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.

Psychology Foundations and Research

SSPFR1 Explain selected historical and contemporary perspectives and practices of psychologists.

a. Define the field of psychology.

b. Identify key figures and their perspectives in the history of the field of psychology: include Wundt, Freud, Skinner, James, Watson, Rogers, Bandura, and Pavlov.

c. List and describe the major occupations and subfields of psychology.

SSPFR2 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 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 Compare different states of consciousness.

a. Identify altered states of consciousness, include: sleeping, dreaming, hypnosis, meditation, biofeedback, and mind-altering substances.

b. Describe the sleep cycle and circadian rhythm.

c. Explain theories of sleeping and dreaming.

d. Investigate the validity of hypnosis.

e. Analyze the physical and psychological issues associated with addiction.

f. Explain how the major drug classes (stimulants, depressants, and hallucinogens) affect neurotransmission and behaviors.

SSPBF3 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 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 threshold theory, opponent process theory, trichromatic theory of vision, frequency theory, volley theory and place theory of hearing.

d. Identify additional senses, include: smell, taste and touch.

e. Analyze different perceptual illusions and describe why illusions are important for our understanding of perception.

f. Compare top-down and bottom-up processing.

SSPBF5 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-Schachter’s Two Factor. Change in Behavior and Cognition

SSPBC1 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 Analyze key concepts associated with information processing and memory.

a. Describe the components of the human information processing system, include: sensory memory, attention, short term memory (working memory), encoding, long term memory, and retrieval.

b. Evaluate strategies that enhance memory, include: mnemonics, maintenance rehearsal, and elaborative rehearsal.

c. Analyze theories of forgetting, include, encoding failure, decay, proactive/retroactive interference, types of amnesia (retrograde, anterograde, source, and infantile).

d. Explain the phenomena involved in problem solving and decision-making, 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, Kohlberg, 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 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.

e. Differentiate the levels of intelligence: include giftedness and intellectual disability.

SSPVB2 Evaluate theories of personality and assessment tools.

a. Evaluate Psychodynamic Theory and its impact on contemporary psychology.

b. Evaluate the Humanistic Perspective of personality.

c. Analyze the purpose and theories of the Trait Perspective of personality.

d. Analyze the Social-Cognitive Perspective of personality.

e. Identify various personality assessment tools.

SSPVB3 Identify psychological disorders 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 psychological disorders, include: the current version of the Diagnostic and Statistical Manual, the MMPI, and projective tests.

c. Analyze various psychological disorders and identify appropriate treatments, include: anxiety disorders, bipolar and depressive disorders, personality disorders, somatic disorders, and schizophrenia. d. Analyze the challenges associated with labeling psychological disorders and the impact of diagnosis on patients.

e. Compare the biomedical, psychoanalytical, cognitive, and behavioral and humanistic approaches to the treatment of psychological disorders.

Social Psychology SSPSP1 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 such as Asch’s experiment, 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, mereexposure 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.