Psychology Learning Goals and Outcomes

UNDERGRADUATE PSYCHOLOGY MAJOR LEARNING GOALS AND OUTCOMES: A Report

This document represents the work of the Task Force on Undergraduate Psychology Major Competencies appointed by the American Psychological Association’s Board of Educational Affairs. The document has been endorsed by the Board of Educational Affairs, March 2002, but does not represent policy of the APA.

Undergraduate Psychology Learning Goals and Outcomes

Knowledge, Skills, and Values Consistent with the Science and Application of Psychology

Goal 1. Knowledge Base of Psychology
Demonstrate familiarity with the major concepts, theoretical perspectives, empirical findings, and historical trends in psychology.
Suggested Learning Outcomes

1.1. Characterize the nature of psychology as a discipline.
   (a) Explain why psychology is a science.
   (b) Identify and explain the primary objectives of psychology: describing, understanding, predicting, and controlling behavior and mental processes.
   (c) Compare and contrast the assumptions and methods of psychology with those of other disciplines.
   (d) Describe the contributions of psychology perspectives to interdisciplinary collaboration.

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 four general domains:
      [1] learning and cognition
      [2] individual differences, psychometrics, personality, and social processes, including those related to sociocultural and international dimensions
      [3] biological bases of behavior and mental processes, including physiology, sensation, perception, comparative, motivation, and emotion
      [4] developmental changes in behavior and mental processes across the life span
   (b) the history of psychology, including the evolution of methods of psychology, its theoretical conflicts, and its sociocultural contexts
   (c) relevant levels of analysis: cellular, individual, group/systems, and culture
   (d) overarching themes, persistent questions, or enduring conflicts in psychology, such as
      [1] the interaction of heredity and environment
      [2] variability and continuity of behavior and mental processes within and across species
      [3] free will versus determinism
      [4] subjective versus objective perspective
      [5] the interaction of mind and body
   (e) 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) Interpret behavior and mental processes at an appropriate level of complexity
   (d) Use theories to explain and predict behavior and mental processes
   (e) Integrate theoretical perspectives to produce comprehensive and multi-faceted explanations

1.4. Explain major perspectives of psychology (e.g., behavioral, biological, cognitive, evolutionary, humanistic, psychodynamic, and sociocultural).
   (a) Compare and contrast major perspectives
   (b) Describe advantages and limitations of major theoretical perspectives

Goal 2. Research Methods in Psychology
Understand and apply basic research methods in psychology, including research design, data analysis, and interpretation.
Suggested Learning Outcomes
2.1. Describe the basic characteristics of the science of psychology.

2.2. 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

2.3. Evaluate the appropriateness of conclusions derived from psychological research.
   (a) Interpret basic statistical results
   (b) Distinguish between statistical significance and practical significance
   (c) Describe effect size and confidence intervals
   (d) Evaluate the validity of conclusions presented in research reports

2.4. 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

2.5. 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.

2.6. Generalize research conclusions appropriately based on the parameters of particular research methods.
   (a) Exercise caution in predicting behavior based on limitations of single studies
   (b) Recognize the limitations of applying normative conclusions to individuals
   (c) Acknowledge that research results may have unanticipated societal consequences
   (d) Recognize that individual differences and sociocultural contexts may influence the applicability of research findings

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.

Suggested Learning Outcomes
3.1. Use critical thinking effectively.
   (a) Evaluate the quality of information, including differentiating empirical evidence from speculation and the probable from the improbable
   (b) Identify and evaluate the source, context, and credibility of information
   (c) Recognize and defend against common fallacies in thinking
   (d) Avoid being swayed by appeals to emotion or authority
   (e) Evaluate popular media reports of psychological research
   (f) Demonstrate an attitude of critical thinking that includes persistence, open-mindedness, tolerance for ambiguity and intellectual engagement
   (g) Make linkages or 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) Identify weak, contradictory, and inappropriate assertions
   (e) 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
(e) Select and carry out the best solution

Goal 4. Application of Psychology
Understand and apply psychological principles to personal, social, and organizational issues.

Suggested Learning Outcomes
4.1. Describe major applied areas of psychology (e.g., clinical, counseling, industrial/organizational, school, health).
4.2. Identify appropriate applications of psychology in solving problems, such as
   (a) the pursuit and effect of healthy lifestyles
   (b) origin and treatment of abnormal behavior
   (c) psychological tests and measurements
   (d) psychology-based interventions in clinical, counseling, educational, industrial/organizational, community, and other settings and their empirical evaluation
4.3. Articulate how psychological principles can be used to explain social issues and inform public policy.
   (a) Recognize that sociocultural contexts may influence the application of psychological principles in solving social problems
   (b) Describe how applying psychological principles can facilitate change
4.4. Apply psychological concepts, theories, and research findings as these relate to everyday life.
4.5. Recognize that ethically complex situations can develop in the application of psychological principles.

Goal 5. Values in Psychology
Value empirical evidence, tolerate ambiguity, act ethically, and reflect other values that are the underpinnings of psychology as a science.

Suggested Learning Outcomes
5.1. Recognize the necessity for ethical behavior in all aspects of the science and practice of psychology.
5.2. Demonstrate reasonable skepticism and intellectual curiosity by asking questions about causes of behavior.
5.3. Seek and evaluate scientific evidence for psychological claims.
5.4. Tolerate ambiguity and realize that psychological explanations are often complex and tentative.
5.5. Recognize and respect human diversity and understand that psychological explanations may vary across populations and contexts.
5.6. Assess and justify their engagement with respect to civic, social, and global responsibilities
5.7. Understand the limitations of their psychological knowledge and skills.

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

Goal 6. Information and Technological Literacy
Demonstrate information competence and the ability to use computers and other technology for many purposes.

Suggested Learning Outcomes
6.1. 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, accuracy, quality, and value of the source
      • potential bias of the source
      • the relative value of primary versus secondary sources, empirical versus non-empirical sources, and peer-reviewed versus non-peer-reviewed sources
   (d) Read and accurately summarize the general scientific literature of psychology
6.2. 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.
6.3. 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
6.4. Demonstrate these computer skills:
Goal 7. Communication Skills
Communicate effectively in a variety of formats.

Suggested Learning Outcomes

7.1. 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

7.2. 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).

7.3. 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

7.4. Demonstrate effective interpersonal communication skills.
   (a) Listen accurately and actively
   (b) Use psychological concepts and theory to understand interactions with others
   (c) Identify the impact or potential impact of their behaviors on others
   (d) Articulate ideas thoughtfully and purposefully
   (e) Use appropriately worded questions to improve interpersonal understanding
   (f) Attend to nonverbal behavior and evaluate its meaning in the communications context
   (g) Adapt communication style to accommodate diverse audiences
   (h) Provide constructive feedback to colleagues in oral and written formats

7.5. Exhibit the ability to collaborate effectively.
   (a) Work with groups to complete projects within reasonable timeframes
   (b) Solicit and integrate diverse viewpoints
   (c) Manage conflicts appropriately and ethically
   (d) Develop relevant workplace skills: mentoring, interviewing, crisis management

Goal 8. Sociocultural and International Awareness
Recognize, understand, and respect the complexity of sociocultural and international diversity.

Suggested Learning Outcomes

8.1. Interact effectively and sensitively with people from diverse backgrounds and cultural perspectives.
8.2. Examine the sociocultural and international contexts that influence individual differences.
8.3. Explain how individual differences influence beliefs, values, and interactions with others and vice versa.
8.4. Understand how privilege, power, and oppression may affect prejudice, discrimination, and inequity.
8.5. Recognize prejudicial attitudes and discriminatory behaviors that might exist in themselves and others.

Goal 9. Personal Development
Develop insight into their own and others’ behavior and mental processes and apply effective strategies for self-management and self-improvement.

Suggested Learning Outcomes

9.1. Reflect on their experiences and find meaning in them.
   (a) Identify their personal and professional values
   (b) Demonstrate insightful awareness of their feelings, emotions, motives, and attitudes based on psychological principles

9.2. Apply psychological principles to promote personal development.
   (a) Demonstrate self-regulation in setting and achieving goals
   (b) Self-assess performance quality accurately
   (c) Incorporate feedback for improved performance
   (d) Purposefully evaluate the quality of one’s thinking (metacognition)
9.3. Enact self-management strategies that maximize healthy outcomes.
9.4. Display high standards of personal integrity with others.

Goal 10. Career Planning and Development
Pursue realistic ideas about how to implement their psychological knowledge, skills, and values in occupational pursuits in a variety of settings.
Suggested Learning Outcomes

10.1. Apply knowledge of psychology (e.g., decision strategies, life span processes, psychological assessment, types of psychological careers) to formulating career choices.
10.2. Identify the types of academic experience and performance in psychology and the liberal arts that will facilitate entry into the work force, post-baccalaureate education, or both.
10.3. Describe preferred career paths based on accurate self-assessment of abilities, achievement, motivation, and work habits.
10.4. Identify and develop skills and experiences relevant to achieving selected career goals.
10.5. Demonstrate an understanding of the importance of lifelong learning and personal flexibility to sustain personal and professional development as the nature of work evolves.