

## LEARNING OUTCOMES FOR THE PSYCHOLOGY MAJOR

### Goal 1. Knowledge Base of Psychology

Demonstrate familiarity with the major concepts, theoretical perspectives, empirical findings, and historical trends in psychology.

### Learning Outcomes

1.1 Characterize the nature of psychology as a discipline.

- a. Identify and explain the primary objectives of psychology: describing, understanding, predicting, and controlling behavior and mental processes.
- b. Compare and contrast the assumptions and methods of psychology with those of other disciplines.

1.2 Demonstrate knowledge and understanding representing appropriate breadth and depth in selected content areas of psychology:

- a. theory and research representing each of the following general domains:
  - (1) learning, cognition, and developmental changes across the life span
  - (2) social processes
  - (3) biological bases of behavior and mental processes, including physiology, sensation, perception, comparative, motivation, and emotion
- b. depth within at least one of these domains
- c. relevant levels of analysis: cellular, individual, group/systems, and culture
- d. relevant ethical issues, including a general understanding of the APA Code of Ethics

1.3 Use the concepts, language, and major theories of the discipline to account for psychological phenomena.

- a. Describe behavior and mental processes empirically, including operational definitions
- b. Identify antecedents and consequences of behavior and mental processes
- c. Use theories to explain and predict behavior and mental processes
- d. Integrate theoretical perspectives to produce comprehensive and multi-faceted explanations

## **Goal 2. Research Methods in Psychology**

Understand and apply basic research methods in psychology, including research design, data analysis, and interpretation.

### **Learning Outcomes**

2.1 Explain different research methods used by psychologists.

- a. Describe how various research designs address different types of questions and hypotheses
- b. Articulate strengths and limitations of various research designs
- c. Distinguish the nature of designs that permit causal inferences from those that do not

2.2 Evaluate the appropriateness of conclusions derived from psychological research.

- a. Interpret basic statistical results
- b. Describe effect size and confidence intervals
- c. Evaluate the validity of conclusions presented in research reports

2.3 Design and conduct basic studies to address psychological questions using appropriate research methods.

- a. Locate and use relevant databases, research, and theory to plan, conduct, and interpret results of research studies
- b. Formulate testable research hypotheses, based on operational definitions of variables
- c. Select and apply appropriate methods to maximize internal and external validity and reduce the plausibility of alternative explanations
- d. Collect, analyze, interpret, and report data using appropriate statistical strategies to address different types of research questions and hypotheses
- e. Recognize that theoretical and sociocultural contexts as well as personal biases may shape research questions, design, data collection, analysis, and interpretation

2.4 Follow the APA Code of Ethics in the treatment of human and nonhuman participants in the design, data collection, interpretation, and reporting of psychological research.

### **Goal 3. Critical Thinking Skills in Psychology**

Respect and use critical and creative thinking, skeptical inquiry, and, when possible, the scientific approach to solve problems related to behavior and mental processes.

#### **Learning Outcomes**

##### 3.1 Use critical thinking effectively.

- a. Evaluate the quality of information in terms of its source, context, and potential bias
- b. Differentiate empirical evidence from speculation
- c. Recognize and defend against common fallacies in thinking
- d. Avoid being swayed by appeals to emotion or authority
- e. Demonstrate an attitude of critical thinking that includes persistence, open-mindedness, tolerance for ambiguity and intellectual engagement
- f. Make connections between diverse facts, theories, and observations

##### 3.2 Engage in creative thinking.

- a. Intentionally pursue unusual approaches to problems
- b. Recognize and encourage creative thinking and behaviors in others
- c. Evaluate new ideas with an open but critical mind

##### 3.3 Use reasoning to recognize, develop, defend, and criticize arguments and other persuasive appeals.

- a. Identify components of arguments (e.g., conclusions, premises/assumptions, gaps, counterarguments)
- b. Distinguish among assumptions, emotional appeals, speculations, and defensible evidence
- c. Weigh support for conclusions to determine how well reasons support conclusions
- d. Develop sound arguments based on reasoning and evidence

##### 3.4 Approach problems effectively.

- a. Recognize ill-defined and well-defined problems
- b. Articulate problems clearly

- c. Generate multiple possible goals and solutions
- d. Evaluate the quality of solutions and revise as needed

**Knowledge, Skills, and Values Consistent with Liberal Arts Education that are Further Developed in Psychology**

**Goal 4. Information and Technological Literacy**

Demonstrate information competence and the ability to use computers and other technology for many purposes.

**Learning Outcomes**

4.1 Demonstrate information competence at each stage in the following process:

- a. Formulate a researchable topic that can be supported by database search strategies
- b. Locate and, choose relevant sources from appropriate media, which may include data and perspectives outside traditional psychology and Western boundaries
- c. Use selected sources after evaluating their suitability based on
  - appropriateness and accuracy of source
  - potential bias
  - the relative value of primary versus secondary sources, empirical versus non-empirical sources, and peer-reviewed versus nonpeer-reviewed sources
- d. Read and accurately summarize the general scientific literature of psychology

4.2 Use appropriate software to produce understandable reports of the psychological literature, methods, and statistical and qualitative analyses in APA or other appropriate style, including graphic representations of data.

4.3 Use information and technology ethically and responsibly.

- a. Quote, paraphrase, and cite correctly from a variety of media sources
- b. Define and avoid plagiarism
- c. Avoid distorting statistical results
- d. Honor commercial and intellectual copyrights

#### 4.4 Demonstrate these computer skills:

- a. Use basic word processing, database, email, spreadsheet, and data analysis programs
- b. Search internet databases for high quality information
- c. Use proper etiquette and security safeguards when communicating through email

### **Goal 5. Communication Skills**

Communicate effectively in a variety of formats.

#### **Learning Outcomes**

5.1 Demonstrate effective writing skills in various formats (e.g., essays, correspondence, technical papers, note taking) and for various purposes (e.g., informing, defending, explaining, persuading, arguing, teaching).

- a. Demonstrate professional writing conventions (e.g., grammar, audience awareness, formality) appropriate to purpose and context
- b. Use APA style effectively in empirically-based reports, literature reviews, and theoretical papers

5.2 Demonstrate effective oral communication skills in various formats (e.g., group discussion, debate, lecture) and for various purposes (e.g., informing, defending, explaining, persuading, arguing, teaching).

5.3 Exhibit quantitative literacy.

- a. Apply basic mathematical concepts and operations to support measurement strategies
- b. Use relevant probability and statistical analyses to facilitate interpretation of measurements
- c. Articulate clear and appropriate rationale for choice of information conveyed in charts, tables, figures, and graphs
- d. Interpret quantitative visual aids accurately, including showing vigilance about misuse or misrepresentation of quantitative information