



## **Psychology**

### **Semester A Summary:**

This is the first of two courses that comprise Psychology. This course begins with a historical review of how man has sought to explain human behavior from ancient times to today. The student will learn about the research methods that are applied to the field and how the scientific method of inquiry moved psychology from quaint parlor tricks like hypnosis and mesmerism to serious inquiry that utilizes hard science to prove theories. The student will also learn about the amazing brain and will explore the workings of the normal brain. The student will then build upon this biological foundation to learn how the information that we take in through our senses is perceived and interpreted by the brain to form the mental images of our daily experiences in the world. The course also provides a survey of a human's life span from birth to death. The student will learn about all of the major physical and psychological changes that mark the development of a human's existence and a variety of theories that outline these processes.

### **Semester A Outline**

#### **1. Introducing Psychology**

1. Why Study Psychology?
  - Define psychology
  - Provide a rationale for the study of psychology
  - Consider that both cognitive and physiological factors influence behavior
2. Psychology as a Science
  - Discuss the four goals of psychology
  - Consider the scientific basis of psychology
  - Define hypothesis
  - List and explain the 5 steps of the scientific method
  - Compare and contrast the concepts of basic science and applied science and apply to psychology today
3. The Roots of Psychology
  - Name the three historical roots of psychology
  - Describe the significance of dualism in the development of psychology
  - Explain why the scientific basis of psychology is considered a major advance from early psychology thinking
4. Early Perspectives
  - Distinguish among the early schools of thought in psychology. These include: structuralism, functionalism, psychoanalysis, clinical, and Gestalt psychology
  - Distinguish among the different research strategies used by psychologists to explore behavior
5. Schools of Thought
  - Recognize the main differences among the following movements in modern psychology: behavioral, humanistic, cognitive, and psychobiology
  - Distinguish among the different research strategies used by psychologists to explore behavior

## 6. Careers in Psychology

- Recognize and distinguish between the various careers in the field of psychology
- Gain an understanding of the levels of education required for different careers within the field of psychology

## 2. **Research Methods Statistics**

### 1. Goals of Research

- Gain an overview of psychological research and its methods
- Consider what drives psychology research
- Describe the five steps in the process of scientific research

### 2. Research Methods

- Compare and contrast the three main methods of research
- Describe the important features of experimental research

### 3. Data Collection Methods

- Describe the main data collection methods
- Compare and contrast the reasons for data collection
- Explain the major ethical issues associated with undertaking scientific research

### 4. Understanding Data

- Consider how data is interpreted and presented
- Consider how research findings are formulated from the analysis of data

## 3. **Basics of the Nervous System**

### 1. The Neuron

- Describe the structure of a neuron and describe the functions of each major part
- Distinguish between sensory neurons (receptor), motor neurons, and interneurons
- Recognize the process by which nerve impulses are propagated
- Explain the activities that take place at the synapse

### 2. The Nervous System

- Discuss the role of the nervous system in influencing behavior
- Identify the two main organs of the central nervous system
- Name the two divisions of the peripheral nervous system and describe their functions
- Distinguish between the somatic nervous system and the autonomic nervous system
- Distinguish between the sympathetic division and the parasympathetic division

### 3. The Brain

- Identify the major structures and functions of the human brain

### 4. Modern Brain Research Techniques

- Consider modern brain imaging techniques and their use to psychology researchers

### 5. Hormones, Heredity, and Environment

- Describe the functions of the endocrine system and the influence of hormones on behavior
- Discuss some social implications of behavior genetics
- Identify several approaches to studying heritability of a trait

## 4. **Altered States**

### 1. Sleep

- Explain the theories related to the functions of sleep
- List and briefly describe the different stages of sleep

- Explain what happens during REM sleep and explain why it is called paradoxical sleep
  - List and briefly explain the major sleep disorders
2. Dreams
    - List and explain the major dream theories
  3. Your Brain on Drugs
    - Understand how various drugs of abuse are injected and get to the brain
    - Discuss the effects of the various drugs of abuse on the brain
    - Explain how drug use can lead to addiction
- 5. Sensation and Perception**
1. Sensation
    - Define sense and sensation
    - Explain the difference between sensation and perception
    - Differentiate between absolute and difference potential
    - Define signal detection
  2. The Senses
    - List the major structures and function of the eye and compare the two major theories of color vision
    - Outline the function of the senses
    - Define visual illusion and list six examples
  3. Perception
    - Define form perception and identify four Gestalt principles that describe the process
    - Describe Gestalt principles of perceptual organization
    - Define perceptual constancy and give examples of size, shape, and brightness constancy
- 6. Development Theories**
1. Introduction to Developmental Psychology
    - Describe the main historical approaches to child development and name their proponents
    - Describe the three domains of developmental psychology
    - List three reasons for studying child development
  2. Freud's Theories
    - Discuss the basic ideas in Sigmund Freud's psychosexual theory of personality development, including the id, ego, and superego
    - Describe each stage of Freud's theory
  3. Erikson's Theory
    - Discuss the basic ideas in Erik Erikson's psychosocial theory of development and compare it to Freud's psychosexual theory
    - Be able to describe each stage of Erikson's theory
  4. Piaget's Theories
    - Discuss the basic ideas in Jean Piaget's theory of development, including the notion of schemas, the processes of assimilation and accommodation, and equilibrium
    - Compare and contrast Piaget's cognitive theory of development to Freud and Erikson's theories
  5. Social Development Theory
    - Define the key aspects of attachment theory as it relates to social development and all relationships throughout a person's life
    - Describe specific implications of attachment theory with regard to adoption and child rearing practices
- 7. Final Review and Exam**

1. Psychology A Final Review
2. Psychology A Final Exam

## **Semester B Summary:**

This is the second of two courses that comprise Psychology. The course begins with an exploration of what makes individuals different from one another and the notion of personality. The student will dissect the widely divergent and often contradictory personality theories. In the section on Learning, Memory, and Motivation, the student will tie together his knowledge of the biological basics of behavior with the major personality theories in order to understand the complex mental processes of learning, memory, thought, and language. Finally, the student will shift his focus from normal to abnormal behavior, and in doing so, study the theories related to life adjustment, stress, psychological breakdown and methods of therapy.

## **Semester B Outline**

### **1. Psychological Testing**

1. Intelligence
  - Define the concept of intelligence
  - Outline the major theories of intelligence
  - Outline the environmental influences on intelligence
  - Outline the genetic influences on intelligence
  - Describe the development of the Stanford-Binet Intelligence Scale
  - Understand the concept of intelligence quotient (IQ)
2. Intelligence Tests
  - List the characteristics of good intelligence tests
  - Recognize the importance of intelligence scores in modern society
  - Understand the criticisms of intelligence tests
3. Aptitude Tests
  - Define and compare aptitude tests, achievement tests, and interest inventories
  - Discuss the qualities of aptitude tests, achievement tests, and interest inventories
  - Explain the value and application of aptitude tests, achievement tests, and interest inventories
4. Personality Tests
  - Discuss the differences between objective and projective personality tests and why this distinction is important
  - Compare and contrast projective and objective personality tests

### **2. Theories of Personality**

1. What is Personality
  - Define personality and theory
  - Recognize the interests and goals of personality theorists
2. Psychoanalytic Theories
  - Explain the major psychoanalytic theories of personality
  - Discuss Freud's theory of personality and define its main components
  - Identify and define the major defense mechanisms
  - Compare and contrast Jung's theory to Freud's personality theory
  - Explain Adler's theory of personality
3. Learning Theories
  - Compare and contrast the theories of behaviorism and social cognition

- Discuss the criticisms for and against behaviorism and social cognition as theories of personality
4. Humanistic Theories
    - Compare and contrast humanistic theory of personality to psychoanalytic and behavioral theories
    - Discuss and define the main themes of Maslow's and Rogers' theories
    - Fully explain the stages of Maslow's hierarchy of needs model
    - Understand why these theories are so appealing
  5. Cognitive Theories
    - Discuss the cognitive theory of personality
    - Compare and contrast the cognitive to the other major personality theories
    - Explain the limitations and criticisms of the cognitive theory
  6. Trait Theories
    - Describe trait theory and the methods used to discover personality traits
    - Discuss Allport's trait theory
    - Explain Raymond Cattell's trait theory of personality
    - Understand Eysenck's theory of personality
    - Recognize and list the Big Five Factors of personality and be able to describe them

### **3. Learning, Memory, and Motivation**

1. Classical Conditioning
  - Define learning
  - Identify the types of stimuli and responses in classical conditioning
  - Outline the basic principles of classical conditioning
  - Describe how taste aversion might be acquired through classical conditioning
  - Demonstrate a knowledge of the applications of classical conditioning
2. Operant Conditioning
  - Define and outline the basic principles of operant conditioning
  - Explain the four types of operant conditioning
  - Differentiate between examples of classical and operant conditioning
3. Memory - Part 1
  - Differentiate between learning and memory
  - Describe the three processes of memory and provide examples that illustrate each
4. Memory - Part 2
  - Describe the three systems of memory
  - Provide examples of sensory memory
  - List and compare the various effects on short-term memory
  - Compare the types of long-term memory
  - Discuss the long-term memory process and its components
5. Your Brain's Database
  - Explain the processes involved in forming memories
  - Understand the value of mnemonic devices in memory
  - Discuss methods of improving memory
6. Forgetting
  - Compare the five theories of forgetting
  - Explain two mechanisms of memory interference
  - Identify two types of amnesia
7. Thinking and Problem Solving
  - Define thinking and the three main types
  - Discuss divergent and convergent thought
  - Distinguish between reasoning and problem solving

- Define the types of reasoning
  - Describe Gestalt theory
8. Language
- Define language and describe its structure
  - Outline how language develops in infants and children
  - Compare the two major theories of language development
  - Distinguish among phonemes, morphemes, and syntax
  - Discuss support for Chomsky's theory of language acquisition
4. **Stress, Coping, and Mental Health**
1. Stress and Health
- Define stress and list its causes
  - Differentiate between distress and eustress
  - Explain the connection between stress and health
  - Define the three types of stress
  - Define posttraumatic stress disorder (PTSD)
2. Effects of Stress
- Define the fight or flight mechanism
  - Differentiate between the psychological and physiological components of the fight or flight mechanism
  - Differentiate between acute and chronic stress
  - Explain the connection between chronic stress and disease
3. Coping with Stress
- Identify techniques for coping with stress
  - Differentiate between problem-focused coping and emotion-focused coping
  - Define self-esteem
  - Explain connection between low self-esteem and stress
5. **Disorders**
1. What is Normal?
- Define normalcy
  - Differentiate between historical and contemporary visions of normalcy and treatment of abnormal behavior
  - Define maladaptive behavior
2. Anxiety Disorders
- Define anxiety
  - Define the term anxiety disorder
  - Differentiate between the different types of anxiety disorders
3. Somatoform and Dissociative Disorders
- Define somatoform disorder
  - Define dissociative disorder
  - Differentiate the different types of somatoform and dissociative disorders
4. Schizophrenia
- Define schizophrenia
  - Learn the symptoms of schizophrenia
  - Differentiate the various types of schizophrenia
  - Investigate the causes of schizophrenia
5. Personality Disorders
- Define personality disorder
  - Explain the symptoms of personality disorders
  - Differentiate the various types of personality disorders
6. Drug Addiction
- Define addiction
  - Explain the psychological and physiological aspects of addiction

- Explain the risk factors for addiction
- Explain the signs and symptoms of addiction

## **6. Therapy and Change**

1. What is Psychotherapy?
  - Define psychotherapy
  - Explain the emergence of modern psychotherapy
  - Differentiate the various schools of psychotherapy
2. Psychoanalysis
  - Define psychoanalysis
  - Explain the origins of psychoanalysis
  - Explain the role of the therapist in psychoanalysis
3. Humanistic Therapy
  - Define humanistic therapy
  - Explain the emergence of humanistic therapy
  - Identify the major figures associated with humanistic therapy
  - Explain the connection between humanistic therapy and existentialism
4. Cognitive Therapy
  - Define cognitive therapy
  - Explain the emergence of cognitive therapy
  - Identify the major figures associated with cognitive therapy
  - Explain the two major types of cognitive therapy
5. Behavioral Therapies
  - Define behavioral therapy
  - Explain the emergence of behavioral therapy
  - Identify the major figure associated with behavioral therapy
  - Explain the major types of behavioral therapies
6. Biological Approaches
  - Define a biological approach to therapy
  - Explore homeopathic alternatives to the biological approach
  - Explain the major types of biological therapies

## **7. Final Review and Exam**

1. Psychology B Final Exam Review
2. Psychology B Final Exam