**Scientific Foundations of Psychology (10-14%)**

Psychology has evolved markedly since its inception as a discipline in 1879. There have been significant changes in the theories that psychologists use to explain behavior and mental processes. In addition, the methodology of psychological research has expanded to include a diversity of approaches to data gathering.

Psychology is an empirical discipline. Psychologists develop knowledge by doing research. Research provides guidance for psychologists who develop theories to explain behavior and who apply theories to solve problems in behavior.

Topics:

* 1. Introducing Psychology
  2. Research Methods in Psychology
  3. The Experimental Method
  4. Selecting a Research Method
  5. Statistical Analysis in Psychology
  6. Ethical Guidelines in Psychology

Learning Targets:

* Recognize how philosophical and physiological perspectives shaped the development of psychological thought.
* Identify the research contributions of major historical figures in psychology.
* Describe and compare different theoretical approaches in explaining behavior.
* Recognize the strengths and limitations of applying theories to explain behavior.
* Distinguish the different domains of psychology.
* Differentiate types of research with regard to purpose, strengths, and weaknesses.
* Discuss the value of reliance on operational definitions and measurement in behavioral research.
* Identify independent, dependent, confounding, and control variables in experimental designs.
* Describe how research design drives the reasonable conclusions that can be drawn.
* Distinguish between random assignment of participants to conditions in experiments and random selection of participants, primarily in correlational studies and surveys.
* Predict the validity of behavioral explanations based on the quality of research design.
* Apply basic descriptive statistical concepts, including interpreting and constructing graphs and calculating simple descriptive statistics.
* Distinguish the purposes of descriptive statistics and inferential statistics.
* Identify how ethical issues inform and constrain research practices.
* Describe how ethical and legal guidelines protect research participants and promote sound ethical practice.

**Vocabulary**

*Chapter 1, Section 1: Introducing Psychology, Pages 2-12*

1. Growth mindset
2. Grit
3. Psychology
4. Critical thinking
5. Pseudoscience
6. Structuralism
7. Functionalism
8. Psychoanalytic perspective
9. Psychodynamic perspective
10. Behavioral perspective
11. Humanistic perspective
12. Positive psychology
13. Cognitive perspective
14. Biological perspective
15. Evolutionary perspective
16. Natural selection
17. Sociocultural perspective
18. Biopsychosocial model

People to note (not required, but helpful):

* Wilhelm Wundt
* Edward Titchener
* William James
* Sigmund Freud
* John B. Watson
* Ivan Pavlov
* B.F. Skinner
* Carl Rogers
* Abraham Maslow
* Mary Calkins
* Margaret Floy Washburn
* Francis Cecil Sumner
* Kenneth B. Clark
* Mamie Clark

*Chapter 1, Section 2: The Science of Psychology, Pages 13-19*

1. Basic research
2. Applied research
3. Scientific method
4. Hypothesis
5. Operational definition
6. Statistically significant
7. Meta-analysis
8. Theory
9. Nature-nurture controversy
10. Informed consent
11. Debriefing

*Chapter 1, Section 3: Research Methods, Pages 20-31*

1. Descriptive research
2. Naturalistic observation
3. Surveys/interviews
4. Case study
5. Archival research
6. Correlational research
7. Correlation coefficient
8. Third-variable problem
9. Illusory correlation
10. Experimental research
11. Experiment
12. Independent variable (IV)
13. Dependent variable (DV)
14. Experimental group
15. Control group
16. Random assignment
17. Sample bias
18. Representative sample
19. Confounding variable
20. Experimenter bias
21. Ethnocentrism
22. Participant bias
23. Single-blind study
24. Double blind study
25. Placebo
26. Placebo effect

*Chapter 1, Section 4: Tools for Student Success, pages 32-38: optional but helpful*

*Test Date: August 12th*