Psychology

Psychology is the scientific study of behavior and mental processes. It is a unique science that often necessitates the use of special measurements and research methods. The course has four sections: psychological foundations and research; biological foundations; change in behavior and cognition; and variability of behavior among individual and groups.

Standards with an asterisk(*) are recommend for a one semester course.

Psychology Foundations and Research

*SSPFR1: The student will explain selected historical and contemporary perspectives and practices of psychologists.
   a. Define the field of psychology.
   b. Identify key figures in the history of the field of psychology and their major contributions; include Wundt, Freud, Skinner, James, Watson and Rogers.
   c. List and describe the major occupations and subfields of psychology.

*SSPFR2: The student will explain the research methods and the types of statistics used in the field of psychology.
   a. Explain how psychologists conduct research to describe, explain, predict, and control behavior.
   b. Describe the types of research methods used by psychologists; include experiment, survey, case study, and observation.
   c. Identify the basic elements of an experiment; include independent and dependent variables, types of experimental control (blind/double-blind procedures, placebo controls).
   d. Explain the differences between a correlation and an experiment.
   e. Classify the types and uses of statistics in psychological research; include descriptive statistics and inferential statistics.
   f. Interpret graphic data representations.
   g. Explain ethical issues in psychological research.

Biological Foundations

*SSPBF1: The student will explain the development, structure, and function of biological systems and their role in behavior, cognition, and emotion.
   a. Discuss the major divisions and sub-divisions of the nervous system and their role in behavior; include central (brain and spinal cord) and peripheral [autonomic (sympathetic and parasympathetic) and somatic].
   b. Identify the components and function of a neuron.
   c. Explain the process of neurotransmission; include action potentials and synaptic transmission.
   d. Identify the major structures and functions of the brain.
   e. Describe the methods used to analyze neural form and function; include the MRI, fMRI, PET, CAT, and EEG.
   f. Examine the role of genetics in the development of behaviors.
SSPBF2: The student will compare different states of consciousness.
   a. Describe the sleep cycle and circadian rhythm,
   b. Explain why we sleep and dream.
   c. Investigate the validity of hypnosis as a state of consciousness.
   d. Analyze the physical and psychological issues associated with addiction.
   e. Explain how the major drug classes (stimulants, depressants, and hallucinogens) affect neurotransmission and behaviors.

SSPBF3: The student will discuss the components of stress.
   a. Categorize and explain the different physiological and psychological reactions to stress.
   b. Identify strategies to deal with stress that promote health; include coping strategies and behavioral modification.

SSPBF4: The student will describe how the physical world is translated into a psychological experience.
   a. Describe the basic structures of the eye and ear, the associated neural pathways, and the process of sensory transduction.
   b. Recognize causes which can lead to hearing and vision deficits; include environmental causes, aging, genetics, diet, disease, and trauma.
   c. Describe the major theories associated with visual and auditory sensation and perception; include opponent process theory, trichromatic theory of vision, frequency theory, volley theory, and place theory of hearing.
   d. Analyze different perceptual illusions and describe why illusions are important for our understanding of perception.
   e. Compare top-down and bottom-up processing.

SSPBF5: The student will identify major theories and concepts related to motivation and emotion.
   a. Compare and contrast the biological, cognitive/learning, and humanistic perspectives of motivation.
   b. Compare and contrast theories of emotion; include James-Lange, Cannon-Bard, and Singer-Schacter’s Two Factor.

Change in Behavior and Cognition

*SSPBC1: The student will identify the characteristics of and major approaches to learning.
   a. Identify learning as a relatively permanent change in behavior based on experience.
   b. Explain the behavioral approach to learning.
   c. Compare and contrast the paradigms of classical and operant conditioning.
   d. Describe changes in behavior using the social learning theory.
SSPBC2: The student will analyze key concepts associated with information processing.
   a. Describe the components of the human information processing system; include working memory, long term memory, sensory memory, and attention.
   b. Evaluate strategies that enhance memory; include mnemonics, rehearsal, and elaboration.
   c. Analyze theories of forgetting; include loss of access, interference, displacement, and decay.
   d. Explain the phenomena involved in problem solving and decisionmaking; include heuristics, algorithms, biases, expectancies, and mental set.

*SSPBC3: Describe behavioral, social, and cognitive changes from the prenatal period throughout the life span.
   a. Chart physical changes of a human being from conception through late adulthood.
   b. Explain the developmental models of Freud, Piaget, Kholberg, and Erikson.
   c. Compare and contrast the theories of language and language acquisition; include Chomsky, Skinner, and Whorf.
   d. Describe the role of critical periods in development.

Variability of Behavior among Individuals and Groups
SSPVB1: The student will analyze concepts related to the measurement and nature of intelligence.
   a. Differentiate between general and multiple intelligences.
   b. Explain how intelligence may be influenced by heredity and environment.
   c. Evaluate the reliability, validity, and standardization of historical and contemporary intelligence tests.
   d. Evaluate the implications of measurement of intelligence on the individual and culture.

*SSPVB2: The student will evaluate assessment tools and theories in personality.
   a. Evaluate Psychodynamic Theory and its impact on contemporary psychology.
   b. Evaluate the Humanistic Perspective.
   c. Analyze the purpose and theories of the Trait Perspective of personality.
   d. Analyze the Social-Cognitive Perspective of personality.

*SSPVB3: The student will identify abnormal behavior and treatment.
   a. Identify criteria that distinguish normal from disordered behavior; include the criteria of distress, deviance, and dysfunction.
   b. Describe methods used to diagnose and assess abnormal behavior; include the current version of the Diagnostic and Statistical Manual, the MMPI, and projective tests.
   c. Compare anxiety disorders, mood disorders, personality disorders, and schizophrenia and describe appropriate treatments for these disorders.
   d. Analyze the challenges associated with labeling psychological disorders and the impact of diagnosis on patients.
   e. Compare the biomedical, psychoanalytical, cognitive, and behavioral approaches to the treatment of psychological disorders.
Social Psychology

*SSPSP1: The student will analyze the impact of the social environment on behaviors and attitudes.

a. Explain phenomena that result from the influence of the social environment on the individual and vice versa; include obedience, social facilitation, social loafing, bystander apathy, conformity, groupthink, group polarization, and deindividuation.

b. Analyze attribution and cognitive dissonance theories pertaining to social judgments and attitudes.

c. Explain the factors that contribute to affiliation and attraction; include proximity, mere-exposure effect, and similarity.

d. Analyze and evaluate the ethics of experimentation in social psychology; include Milgram’s experiment of obedience and Zimbardo’s Stanford Prison Experiment.