Psychology

The national standards for teaching psychology, developed by the American Psychological Association, greatly influenced the development of the content of this course. Psychology acquaints students with psychological theories, principles, and practices associated with the following major subfields or domains of Scientific Inquiry, Biopsychology, Consciousness Development and Learning, Social Interactions, Cognition, Individual Variations, and Applications of Psychological Science.

The study of psychology requires a flexible, investigative classroom environment that allows for experimentation and participatory activities. Students are encouraged to use critical-thinking skills employed by psychologists in the practice of their science. They also apply knowledge of the brain and its functioning to the understanding of human behavior. As a general psychology elective, this course is particularly beneficial to students as they endeavor to understand themselves and others.

Local school systems have great flexibility regarding the scheduling of a psychology course. Some systems offer a one-year course while others offer only a semester-long course. When designing content for a high school psychology course, it is essential to include the minimum required content described in this document as well as follow guidelines of the American Psychological Association's *National Standards for High School Psychology Curricula*, which recommends psychology courses contain at least one topic area per domain in order to represent the breadth of the field of psychology for students.

Students will:

- 1. Trace the development of psychology as a scientific discipline evolving from other fields of study.
 - Describing early psychological and biological inquiries that led to contemporary approaches and methods of experimentation, including ideologies of Aristotle, John Locke, Wilhelm Wundt, Charles Darwin, William James, Frantz Fanon, and G. Stanley Hall
 - Differentiating among various modern schools of thought and perspectives in psychology that have evolved since 1879, including each school's view on concepts of aggression or appetite
 - Illustrating how modern psychologists utilize multiple perspectives to understand behavior and mental processes
 - Identifying major subfields and career opportunities related to psychology

- 2. Describe research strategies used by psychologists to explore mental processes and behavior.
 - Describing the type of methodology and strategies used by researchers in different psychological studies

Examples: surveys, naturalistic observations, case studies, longitudinal studies, cross-sectional studies

- Contrasting independent, dependent, and confounding variables and control and experimental groups
- Constructing an experiment in which all elements are identified
- Describing the use of statistics in evaluating research, including calculating the mean, median, and mode from a set of data; conducting simple correlational analysis using either calculators or computer software; and explaining the meaning of statistical significance
- 3. Explain how processes of the central and peripheral nervous systems underlie behavior and mental processes, including how neurons are the basis for neural communication.
 - Describing how neurons communicate, including the role of neurotransmitters in behavior and the electrochemical process
 - Comparing the effect of drugs and toxins on the brain and neurotransmitters
 - Describing how different sections of the brain have specialized yet interdependent functions, including functions of different lobes and hemispheres of the cerebral cortex and consequences of damage to specific sections of the brain
 - Describing different technologies used to study the brain and nervous system
 - Analyzing behavior genetics for its contribution to the understanding of behavior and mental processes, including differentiating between deoxyribonucleic acid (DNA), chromosomes, and genes; identifying effects of chromosomal abnormalities; and explaining how genetics and environmental factors work together to determine inherited traits
- 4. Describe the interconnected processes of sensation and perception.
 - Explaining the role of sensory systems in human behavior, including sight, sound, smell, touch, and pain
 - Explaining how what is perceived can be different from what is sensed, including how attention and environmental cues can affect the ability to accurately sense and perceive the world

- Describing the role of Gestalt principles and concepts in perception
- 5. Explain ways to promote psychological wellness.
 - Describing physiological processes associated with stress, including hormones associated with stress responses
 - Describing Hans Selye's general adaptation syndrome (GAS)
 - Describing the flight-or-fight response in terms of the autonomic and somatic nervous systems
 - Contrasting positive and negative ways of coping with stress related to problem-focused coping, aggression, and emotionfocused coping
 - Explaining approach-approach, approach-avoidance, and avoidance-avoidance conflicts
 - Identifying various eating disorders and conditions

 Examples: anorexia nervosa, bulimia nervosa, obesity
- 6. Describe the physical, cognitive, and social development across the life span of a person from the prenatal through aging stages
 - Outlining the stage of development theories of Jean Piaget, Erik H. Erikson, Sigmund Freud, Carol Gilligan, and Lawrence Kohlberg
- 7. Describe the processes and importance of memory, including how information is encoded and stored, mnemonic devices, schemas related to short-term memory, working memory, and long-term memory.
 - Distinguishing between surface and deep processing in memory development
 - Comparing ways memories are stored in the brain, including episodic and procedural
 - Identifying different parts of the brain that store memory
 - Differentiating among different types of amnesia
 - Describing how information is retrieved from memory
 - Explaining how memories can be reconstructed and misremembered
- 8. Describe different ways in which organisms learn, including the processes of classical conditioning, operant conditioning, and observational conditioning.
 - Identifying unconditioned stimuli (UCS), conditioned stimuli (CS), unconditioned responses (UCR), and conditioned responses (CR)
 - Describing the law of effect

- Describing original experiments conducted by B. F. Skinner, Albert Bandura, Ivan Pavlov, John B. Watson, and Rosalie Rayner
- Differentiating between reinforcement and punishment, positive and negative reinforcement, and various schedules of reinforcement
- Describing biological limitations on operantly conditioned learning
- Differentiating between observational learning and modeling
- Analyzing watching violent media for effects on violent behavior
- 9. Describe how organisms think and solve problems, including processes involved in accurate thinking.
 - Identifying the role of mental images and verbal symbols in the thought process
 - Explaining how concepts are formed
 - Differentiating between algorithms and heuristics
 - Analyzing different types of heuristics to determine effects on problem solving
- 10. Describe the qualities and development of language.
 - Identifying common phonemes and morphemes of language
 - Describing how syntax and grammar affect language comprehension
 - Demonstrating how qualities of sign language are similar to spoken language
 - Describing how infants move from babbling to usage of complete sentences
 - Explaining how hearing loss in infants and children can affect the development of spoken language
- 11. Compare various states of consciousness evident in human behavior, including the process of sleeping and dreaming.
 - Explaining states of sleep throughout an average night's sleep, including nonrapid eye movement (NREM) and rapid eye movement (REM)
 - Describing the mechanism of the circadian rhythm
 - Evaluating the importance of sleep to good performance
 - Comparing theories regarding the use and meaning of dreams
 - Analyzing the use of psychoactive drugs for effects on people, including the mechanisms of addiction, withdrawal, and tolerance
 - Evaluating the phenomenon of hypnosis and its possible uses

- 12. Describe the role of motivation and emotion in human behavior.
 - Identifying theories that explain motivational processes, including cognitive, biological, and psychological reasons for motivational behavior, and Maslow's hierarchy of needs and arousal theory
 - Describing situational cues that cause emotions, including anger, curiosity, and anxiety
 - Differentiating among theories of emotion
 - Identifying universally recognized emotions
- 13. Describe methods of assessing individual differences and theories of intelligence, including Charles E. Spearman's general (g) factor of intelligence, Howard Gardner's multiple intelligences, and Robert J. Sternberg's triarchic theory of intelligence.
 - Describing different types of intelligence tests, including the Flynn effect
 - Describing how intelligence may be influenced by differences in heredity and environment and by biases toward ethnic minority and socioeconomic groups
- 14. Explain the role of personality development in human behavior.
 - Differentiating among personality theories, including psychoanalytic, sociocognitive, trait, and humanistic theories of personality
 - Describing different measures of personality, including the Neuroticism-Extroversion-Openness Personality Inventory (NEO-PI), the Minnesota Multiphasic Personality Inventory (MMPI), and projective tests
- 15. Describe major psychological disorders and their treatments.
 - Differentiating between normal and abnormal behavior
 - Describing different approaches for explaining mental illness, including biological and medical, cognitive, and sociocultural models
 - Differentiating types of mental illness, including mood, anxiety, somatoform, schizophrenic, dissociative, and personality disorders

- 16. Describe how attitudes, conditions of obedience and conformity, and other influences affect actions and shape human behavior, including actor-observer, selfserver, social facilitation, social loafing, bystander effect, groupthink, and group polarization.
 - Explaining the fundamental attribution error
 - Critiquing Stanley Milgram's work with obedience and S. E. Asch's work with conformity
- 17. Describe various careers pursued by psychologists, including medical and mental health care fields, the business world, education, law and criminal justice, and research.
- 18. Explain how culture and gender influence behavior.
 - Identifying gender differences and similarities
 - Explaining ways in which gender differences are developed
 - Describing ways in which gender roles are assigned in different cultures