effort and providing recognition Homework and practice Nonlinguistic representations 	6. Cooperative learning7. Setting objectives and providing feedback8. Generating and testing hypotheses9. Cues, questions, and advance organizers10. Manage response rates			

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9.1 Personal Financial Literacy - Income And Careers & 9.2 Career Awareness, Exploration, And Preparation - Career Awareness & 9.4 Life Literacies and Key Skills

- 9.2.12.CAP.2: Develop college and career readiness skills by participating in opportunities such as structured learning experiences, apprenticeships, and dual enrollment programs
- 9.4.12.Cl.1: Demonstrate the ability to reflect, analyze, and use creative skills and ideas
- 9.4.12.Cl.2: Identify career pathways that highlight personal talents, skills, and abilities
- 9.4.12.Cl.3: Investigate new challenges and opportunities for personal growth, advancement, and transition
- 9.4.12.CT.1: Identify problem-solving strategies used in the development of an innovative product or practice
- 9.4.12.CT.2: Explain the potential benefits of collaborating to enhance critical thinking and problem solving
- 9.4.12.CT.4: Participate in online strategy and planning sessions for course-based, school-based, or other project and determine the strategies that contribute to effective outcomes
- 9.4.12.DC.7: Evaluate the influence of digital communities on the nature, content and responsibilities of careers, and other aspects of society
- 9.4.12.IML.2: Evaluate digital sources for timeliness, accuracy, perspective, credibility of the source, and relevance of information, in media, data, or other resources
- 9.4.12.IML.4: Assess and critique the appropriateness and impact of existing data visualizations for an intended audience
- 9.4.12.IML.8: Evaluate media sources for point of view, bias, and motivations
- 9.4.12.TL.4: Collaborate in online learning communities or social networks or virtual worlds to analyze and propose a resolution to a real-world problem
- 9.4.12.GCA.1: Collaborate with individuals to analyze a variety of potential solutions to climate change effects and determine why some solutions (e.g., political. economic, cultural) may work better than others

The implementation of the 21st Century skills and standards for students of the Winslow Township District is infused in an interdisciplinary format in a variety of curriculum areas that include, English language Arts, Mathematics, School Guidance, Social Studies, Technology, Visual and Performing Arts, Science, Physical Education and Health, and World Language.: Additional opportunities to address 9.1, 9.2 & 9.4:

Philadelphia Mint https://www.usmint.gov/learn/kids/resources/educational-standards

Different ways to teach Financial Literacy.

https://www.nea.org/professional-excellence/student-engagement/tools-tips/resources-teaching-financial-literacy

https://www.makeuseof.com/tag/10-interactive-financial-websites-teach-kids-money-management-skills/

Unit 2: Biological Bases of Behavior

Modifications for Special Education/504

Students with special needs: Supports, Accommodations, and Modifications must be provided as stated in IEP, 504 Plan, or CST Team Intervention Plan, and may include (but are not limited to) the following:

Presentation accommodations: ② Listen to audio recordings instead of reading text ③ Learn content from audiobooks, movies, videos and digital media instead of reading print versions ② Use alternate texts at lower readability level ② Work with fewer items per page or line and/or materials in a larger print size ② Use magnification device, screen reader, or Braille / Nemeth Code ② Use audio amplification device (e.g., hearing aid(s), auditory trainer, sound-field system (which may require teacher use of microphone) ② Be given a written list of instructions ② Record a lesson, instead of taking notes ② Have another student share class notes with him ② Be given an outline of a lesson ② Be given a copy of teacher's lecture notes ② Be given a study guide to assist in preparing for assessments ② Use visual presentations of verbal material, such as word webs and visual organizers ② Use manipulatives to teach or demonstrate concepts ② Have curriculum materials translated into native language

<u>Response accommodations</u>: ② Use sign language, a communication device, Braille, other technology, or native language other than English ② Dictate answers to a scribe ② Capture responses on an audio recorder ② Use a spelling dictionary or electronic spell-checker ② Use a word processor to type notes or give responses in class ② Respond directly in the test booklet rather than on an answer sheet.

Setting accommodations: Work or take a test in a different setting, such as a quiet room with few distractions Sit where he learns best (for example, near the teacher, away from distractions) Use special lighting or acoustics Take a test in small group setting Use sensory tools such as an exercise band that can be looped around a chair's legs (so fidgety kids can kick it and quietly get their energy out) Use noise buffers such as headphones, earphones, or earplugs

<u>Timing accommodations:</u> ② Take more time to complete a task or a test ② Have extra time to process oral information and directions ② Take frequent breaks, such as after completing a task

<u>Scheduling accommodations:</u> ② Take more time to complete a project ③ Take a test in several timed sessions or over several days ② Take sections of a test in a different order ② Take a test at a specific time of day

<u>Organization skills accommodations:</u> ② Use an alarm to help with time management ② Mark texts with a highlighter ② Have help coordinating assignments in a book or planner

Modifications for At-Risk Students

Formative and summative data will be used to monitor student success. At first signs of failure, student work will be reviewed to determine support. This may include parent consultation, basic skills review and differentiation strategies. With considerations to UDL, time may be a factor in overcoming developmental considerations. More time will be made available with a certified instructor to aid students in reaching the standards.

English Language Learners	Modifications for Gifted Students
All WIDA Can Do Descriptors can be found at this link: https://wida.wisc.edu/teach/can-do/descriptors Grades 9-12 WIDA Can Do Descriptors: Listening Speaking Reading Writing Oral Language Students will be provided with accommodations and modifications that may include: Relate to and identify commonalities in psychology studies in student's home country Assist with organization Use of computer Emphasize/highlight key concepts Teacher Modeling Peer Modeling Label Classroom Materials - Word Walls	Students excelling in mastery of standards will be challenged with complex, high level challenges related to the topic. Raise levels of intellectual demands Require higher order thinking, communication, and leadership skills Differentiate content, process, or product according to student's readiness, interests, and/or learning styles Provide higher level texts Expand use of open-ended, abstract questions Critical and creative thinking activities that provide an emphasis on research and in-depth study Enrichment Activities/Project-Based Learning/ Independent Study Additional Strategies may be located at the links: Gifted Programming Standards Webb's Depth of Knowledge Levels and/or Revised Bloom's Taxonomy REVISED Bloom's Taxonomy Action Verbs

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Interdisciplinary Connections

CCSS.ELA-LITERACY.RH.11-12.1

Cite specific textual evidence to support analysis of primary and secondary sources, connecting insights gained from specific details to an understanding of the text as a whole.

CCSS.ELA-LITERACY.RH.11-12.2

Determine the central ideas or information of a primary or secondary source; provide an accurate summary that makes clear the relationships among the key details and ideas.

CCSS.ELA-LITERACY.RH.11-12.3

Evaluate various explanations for actions or events and determine which explanation best accords with textual evidence, acknowledging where the text leaves matters uncertain.

CCSS.ELA-LITERACY.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).

CCSS.ELA-LITERACY.RH.11-12.5

Analyze in detail how a complex primary source is structured, including how key sentences, paragraphs, and larger portions of the text contribute to the whole.

CCSS.ELA-LITERACY.RH.11-12.6

Evaluate authors' differing points of view on the same historical event or issue by assessing the authors' claims, reasoning, and evidence.

CCSS.ELA-LITERACY.RH.11-12.7

Integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., visually, quantitatively, as well as in words) in order to address a question or solve a problem.

CCSS.ELA-LITERACY.RH.11-12.8

Evaluate an author's premises, claims, and evidence by corroborating or challenging them with other information.

CCSS.ELA-LITERACY.RH.11-12.9

Integrate information from diverse sources, both primary and secondary, into a coherent understanding of an idea or event, noting discrepancies among sources.

CCSS.ELA-LITERACY.RH.11-12.10

By the end of grade 12, read and comprehend history/social studies texts in the grades 11-CCR text complexity band independently and proficiently.

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Integration of Technology Standards NJSLS 8

- 8.1.12.F.1- Evaluate the strengths and limitations of emerging technologies and their impact on educational, career, personal and or social needs.
- 8.1.12.IC.3: Predict the potential impacts and implications of emerging technologies on larger social, economic, and political structures, using evidence from credible sources.
- 8.2.12.ITH.1: Analyze a product to determine the impact that economic, political, social, and/or cultural factors have had on its design, including its design constraints...
- 8.2.12.EC.1: Analyze controversial technological issues and determine the degree to which individuals, businesses, and governments have an ethical role in decisions that are made.
- 8.2.12.EC.2: Assess the positive and negative impacts of emerging technologies on developing countries and evaluate how individuals, non-profit organizations, and governments have responded.
- 8.2.12.EC.3: Synthesize data, analyze trends, and draw conclusions regarding the effect of a technology on the individual, culture, society, and environment and share this information with the appropriate audience.
- 8.2.12.ETW.4: Research historical tensions between environmental and economic considerations as driven by human needs and wants in the development of a technological product and present the competing viewpoints.