NATIONAL STANDARDS FOR

HIGH SCHOOL PSYCHOLOGY CURRICULA

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High School Psychology Standards Working Group for Revised Standards (2005)

Kristin H. Whitlock, Chair, Viewmont High School, Bountiful, UT

Amy C. Fineburg, Spain Park High School, Hoover, AL

James E. Freeman, PhD, University of Virginia, Charlottesville, VA

Marie T. Smith, PhD, Thomas S. Wootton High School, Rockville, MD

High School Psychology Standards Working Group for Revised Standards (1999-2004)

Laura L. Maitland, Chair, Mepham High School, Bellmore, NY

Rob McEntarffer, Lincoln Southeast High School, Lincoln, NE

Kenneth A. Weaver, PhD, Emporia State University, Emporia, KS

Kristin H. Whitlock, Viewmont High School, Bountiful, UT

Task Force Members and Standards Authors (1994-1999)

Laura L. Maitland, Chair, Mepham High School, Bellmore, NY

Ruth M. Anderson, Clovis West High School, Clovis, CA

Charles T. Blair-Broeker, Cedar Falls High School, Cedar Falls, IA

Carol J. Dean, EdD, Lake Park High School, Roselle, IL

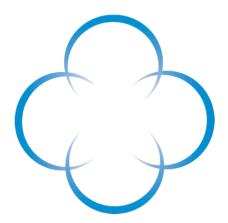
Randal M. Ernst, Lincoln High School, Lincoln, NE

Jane S. Halonen, PhD, James Madison University, Harrisonburg, VA

Bates Mandel, Ben Franklin High School, Philadelphia, PA

Wilbert J. McKeachie, PhD, University of Michigan, Ann Arbor, MI

Marilyn J. Reedy, Alverno College, Milwaukee, WI



This document is the most recent revision of the document originally entitled *National Standards for the Teaching of High School Psychology*, first approved by the APA Council of Representatives in August 1999. The APA Council of Representatives approved this revision in August 2005. This revision is effective as of August 2005, and supersedes the previous version.

WHY LEARN ABOUT PSYCHOLOGY IN HIGH SCHOOL?

Most of the challenging problems or otherwise salient issues of our society are linked in part to human attitudes, values, and behavior. Promoting health and safety, learning skills, work productivity, child and adolescent development, and human effectiveness in a world of technology and information are a few examples of such issues. Societal concerns about crime and violence, poverty and prejudice, environmental and consumer issues are yet other examples that directly implicate human thought and behavior. The science of psychology, in collaboration with other scientific fields, is contributing to our understanding of these problems and to their solutions. Thus, as the science of mind and behavior, an introduction to the discipline of psychology should be part of the curriculum for high school students.

Through the study of scientific psychology, students gain an understanding of the complexities of human thought and behavior, as well as the factors related to the differences between people. Students also gain a basic understanding of the scientific methods that are at the core of the discipline. Students are able to directly apply knowledge gained from a psychology class to their daily lives. The scope of high school psychology is extensive; the American Psychological Association (APA) estimates that about 370,000 high school students annually are enrolled in psychology classes. In 2005, about 86,000 students took the Advanced Placement psychology exam.

Psychology is a science with connections to social and natural sciences. Because of the departmental structure of American high schools, psychology courses are taught in either the social studies department or the science department (or both). Such departmental designations often influence the curriculum. Courses in the social studies department may emphasize history, personality, and social psychology, whereas courses in the science department frequently emphasize biological bases of behavior, sensation and perception, and learning. Neither social studies nor science curriculum standards have addressed psychology adequately. Consequently, these variations in high school courses of psychology

mean that students' first exposures to psychology as a discipline can be vastly different in content and level of challenge from one school to another, unlike what is expected in other fields of science taught in secondary schools.

It is apparent that if psychology is to be learned as a scientific discipline at the secondary level of education, as are other sciences, there need to be learning objectives within the subfields of psychology. It was in this context that the American Psychological Association commissioned the Task Force for the Development of National High School Psychology Standards in 1994 to develop standards that identify what students in an introductory high school psychology course should learn. Task force members included experienced psychology educators at the secondary and university levels as well as other scientists in the profession.

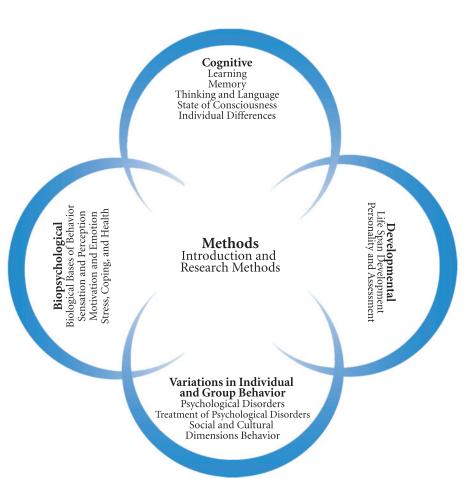
From the onset of this project, the task force members anticipated the need for periodic revision of the standards due to the continued advancement of psychology as a discipline. Soon after the original approval in August 1999 of the psychology curricula standards, the High School Psychology Standards Working Group was formed to coordinate the revision process. A rigorous review process was conducted to produce a document that represents the best practices in the teaching of psychology as both a natural and social science. This current version of the standards reflects the growing and evolving body of knowledge high school psychology students are expected to learn.

These standards were designed to enhance quality curricula, to express learning goals for students, and to promote change in the teaching of the high school introductory psychology course. The public has a right to expect a course in psychology to meet criteria for quality. Expectations with respect to learning goals should be clear. Standards related to knowledge and skills expected of students should be high but attainable. This document represents a vision of what students should know and be able to do after completing the high school psychology course.

EXECUTIVE SUMMARY

The mission of the task force and subsequent revision committees was to prepare a document that can be used by policymakers, educational leaders, teachers, parents, and other stakeholders to determine what high school psychology students should know and how they can demonstrate what they know. Use of the term "standards" in this document is consistent with national practices in K-12 education when disciplinary societies, teacher organizations, or other nonregulatory groups develop benchmark learning objectives for curriculum development and assessment of student learning in particular subjects of study. Consistent with the use of the term "standards" in a secondary school setting, these standards are advisory.

This document provides standards designed for 15 units: introduction and research methods, biological bases of behavior, sensation and perception, motivation and emotion, stress, coping, and health, life span development, personality and assessment, learning, memory, thinking and language, states of consciousness, individual differences, psychological disorders, treatment of psychological disorders, and social and cultural dimensions of behavior. The five content domains are Methods, Biopsychological, Developmental, Cognitive, and Variations in Individual and Group Behavior. The content standards are organized according to these domains as illustrated below:



The placement of Methods at the center of the model underscores the importance of teaching the content and skills consistent with the science of psychology as the core activity of the course.

PROCESS OF DEVELOPING AND REVISING THE STANDARDS

Initial development of these psychology curricula standards resulted through the contributions of many individuals and groups. Virginia Andreoli Mathie, PhD, her committee from the APA National Conference on Enhancing the Quality of Undergraduate Education in Psychology (St. Mary's College, June 1991), the APA Board of Educational Affairs (BEA), the APA High School Standards Task Force, and Jill Reich, PhD, executive director of the Education Directorate, were key leaders in the development of the original psychology curricula standards published in August 1999.

The psychology curricula standards began with BEA approval for the project in spring 1994. The APA Board of Directors approved a High School Standards Task Force in June 1994, with subsequent approval of the task force by the APA Council of Representatives. The initial set of standards was developed in 1995, and the document went through seven drafts as APA boards, committees, and divisions, and members of the APA Teachers of Psychology in Secondary Schools (TOPSS) reviewed the standards and submitted comments for consideration. In spring 1998, the final version was approved by BEA. The APA Board of Directors approved the final version in fall 1998, followed by the APA Council of Representatives' approval in August 1999.

For this first revision of these standards, recommendations were solicited in 2001 from all APA directorates, boards and committees, divisions, and caucuses to update the content standards, performance standards, and performance indicators. Psychologists identified as content experts from each of the five original domains (i.e., Methods, Biopsychological, Developmental, Cognitive, and Variations in Individual and Group Behavior) were asked to review the set of recommendations for each respective domain. The High School Psychology Standards Working Group reviewed the experts' feedback and developed the revised standards in November 2003. APA boards and committees reviewed these revisions and provided additional feedback in fall 2004. A new Standards Working Group convened in January 2005 and incorporated the additional suggestions. The final revised document was circulated to all APA boards and committees in spring 2005. The APA Board of Directors approved the final revised version of the psychology curricula standards in June 2005, followed by APA Council of Representatives' approval in August 2005.

RESOURCE DOCUMENTS

Resources used for creating the psychology curricula standards included references to existing high school standards promulgated by similar disciplinary organizations (i.e., Principles and Standards for School Mathematics promulgated by the National Council of Teachers of Math, Standards for the English Language Arts promulgated by the National Council of Teachers of English, National Standards for History promulgated by the National Center for History in the Schools, Curriculum Standards for Social Studies promulgated by the National Council for the Social Studies, and National Science Education Standards promulgated by the National Research Council) (NCTM; NCTE; NCH; NCSS; NCR; 2004). Standards from similar disciplinary organizations were examined relative to these standards. The psychology curricula standards parallel similar standards of related disciplines.

Additional resources included use of the Guidelines on Multicultural Education, Training, Research, Practice, and Organizational Change for Psychologists (APA, 2003), the Ethical Principles of Psychologists and Code of Conduct (APA, 2002), and the Handbook for Enhancing Undergraduate Education in Psychology (McGovern, 1993). The Guidelines on Multicultural Education, Training, Research, Practice, and Organizational Change for Psychologists were used as a guide for informing the committee about content specific to education. Similarly, the content that is contained in the standards is consistent with the Ethical Principles of Psychologists and Code of Conduct. Finally, the Handbook for Enhancing Undergraduate Education in Psychology offers guidance regarding curricula for the undergraduate major. The psychology curricula standards are designed to address the introductory course in psychology; hence, the Handbook for Enhancing Undergraduate Education in Psychology provided support for the domains of introductory psychology.

INDIVIDUAL AND CULTURAL DIVERSITY ISSUES

The psychology curricula standards have been reviewed for cultural diversity issues consistent with the *Guidelines on Multicultural Education, Training, Research, Practice, and Organizational Change for Psychologists* (APA, 2003). Further, expert reviewers who were nominated by the Committee of Women in Psychology reviewed these standards. The respective committees of APA that are specifically focused on issues of diversity (e.g., Committee of Ethnic Minority Affairs, Committee of Lesbian, Gay, and Bisexual Concerns) also provided input to the document.

FEEDBACK

The task force and subsequent revision committees view this publication as a "living document." All of the standards have been reviewed by numerous educators and scientists and revised extensively. Comments and suggestions are welcomed. Feedback can be sent to the High School Psychology Standards Working Group, c/o APA Education Directorate, 750 First Street, NE, Washington, DC 20002-4242.

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NATIONAL STANDARDS FOR HIGH SCHOOL PSYCHOLOGY CURRICULA 2005 REVISION

Development of the *National Standards for High School Psychology Curricula* originated in 1994 when a task force commissioned by the American Psychological Association (APA) identified what students in an introductory high school psychology course should learn. In addition to setting forth learning objectives for students, this document provides guidance for teaching based on active learning principles and recommendations for student learning assessment. The psychology curricula standards were adopted as APA policy in 1999; this 2005 revision reflects advances in the field and updates in content.

This document is constructed to guide curriculum decisions by providing content and performance standards to guide teachers in designing instruction.

The standards are hierarchically organized to reflect increasing levels of specificity (i.e., domains, standard areas, content standards, performance standards, and performance indicators).

Domains and Standard Areas

Organization of these standards reflects five broad content domains: Methods, Biopsychological, Developmental, Cognitive, and Variations in Individual and Group Behavior. Central to the discipline of psychology, the Methods Domain serves as the foundation and unifying element of the standards. Broad content domains following the Methods Domain include Biopsychological, Developmental, Cognitive, and Variations in Individual and Group Behavior.

Each standard area refers to a major topic or unit representing a subdivision of psychology. The respective standard areas within each of the broad domains are listed below.

- I. Methods Domain
 - A. Introduction and Research Methods
- II. Biopsychological Domain
 - A. Biological Bases of Behavior

- B. Sensation and Perception
- C. Motivation and Emotion
- D. Stress, Coping, and Health
- III. Developmental Domain
 - A. Life Span Development
- B. Personality and Assessment
- IV. Cognitive Domain
 - A. Learning
 - B. Memory
 - C. Thinking and Language
 - D. States of Consciousness
 - E. Individual Differences
- V. Variations in Individual and Group Behavior Domain
 - A. Psychological Disorders
 - B. Treatment of Psychological Disorders
 - C. Social and Cultural Dimensions of Behavior

Content Standards

Content standards are more explicit and are grouped within each standard area. For example, the Standard Area Biological Bases of Behavior contains the following content standards:

- IIA-1. Structure and function of the neuron
- IIA-2. Organization of the nervous system
- IIA-3. Hierarchical organization of the structure and function of the brain
- IIA-4. Technologies and clinical methods for studying the brain
- IIA-5. Structure and function of the endocrine system
- IIA-6. How heredity interacts with the environment to influence behavior
- IIA-7. How psychological mechanisms are influences by evolution

Therefore, a curriculum designed to meet the Biological Bases of Behavior standard area would include instruction in the aforementioned seven content standards.

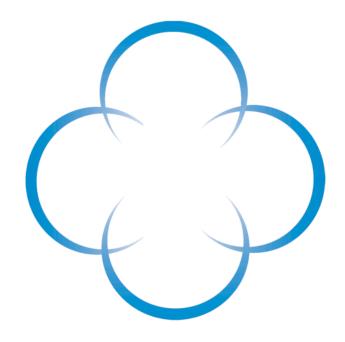
Performance Standards

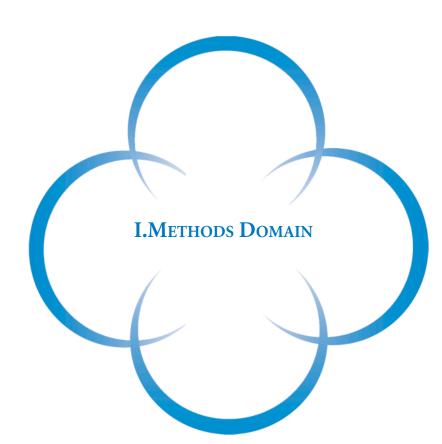
Within each of the content standards, students should receive instruction that would enable them to meet specific performance standards. For example, three performance standards are included in Content Standard IIA-1: Structure and function of the neuron:

- IIA-1.1 Identify the neuron as the basis for neural communication.
- IIA-1.2 Describe how information is transmitted and integrated in the nervous system.
- IIA-1.3 Analyze how the process of neurotransmission can be modified by heredity and environment.

Performance Indicators

Finally, assessment of student learning can entail a variety of techniques and specific content. Hence, each performance standard includes examples of potential ways that a student can demonstrate mastery of the material—labeled performance indicators. Performance indicators throughout this document function merely as examples and are not meant to be all inclusive.





STANDARD AREA IA: INTRODUCTION AND RESEARCH METHODS

Content Standards

After concluding this unit, students understand:

- IA-1. Contemporary perspectives used by psychologists to understand behavior and mental processes
- IA-2. Major subfields and career opportunities that comprise psychology
- IA-3. Research strategies used by psychologists to explore behavior and mental processes
- IA-4. Purpose and basic concepts of statistics
- IA-5. Ethical issues in research with human and other animals that are important to psychologists
- IA-6. Development of psychology as an empirical science

Content Standards With Performance Standards and Suggested Performance Indicators CONTENT STANDARD IA-1: Contemporary perspectives used by psychologists to understand behavior and mental processes in context

Students are able to (performance standards):

IA-1.1 Describe and compare the biological, behavioral, cognitive, sociocultural, humanistic, and psychodynamic perspectives.

Students may indicate this by (performance indicators):

- a. Analyzing how each perspective would explain concepts, e.g., aggression, altruism
- b. Evaluating the limitations of each perspective in assessing behavior and mental processes
- c. Comparing primary emphases of the different perspectives
- d. Examining historical factors that influenced the popularity of a selected perspective

CONTENT STANDARD IA-2: Major subfields and career opportunities that comprise psychology Students are able to (performance standards):

IA-2.1 List and explain the major subfields of psychology.

Students may indicate this by (performance indicators):

- a. Identifying the different subfields of psychology, such as clinical, counseling, social, experimental, school, and developmental psychology
- b. Recognizing applied specializations, including forensic, community, industrial/organizational, human factors, cross-cultural, sports, or rehabilitation psychology, among others
- c. Explaining the differences between a psychologist and psychiatrist
- d. Exploring career opportunities for college graduates with psychology majors

CONTENT STANDARD IA-3: Research strategies used by psychologists to explore behavior and mental processes Students are able to (performance standards):

IA-3.1 Describe the elements of an experiment.

- a. Identifying the independent and dependent variables, possible confounding variables, and control and experimental groups in a description of an experiment
- b. Designing an experiment in which the hypothesis, population, sample, independent variable, dependent variable, random assignment, and experimental and control groups are properly identified

IA-3.2 Explain the importance of sampling and random assignment in psychological research.

Students may indicate this by (performance indicators):

- a. Identifying examples of representative and biased samples in research designs
- b. Specifying how random assignment permits causal inferences
- c. Explaining the importance of being able to generalize results of research
- d. Describing how sample selection (e.g., representation of gender, ethnicity, age, etc.) influences results

IA-3.3 Describe and compare quantitative and qualitative research strategies.

Students may indicate this by (performance indicators):

- a. Explaining the characteristics of surveys, naturalistic observation, case studies, longitudinal studies, cross-sectional research, and experiments
- b. Identifying the suitability of a given method for testing a given hypothesis
- c. Specifying the populations to which a particular research result may be generalized

CONTENT STANDARD IA-4: Purposes and basic concepts of statistics

Students are able to (performance standards):

IA-4.1 Define descriptive statistics and explain how they are used by behavioral scientists.

Students may indicate this by (performance indicators):

- a. Providing examples of situations in which descriptive statistics can be used to organize and analyze information
- b. Explaining how statistical analysis can add value to the interpretation of behavior
- c. Citing a statistical finding to strengthen an argument

IA-4.2 Explain and describe measures of central tendency and variability.

Students may indicate this by (performance indicators):

- a. Calculating the mean, median, and mode for a set of data
- b. Explaining the characteristics of a normal distribution
- c. Providing examples of psychological variables that tend to be normally distributed
- d. Applying the concepts of variability, such as range and standard deviation, to supplement information about central tendency in a normal distribution

IA-4.3 Describe the concept of correlation and explain how it is used in psychology.

Students may indicate this by (performance indicators):

- a. Differentiating between positive, negative, and zero correlations
- b. Identifying and providing examples of how correlations can be used to predict future behavior or performance
- c. Explaining the difference between correlation and causation

IA-4.4 Recognize how inferential statistics are used in psychological research.

- a. Recognizing the basic process that psychologists use to draw statistical inferences
- b. Defining statistical significance as a statement of probability
- c. Recognizing limitations in interpretation of statistical significance

CONTENT STANDARD IA-5: Ethical issues in research with human and other animals that are important to psychologists

Students are able to (performance standards):

IA-5.1 Identify ethical issues in psychological research.

Students may indicate this by (performance indicators):

- a. Discussing ethical issues in psychological research
- b. Identifying historical examples of research that may have departed from contemporary ethical standards
- c. Acknowledging the importance of adhering to APA and government ethical standards and procedures (i.e., Institutional Review Boards) for working with humans and other animals
- d. Explaining the use and value of humans and other animals in behavioral research, including their ethical treatment

CONTENT STANDARD IA-6: Development of psychology as an empirical science

Students are able to (performance standards):

IA-6.1 Discuss psychology's roots in philosophy and natural science.

Students may indicate this by (performance indicators):

- a. Describing the form psychology took before the 20th century (e.g., Aristotle, Locke)
- b. Summarizing some 19th century scientific research findings (e.g., Helmholtz, Weber, and Fechner)
- c. Analyzing how philosophical issues become psychological when tested empirically

IA-6.2 Describe the emergence of experimental psychology.

Students may indicate this by (performance indicators):

- a. Defining psychophysics and describing its impact on empirical psychology
- b. Identifying Wilhelm Wundt's contributions to experimental psychology
- c. Comparing philosophical argument with the empirical method

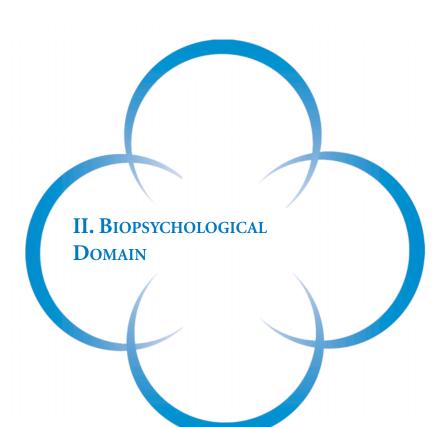
IA-6.3 Recognize the diversity of psychological theories in the 20th and 21st centuries.

Students may indicate this by (performance indicators):

- a. Describing the 20th and 21st centuries "schools" of psychology (e.g., behaviorism, Gestalt psychology, psychoanalysis, humanistic psychology, cognitive psychology)
- b. Showing how different theories of psychology produce different explanations of a particular behavior (e.g., truancy, altruism)
- c. Explaining the growing influence of new approaches to psychology (e.g., positive psychology, behavioral genetics, or the study and practice of psychology at the beginning of the 21st century)

IA-6.4 Describe psychology's increasing inclusiveness of diverse interests and constituents.

- a. Comparing the diverse topics that generate contemporary research with early research emphases
- b. Identifying how research biases have influenced research design and scope
- c. Exploring reasons why psychology had more limited participation from women and ethnic minorities in its early stages
- d. Highlighting contributions by ethnic minority psychologists
- e. Describing historical events and processes affecting the experiences and opportunities of minority groups



STANDARD AREA IIA: BIOLOGICAL BASES OF BEHAVIOR

Content Standards

After concluding this unit, students understand:

- IIA-1. Structure and function of the neuron
- IIA-2. Organization of the nervous system
- IIA-3. Hierarchical organization of the structure and function of the brain
- IIA-4. Technologies and clinical methods for studying the brain
- IIA-5. Structure and function of the endocrine system
- IIA-6. How heredity interacts with the environment to influence behavior
- IIA-7. How psychological mechanisms are influenced by evolution

Content Standards With Performance Standards and Suggested Performance Indicators

CONTENT STANDARD IIA-1: Structure and function of the neuron

Students are able to (performance standards):

IIA-1.1 Identify the neuron as the basis for neural communication.

Students may indicate this by (performance indicators):

- a. Using diagrams, models, and/or computer programs to identify the structure and function of different parts of a neuron
- b. Discussing how internal and external stimuli initiate the communication process in the neuron
- c. Describing the electrochemical process that propagates the neural impulse

IIA-1.2 Describe how information is transmitted and integrated in the nervous system.

Students may indicate this by (performance indicators):

- a. Describing the process of synaptic transmission
- b. Contrasting excitatory and inhibitory transmission

IIA-1.3 Analyze how the process of neurotransmission can be modified by heredity and environment.

Students may indicate this by (performance indicators):

- a. Comparing the effects of certain drugs or toxins with the effects of neurotransmitters in relation to synaptic transmission
- b. Discussing the role of neurotransmitters in Parkinson's disease, hyperactivity, and/or multiple sclerosis
- c. Describing how learning affects neural transmission (e.g., Eric Kandel's work)

CONTENT STANDARD IIA-2: Organization of the nervous system

Students are able to (performance standards):

IIA-2.1 Classify the major divisions and subdivisions of the nervous system.

- a. Describing how views of the nervous system have evolved
- b. Identifying the central nervous system and its component parts
- c. Identifying the peripheral nervous system and its subdivisions

IIA-2.2 Differentiate the functions of the various subdivisions of the nervous system.

Students may indicate this by (performance indicators):

- a. Comparing the functions of the somatic and autonomic nervous systems
- b. Explaining the function of the sympathetic and the parasympathetic nervous systems on heart rate or other physiological responses in an emotional situation

CONTENT STANDARD IIA-3: Hierarchical organization of the structure and function of the brain Students are able to (performance standards):

IIA-3.1 Identify the structure and function of the major regions of the brain.

Students may indicate this by (performance indicators):

- a. Identifying the regions of the brain by using diagrams and/or computer-generated diagrams
- b. Summarizing the functions of the major brain regions

IIA-3.2 Recognize that specific functions are centered in specific lobes of the cerebral cortex.

Students may indicate this by (performance indicators):

- a. Describing the functions controlled by the frontal, parietal, occipital, and temporal lobes of the cerebral cortex
- b. Relating examples of research on cortical functioning

IIA-3.3 Describe lateralization of brain functions.

Students may indicate this by (performance indicators):

- a. Identifying the role of the corpus callosum in hemispheric communication
- b. Identifying how vision, motor, language, and other functions are regulated by the hemispheres
- c. Explaining the purpose and findings of split-brain research
- d. Analyzing critically popular conceptions of hemispheric specialization

CONTENT STANDARD IIA-4: Technologies and clinical methods for studying the brain Students are able to (performance standards):

IIA-4.1 Explain how research and technology have provided methods to analyze brain behavior and disease.

Students may indicate this by (performance indicators):

- a. Describing how lesions and electrical stimulation in animal research provide information about brain functions
- b. Discussing how the use of the CT scan, PET scan, MRI, fMRI, and EEG provides information about the brain

CONTENT STANDARD IIA-5: Structure and function of the endocrine system

Students are able to (performance standards):

IIA-5.1 Describe how the endocrine glands are linked to the nervous system.

- a. Discussing the effect of the hypothalamus on the endocrine system
- b. Identifying the influence of fetal hormones on sexual differentiation of the central nervous system
- c. Giving examples of how hormones are linked to behavior and behavioral problems

CONTENT STANDARD IIA-6: How heredity interacts with environment to influence behavior

Students are able to (performance standards):

IIA-6.1 Assess the effects of heredity and environment on behavior.

Students may indicate this by (performance indicators):

- a. Identifying the relationships among DNA, genes, and chromosomes
- b. Differentiating between genotype and phenotype
- c. Explaining how chromosomal abnormalities can cause Down and/or Turner's syndrome
- d. Using twin and adoption studies to assess the influence of heredity and environment on behavior
- e. Comparing results from inbred and outbred strains of rats and mice

CONTENT STANDARD IIA-7: How psychological mechanisms are explained by evolution

Students are able to (performance standards):

IIA-7.1 Explain how evolved tendencies interact with the present environment and culture to determine behavior.

- a. Describing how the environment selects traits and behaviors that increase the survival rate of organisms
- b. Comparing and contrasting sleeping behavior in animals and humans

STANDARD AREA IIB: SENSATION AND PERCEPTION

Content Standards

After concluding this unit, students understand:

- IIB-1. Basic concepts explaining the capabilities and limitations of sensory processes
- IIB-2. Interaction of the person and the environment in determining perception
- IIB-3. Nature of attention

Content Standards With Performance Standards and *Suggested* Performance Indicators **CONTENT STANDARD IIB-1: Basic concepts explaining the capabilities and limitations of sensory processes** Students are able to (performance standards):

IIB-1.1 Explain the concepts of threshold, adaptation, and constancy.

Students may indicate this by (performance indicators):

- a. Devising demonstrations that illustrate threshold, adaptation, and constancy
- b. Providing real-life examples of threshold, adaptation, and constancy
- c. Describing classical examples of psychophysical research

IIB-1.2 Describe the operation of sensory systems.

Students may indicate this by (performance indicators):

- a. Identifying the physiological features common across all sensory systems (e.g., receptors, pathways to the brain, transduction)
- b. Labeling a diagram of the parts of the eye and ear and explaining the role of each part
- c. Explaining the operation of other sensory systems, such as taste and touch
- d. Discussing how to protect sensory systems(e.g., avoiding prolonged loud voices)

IIB-1.3 List forms of energy for which we do and do not have sensory receptors.

Students may indicate this by (performance indicators):

- a. Comparing the sensory capabilities of humans and other species, such as the echo-detection system in bats
- b. Hypothesizing about system limitations, such as human limits related to sensing the spectrum of light

IIB-1.4 Relate knowledge of sensory processes to applications in areas such as engineering psychology, advertising, music, architecture, and so on.

Students may indicate this by (performance indicators):

- a. Analyzing advertisements for their use of sensory information
- b. Finding examples of sensory principles in an area other than advertising, such as in music or textbooks

CONTENT STANDARD IIB-2: Interaction of the person and the environment in determining perception Students are able to (performance standards):

IIB-2.1 Explain Gestalt concepts and principles, such as figure-ground, continuity, similarity, proximity, closure, and so on.

- a. Finding examples of Gestalt principles
- b. Constructing demonstrations of Gestalt principles
- c. Explaining the significance of "the whole is greater than the sum of its parts"

IIB-2.2 Describe binocular and monocular depth cues.

Students may indicate this by (performance indicators):

- a. Analyzing how three-dimensional viewers or random dot stereograms use stereopsis to create depth
- b. Finding examples of monocular depth cues, such as linear perspective and relative size, in pictures, paintings, or photographs

IIB-2.3 Describe the influence on perception of environmental variables, motivation, past experiences, culture, and expectations.

Students may indicate this by (performance indicators):

- a. Analyzing the factors that influence the validity of eyewitness testimony (e.g., framing of questions, cross-racial identification problems)
- b. Hypothesizing why students from different schools disagree about an official's call in a football game
- c. Comparing perceptions of school violence in urban, suburban, and rural communities from the standpoint of race/ethnicity, class, or gender
- d. Hypothesizing about how perceptual principles may relate to stereotypes and prejudice
- e. Describing cross-cultural studies that illustrate cultural similarities and differences in perception
- f. Discriminating between bottom-up and top-down processing and how those interact when we encounter new stimuli.

CONTENT STANDARD IIB-3: Nature of attention

Students are able to (performance standards):

IIB-3.1 Explain what is meant by attention.

Students may indicate this by (performance indicators):

- a. Finding examples of selective attention and divided attention
- b. Identifying variables that draw attention to a particular event
- c. Identifying variables that influence the ability to divide attention
- d. Designing a demonstration that illustrates the difference between selective attention and divided attention, such as listening to a lecture while taking notes
- e. Relating signal detection theory to an everyday example

IIB-3.2 Describe how attention differs for demanding versus simple tasks.

- a. Analyzing the amount of attention required for demanding versus simple tasks
- b. Applying knowledge of attentional processes to design an ideal environment for homework

STANDARD AREA IIC: MOTIVATION AND EMOTION

Content Standards

After concluding this unit, students understand:

- IIC-1. Motivational concepts
- IIC-2. The role of biology and learning in motivation and emotion
- IIC-3. Major theories of motivation
- IIC-4. Interaction of biological and cultural factors in emotions and motivations
- IIC-5. Role of values and expectancies in determining choice and strength of motivation
- IIC-6. Physiological, affective, cognitive, and behavioral aspects of emotions and the interactions among these aspects
- IIC-7. Effects of motivation and emotion on perception, cognition, and behavior

Content Standards With Performance Standards and *Suggested* Performance Indicators **CONTENT STANDARD IIC-1: Motivational concepts**

Students are able to (performance standards):

IIC-1.1 Apply motivational concepts to the behavior of humans and other animals.

Students may indicate this by (performance indicators):

- a. Describing their own motives, goals, and values
- b. Analyzing the goals and expectancies in a case study or vignette
- c. Identifying the values or motives appealed to in political campaigns or television advertisements
- d. Analyzing factors that may increase their intrinsic motivation for studying psychology
- e. Explaining how the effect of teacher praise or punishment on student motivation depends on the student's attribution
- f. Giving examples of how motivation has and can be studied

CONTENT STANDARD IIC-2: The role of biology and learning in motivation and emotion

Students are able to (performance standards):

IIC-2.1 Describe the interaction of internal cues and learning on basic drives.

Students may indicate this by (performance indicators):

- a. Explaining why one becomes hungry when one smells bread baking or hears an ice cream truck
- b. Discussing how the concepts of homeostasis and adaptation level can be applied in understanding motivated behavior
- c. Describing how addiction and tolerance to drugs are modified by learning

IIC-2.2 Describe the situational cues giving rise to anger and fear.

Students may indicate this by (performance indicators):

- a. Analyzing occasions on which they became angry or afraid
- b. Evaluating personal experiences of discrimination giving rise to fear and/or anger

IIC-2.3 Describe the situational cues and individual characteristics giving rise to curiosity and anxiety.

- a. Explaining why one person would be curious and another anxious in the same situation
- b. Discussing why one person responds to stereotyping without anxiety and another person responds with anxiety

CONTENT STANDARD IIC-3: Major theories of motivation

Students are able to (performance standards):

IIC-3.1 Describe one or more theories of motivation, such as expectancy value, cognitive dissonance, arousal, Maslow's hierarchy of needs, and drive reduction.

Students may indicate this by (performance indicators):

- a. Applying Maslow's theory to make predictions about meeting needs
- b. Citing research to support a theory of motivation
- c. Comparing and contrasting two theories of motivation

CONTENT STANDARD IIC-4: Interaction of biological and cultural factors in emotions and motivations Students are able to (performance standards):

IIC-4.1 Explain how common motives and emotions develop.

Students may indicate this by (performance indicators):

- a. Describing how the development of their own motives was affected by their parents, peers, and genetic and biological factors
- b. Describing changes in their own motivation from the beginning of the school year to the present
- c. Identifying how motivation for food develops
- d. Discussing how motives differ for those who drop out of school compared to those who stay in school
- e. Describing how expectations about menstruation affect "premenstrual symptoms" and emotions

CONTENT STANDARD IIC-5: Role of values and expectancies in determining choice and strength of motivation Students are able to (performance standards):

IIC-5.1 Use expectancy-value theory to explain their own and others' behavior.

Students may indicate this by (performance indicators):

- a. Analyzing how expectancy-value theory explains how they spent their time the previous evening
- b. Using strategies for motivating themselves for desired behaviors, such as studying

CONTENT STANDARD IIC-6: Physiological, affective, cognitive, and behavioral aspects of emotions and the interactions among these aspects

Students are able to (performance standards):

IIC-6.1 Describe theories of emotion, such as James-Lange, Cannon-Bard, or cognitive theories.

Students may indicate this by (performance indicators):

- a. Citing research to support a theory of emotion
- b. Comparing and contrasting two theories of emotion
- c. Discussing key ideas of emotional intelligence

IIC-6.2 Explaining how emotions and behaviors are related.

- a. Describing how emotions related to non-verbal communication
- b. Identifying components of the emotional experience

CONTENT STANDARD IIC-7: Effects of motivation and emotion on perception, cognition, and behavior Students are able to (performance standards):

IIC-7.1 Describe differences in perception between individuals differing in motivation.

Students may indicate this by (performance indicators):

- a. Explaining how supporters of opposing football or basketball teams differ in their perceptions of possible fouls
- b. Comparing reactions of individuals to literary and artistic works

IIC-7.2 Explain how learning, memory, problem-solving, and decision-making strategies are influenced by motivation and emotion.

- a. Describing the effect of motivation and emotion on their learning from the assignment for today's class
- b. Hypothesizing about the effect of mood differences on behavior between Wednesday and Friday
- c. Gathering examples of advertisements or political appeals designed to motivate choice or behavior
- d. Explaining the relationship between level of arousal and performance

STANDARD AREA IID: STRESS, COPING, AND HEALTH

Content Standards

After concluding this unit, students understand:

- IID-1. Sources of stress
- IID-2. Physiological reactions to stress
- IID-3. Psychological reactions to stress
- IID-4. Cognitive and behavioral strategies for dealing with stress and promoting health

Content Standards With Performance Standards and Suggested Performance Indicators

CONTENT STANDARD IID-1: Sources of stress

Students are able to (performance standards):

IID-1.1 Identify and explain major sources of stress.

Students may indicate this by (performance indicators):

- a. Defining frustration and giving examples of how it can be a source of stress
- b. Relating results of research about stress effects on animals
- c. Explaining and giving examples of approach—approach, approach—avoidance, and avoidance—avoidance conflicts
- d. Explaining how the hassles of contemporary life are a source of stress
- e. Discussing how our cognitive appraisal of situations can cause stress
- f. Exploring how challenges in work environments, such as violence, harassment, and downsizing, can increase stress reactions
- g. Examining the impact of discrimination from sexism, heterosexism, racism, ageism, and so on
- h. Examining the impact of discrimination on people with accents or distinguishing phenotypes
- i. Describing the impact of poverty on levels of daily stress

CONTENT STANDARD IID-2: Physiological reactions to stress

Students are able to (performance standards):

IID-2.1 List and explain possible physiological reactions to stress.

Students may indicate this by (performance indicators):

- a. Comparing the results of initial fight or flight experiments with animals to human stress reactions
- b. Describing Selye's General Adaptation Syndrome (GAS)
- c. Describing how stress can affect the immune system
- d. Explaining models of stress such as learned helplessness

CONTENT STANDARD IID-3: Psychological reactions to stress

Students are able to (performance standards):

IID-3.1 List and explain possible psychological reactions to stress.

- a. Relating personal examples of how stress can impair psychological functioning in such areas as work, school, and relationships
- b. Explaining how stress can affect neurotransmitter function, mood states, and immunity to illness
- c. Describing how stress may have positive outcomes
- d. Discussing how cultural differences can influence one's reaction to stress

CONTENT STANDARD IID-4: Cognitive and behavioral strategies for dealing with stress and promoting health

Students are able to (performance standards):

IID-4.1 Identify and explain cognitive strategies to deal with stress and promote health.

Students may indicate this by (performance indicators):

- a. Describing how the use of problem solving and other cognitive strategies may help to cope with stress and promote health
- b. Explaining how person versus situation attributions for life events can influence one's response to stressors and promote health
- c. Discussing the sources and beneficial effects of hope and optimism

IID-4.2 Identify and explain behavioral strategies to deal with stress and promote health.

- a. Explaining how defense mechanisms, regular exercise, relaxation, spiritual practices, and social support can help to alleviate some negative effects of stress and promote health
- b. Brainstorming ways in which changing behavior may alleviate some negative effects of stress and promote health
- c. Identifying behavioral strategies for coping with stress that can negatively influence health, such as smoking and substance abuse
- d. Discussing the pros and cons of seeking professional help to cope with stress



STANDARD AREA IIIA: LIFE SPAN DEVELOPMENT

Content Standards

After concluding this unit, students understand:

- IIIA-1. Development as a lifelong process
- IIIA-2. Research techniques used to gather data on the developmental process
- IIIA-3. Theories of development
- IIIA-4. Issues surrounding the developmental process (nature/nurture, continuity/discontinuity, stability/instability, critical periods)

Content Standards With Performance Standards and *Suggested* Performance Indicators **CONTENT STANDARD IIIA-1: Development as a lifelong process** Students are able to (performance standards):

IIIA-1.1 Describe physical, social, and cognitive changes from the prenatal period throughout the life span.

Students may indicate this by (performance indicators):

- a. Illustrating developmental changes in physical, cognitive, and social development
- b. Describing research on child development
- c. Hypothesizing on the interaction of physical, cognitive, and/or social changes in behavior
- d. Inferring how peer relationships change over time
- e. Describing similarities and differences in development across cultures
- f. Discussing the relative importance of peers' versus parents' influence in different cultural groups
- g. Examining the role of psychology in enhancing the life of older adults

IIIA-1.2 Examine the nature of change over the life span.

Students may indicate this by (performance indicators):

- a. Describing how social roles change over time
- b. Examining how culture, ethnicity, race, age, religion, gender, social class, ability/disability, and sexual orientation, and so on affect our lives over the life span
- c. Discussing quality-of-life issues related to aging

IIIA-1.3 Identify the complex cognitive structures found in the early development of infants and young children.

Students may indicate this by (performance indicators):

- a. Citing research on the capabilities of infants and young children
- b. Comparing contemporary research on early views of infant capabilities with current understanding
- c. Discussing the role of the caregiver in promoting child development
- d. Explaining how cultural practices in child-rearing may influence cognitive development

IIIA-1.4 Apply life span principles to personal experience.

- a. Comparing their own life experiences with general patterns of others from their generation
- b. Predicting their own developmental changes over time
- c. Describing transition from childhood to adolescence
- d. Explaining the transition from adolescence to adulthood
- e. Projecting themselves into late life adulthood (i.e., post 65)

CONTENT STANDARD IIIA-2: Research techniques used to gather data on the developmental process Students are able to (performance standards):

IIIA-2.1 Explain the distinguishing characteristics of the longitudinal and cross-sectional methods of study.

Students may indicate this by (performance indicators):

- a. Describing key features of each research technique
- b. Evaluating strengths and weaknesses of each research technique
- c. Demonstrating how certain research techniques relate to specific developmental issues
- d. Identifying behaviors and characteristics across generations
- e. Explaining the advantages of using animals to study life span issues
- f. Relating details of a specific longitudinal or cross-sectional study and its impact for understanding human development

CONTENT STANDARD IIIA-3: Theories of development

Students are able to (performance standards):

IIIA-3.1 Explain various developmental models.

Students may indicate this by (performance indicators):

- a. Explaining components of various developmental models (e.g. Piaget, Erikson, Kohlberg)
- b. Applying developmental theories to life situations
- c. Identifying limitations of stage theories

IIIA-3.2 Recognize how biological and cultural notions of gender shape the experiences of men and women.

Students may indicate this by (performance indicators):

- a. Explaining the differences between sex, identity, and roles
- b. Exploring effects of gender discrimination on development throughout the life span
- c. Explaining how gender identity develops
- d. Exploring how gender expectations may differ depending on ethnicity and acculturation
- e. Identifying biological factors that may lead to gender differences and similarities

IIIA-3.3 Examine the development of ethnic identity.

Students may indicate this by (performance indicators):

- a. Analyzing case studies that illustrate ethnic identity development
- b. Exploring effects of ethnic discrimination on development
- c. Identifying commonalties across racial and ethnic boundaries
- d. Examining theories on multiracial and multiethnic identity and the contexts in which they were developed

IIIA-3.4 Explore developmental theories as they relate to cultural bias.

- a. Identifying how cultural differences affect development, such as in collectivist versus individualist cultures
- b. Evaluating strengths and weaknesses of developmental theories, such as Erikson's stage of identity versus role confusion, from the perspective of different cultures
- c. Exploring effects of discrimination on the basis of sexual orientation on the understanding of human development

CONTENT STANDARD IIIA-4: Issues surrounding the developmental process (nature/nurture, continuity/discontinuity, stability/instability, critical periods)

Students are able to (performance standards):

IIIA-4.1 Describe the role of critical periods in development.

Students may indicate this by (performance indicators):

- a. Giving an example of a critical period in development
- b. Evaluating significance of critical periods in development
- c. Explaining difficulties of research in the area of critical periods
- d. Linking cortical development to enriched environments during critical periods

IIIA-4.2 Explain the issues of continuity/discontinuity and stability/instability in development.

- a. Giving an example to illustrate continuity or discontinuity in development
- b. Citing research concerning stability or instability of traits over time

STANDARD AREA IIIB: PERSONALITY AND ASSESSMENT

Content Standards

After concluding this unit, students understand:

- IIIB-1. How to distinguish between personality and personality constructs
- IIIB-2. Personality approaches and theories
- IIIB-3. Assessment tools used in personality

Content Standards With Performance Standards and Suggested Performance Indicators CONTENT STANDARD IIIB-1: Distinguish between personality and personality constructs Students are able to (performance standards):

IIIB-1.1 Define personality as the individual's unique way of thinking, feeling, and acting.

Students may indicate this by (performance indicators):

- a. Identifying their own thoughts, feelings, and behavior in a personal experience
- b. Describing how personality can explain individual differences and individual consistencies
- c. Evaluating the influence of variables such as culture, family, and genetics on personality development
- d. Exploring the impact of sociocultural factors on personality development, including ethnicity, gender, sexual orientation, ability/disability, and so on

IIIB-1.2 Explain the role of personality constructs as a framework for organizing behavioral phenomena.

Students may indicate this by (performance indicators):

- a. Describing a historical example of personality explanations
- b. Differentiating the situational basis for personality versus enduring aspects of personality
- c. Identifying their personal constructs for explaining behavioral phenomena
- d. Describing how personality constructs can guide research
- e. Hypothesizing on the difficulties personality researchers have studying personality
- f. Discussing how bicultural and multicultural individuals may express different personality dimensions (e.g., "code-switching") depending on the cultural context

CONTENT STANDARD IIIB-2: Personality approaches and theories

Students are able to (performance standards):

IIIB-2.1 Explain the characteristics of the psychodynamic, cognitive-behavioral, humanistic, and trait approaches.

Students may indicate this by (performance indicators):

- a. Comparing how different personality approaches address the influence of free will and determinism
- b. Analyzing how each approach would assess a case history

IIIB-2.2 Identify important contributions to the understanding of personality.

- a. Diagramming Freud's structure of personality and describing his role in initiating study in the area of personality
- b. Describing the influence of external stimuli, modeling, and situational context on behavior
- c. Exploring the significance of self-perception and needs on an individual's thoughts, feelings, and actions

d. Classifying primary dimensions, such as emotional stability or extraversion, as a way to organize behavioral phenomena

CONTENT STANDARD IIIB-3: Assessment tools used in personality

Students are able to (performance standards):

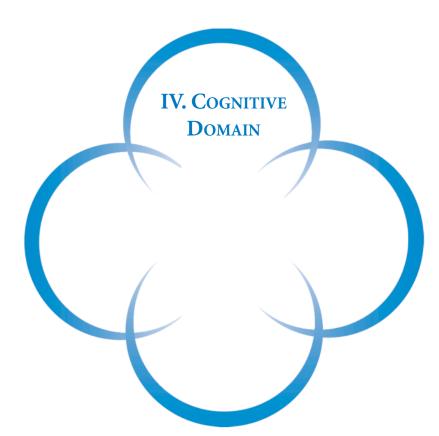
IIIB-3.1 Distinguish between objective and projective techniques of personality assessment.

Students may indicate this by (performance indicators):

- a. Naming popularly used self-report measures and projective tests
- b. Comparing the validity and reliability of objective and projective assessment techniques

IIIB-3.2 Describe tests used in personality assessment.

- a. Explaining key features of tests, such as the Minnesota Multiphasic Personality Inventory (MMPI-2), the Thematic Apperception Test (TAT), the NEO-PI-R, California Psychological Inventory, and 16 Personality Factors (16PF)
- b. Identifying the possible applications of personality assessment



STANDARD AREA IVA: LEARNING

Content Standards

After concluding this unit, students understand:

- IVA-1. Characteristics of learning
- IVA-2. Principles of classical conditioning
- IVA-3. Principles of operant conditioning
- IVA-4. Components of cognitive learning
- IVA-5. Roles of biology and culture in determining learning

Content Standards With Performance Standards and Suggested Performance Indicators

CONTENT STANDARD IVA-1: Characteristics of learning

Students are able to (performance standards):

IVA-1.1 Discuss learning from a psychological viewpoint.

Students may indicate this by (performance indicators):

- a. Examining key contributors to learning theory
- b. Defining learning as relatively permanent changes of behavior resulting from experience
- c. Distinguishing learning from performance
- d. Demonstrating the use of theories of learning in applied examples

IVA-1.2 Recognize learning as a vehicle to promote adaptation through experience.

Students may indicate this by (performance indicators):

- a. Articulating how changes in adaptation can result from genetic factors or learned experiences
- b. Comparing how cultures differ in promoting learned behavior

CONTENT STANDARD IVA-2: Principles of classical conditioning

Students are able to (performance standards):

IVA-2.1 Describe the classical conditioning paradigm.

Students may indicate this by (performance indicators):

- a. Explaining how, using Pavlovian conditioning procedures, a neutral stimulus becomes capable of evoking a response through pairing with an unconditioned stimulus
- b. Labeling elements in classical conditioning examples
- c. Designing procedures to produce classically conditioned responses

CONTENT STANDARD IVA-3: Principles of operant conditioning

Students are able to (performance standards):

IVA-3.1 Describe the operant conditioning paradigm.

- a. Describing how consequences influence behavior, such as a reinforcement strengthening a behavior's occurrence
- b. Identifying consequences of punishment in controlling behavior
- c. Predicting future strength of behavior by applying operant conditioning principles
- d. Designing procedures to produce operant responses
- e. Applying operant conditioning to correcting behavior, such as using shaping, chaining, and self-control techniques
- f. Discussing Skinner's contributions to popularizing behaviorism
- g. Translating emotional responses related to stereotyping, prejudice, and discrimination in operant terminology

CONTENT STANDARD IVA-4: Components of cognitive learning

Students are able to (performance standards):

IVA-4.1 Explain how observational learning works.

Students may indicate this by (performance indicators):

- a. Describing examples of learning by observation, such as Bandura's bobo doll study and studies involving other animals (e.g., chimpanzees)
- b. Identifying everyday examples of observational learning
- c. Discussing impact of role models

IVA-4.2 Describe cognitive learning approaches.

Students may indicate this by (performance indicators):

- a. Comparing learned behavior across cultures
- b. Exploring the role of expectation in promoting learning
- c. Differentiating insight learning from other forms of learning
- d. Describing how cognitive approaches differ from classical and operant conditioning
- e. Explaining the concept of latent learning (e.g., cognitive mapping)

CONTENT STANDARD IVA-5: Roles of biology and culture in determining learning

Students are able to (performance standards):

IVA-5.1 Identify biological contributions to learning.

Students may indicate this by (performance indicators):

- a. Describing biological constraints on learning
- b. Discussing adaptive value of one-trial learning, such as Garcia's taste-aversion studies

IVA-5.2 Speculate on the role of culture in determining what behaviors will be learned.

Students may indicate this by (performance indicators):

- a. Comparing learned behavior across cultures
- b. Describing environmental constraints on learning opportunities

IVA-5.3 Explore how biological and cultural factors interact to impede or enhance learning.

Students may indicate this by (performance indicators):

- a. Examining factors affecting academic performance that may differ for males and females (e.g., stereotype threat)
- b. Predicting how teacher expectancy can influence differential achievement for members of ethnic groups
- c. Debating whether sociocultural factors can reliably predict individual success
- d. Contrasting academic supports available for people who have learning disabilities with those who are gifted learners

IVA-5.4 Describe the collaborative nature of some forms of learning within cultures.

- a. Giving examples of group learning in different cultures
- b. Contrasting Vygotsky's approach to collaborative learning with individualistic theories

STANDARD AREA IVB: MEMORY

Content Standards

After concluding this unit, students understand:

- IVB-1. Encoding, or getting information into memory
- IVB-2. Sensory, working or short-term, and long-term memory systems
- IVB-3. Retrieval, or getting information out of memory
- IVB-4. Biological bases of memory
- IVB-5. Methods for improving memory
- IVB-6. Memory constructions

Content Standards With Performance Standards and *Suggested* Performance Indicators **CONTENT STANDARD IVB-1: Encoding, or getting information into memory** Students are able to (performance standards):

IVB-1.1 Characterize the difference between surface and deep (elaborate) processing.

Students may indicate this by (performance indicators):

a. Providing several examples of surface and deep processing

IVB-1.2 Identify other factors that influence encoding.

Students may indicate this by (performance indicators):

- a. Demonstrating the role of imagery in encoding
- b. Discussing the role of context and meaning on encoding (e.g., semantic encoding, surface processing, context dependent)
- c. Discussing the role of rote rehearsal, imagery, and organization on memory

CONTENT STANDARD IVB-2: Sensory, working or short-term, and long-term memory systems Students are able to (performance standards):

IVB-2.1 Describe the operation of sensory memory.

Students may indicate this by (performance indicators):

- a. Discussing the role of iconic memory through everyday examples
- b. Describing Sperling's research on iconic memory

IVB-2.2 Describe the operation of short-term memory and working memory.

Students may indicate this by (performance indicators):

- a. Explaining the duration and capacity of short-term memory
- b. Providing examples of the use of chunking to increase the capacity of short-term memory
- c. Conducting a demonstration that uses short-term memory
- d. Providing examples of primacy and recency effects
- e. Discussing the concept of working memory as it relates to short-term memory (e.g., Baddeley)
- f. Examining the concept of serial position effect

IVB-2.3 Describe the operation of long-term memory.

- a. Charting the duration and capacity of long-term memory
- b. Providing examples of different types of memory (e.g., episodic, semantic, implicit, explicit, and procedural memories)

- c. Reporting the primary findings of Ebbinghaus' nonsense-syllable studies or Bahrick's more recent research examining very long-term memory
- d. Distinguishing between implicit and explicit memory

CONTENT STANDARD IVB-3: Retrieval, or getting information out of memory

Students are able to (performance standards):

IVB-3.1 Analyze the importance of retrieval cues in memory.

Students may indicate this by (performance indicators):

- a. Identifying contextual and state-related cues (e.g., encoding specificity, state dependent memory, mood congruence)
- b. Examining problems related to retrieval, such as the tip-of-the-tongue phenomenon and context effects

IVB-3.2 Explain the role that interference plays in retrieval.

Students may indicate this by (performance indicators):

- a. Providing examples of proactive and retroactive interference
- b. Relating the concept of interference to studying school-related material

IVB-3.3 Relate difficulties created by reconstructive memory processes.

Students may indicate this by (performance indicators):

- a. Discussing the role of reconstruction in claims of repressed childhood memories
- b. Hypothesizing about the role of reconstruction in cases of eyewitness testimony

CONTENT STANDARD IVB-4: Biological bases of memory

Students are able to (performance standards):

IVB-4.1 Identify the brain structures most important to memory.

Students may indicate this by (performance indicators):

- a. Relating case studies of damage to the hippocampus and its effect on memory
- b. Reporting on conditions, such as Alzheimer's and stroke, that can impair memory

CONTENT STANDARD IVB-5: Methods for improving memory

Students are able to (performance standards):

IVB-5.1 Identify factors that interfere with memory.

Students may indicate this by (performance indicators):

- a. Generating examples of interference that reduce academic performance
- b. Describing case studies that involve memory loss
- c. Exploring the false memory/recovered memory controversy, as it relates to child abuse
- d. Explaining cross-racial eyewitness identification

IVB-5.2 Describe strategies for improving memory based on our understanding of memory.

- a. Developing and describing mnemonic devices to help learn psychological concepts
- b. Listing specific suggestions to enhance deep processing of information and to minimize the effect of interference

c. Describing how concepts such as massed versus distributed practice, overlearning, state and context dependence, and schemas might relate to studying

CONTENT STANDARD IVB-6: Memory Constructions

Students are able to (performance standards):

IVB-6.1 Describe the processes that lead to inaccuracies in memory

- a. Describing research (e.g., Loftus) on the tendency to construct memories
- b. Discussing the misinformation effect
- c. Describing the implications constructed memories have on courtroom testimonies

STANDARD AREA IVC: THINKING AND LANGUAGE

Content Standards

After concluding this unit, students understand:

- IVC-1. Basic elements comprising thought
- IVC-2. Strategies and obstacles involved in problem solving and decision-making
- IVC-3. Structural features of language
- IVC-4. Theories and developmental stages of language acquisition
- IVC-5. Links between thinking and language

Content Standards With Performance Standards and Suggested Performance Indicators

CONTENT STANDARD IVC-1: Basic elements comprising thought

Students are able to (performance standards):

IVC-1.1 Define thinking as a mental process involved in the manipulation and understanding of information.

Students may indicate this by (performance indicators):

- a. Identifying mental images and verbal symbols as elements that comprise thinking
- b. Describing controversies related to the role of thinking in behavior

IVC-1.2 Recognize that information is classified into categories containing similar properties known as concepts

Students may indicate this by (performance indicators):

- a. Describing the process of concept formation
- b. Analyzing a group of words, phrases, or images and identifying the unifying concept
- c. Discussing how researchers study concept formation
- d. Discussing examples of prototypes
- e. Examining the role of hierarchies in organizing concepts

CONTENT STANDARD IVC-2: Strategies and obstacles involved in problem solving and decision-making Students are able to (performance standards):

IVC-2.1 Identify problem solving as a directed and productive example of thinking.

Students may indicate this by (performance indicators):

- a. Describing the steps involved in the problem-solving process
- b. Providing examples of how algorithms, heuristics, and insight are used in problem solving

IVC-2.2 Explain the use of creative thinking in problem solving.

Students may indicate this by (performance indicators):

- a. Discussing how creative thinking strategies, such as divergent thinking, and restructuring, are used in problem solving
- b. Describing the effects of social factors on problem solving

IVC-2.3 Analyze the obstacles that inhibit problem solving and decision-making.

- a. Providing examples of how mental set and functional fixedness prevent the solving of a problem
- b. Evaluating strategies and obstacles involved in a class problem-solving activity
- c. Providing examples of how framing, risk avoidance, and overconfidence can affect decision making
- d. Determining the effects of hindsight bias, confirmation bias, and belief perseverance
- e. Explaining how availability and representativeness heuristics hinder problem solving

CONTENT STANDARD IVC-3: Structural features of language

Students are able to (performance standards):

IVC-3.1 Define language as symbols and sounds that convey meaning and facilitate communication.

Students may indicate this by (performance indicators):

- a. Defining the properties of meaningfulness, structure, and reference in language
- b. Demonstrating that language is not limited to sounds by using American Sign Language

IVC-3.2 Recognize that language is organized in a hierarchical structure.

Students may indicate this by (performance indicators):

- a. Identifying the basic unit of language as phonemes that are combined in meaningful strings known as morphemes
- b. Providing examples of how morphemes combine to form words, phrases, and sentences
- c. Describing the role of grammar in language systems

CONTENT STANDARD IVC-4: Theories and developmental stages of language acquisition

Students are able to (performance standards):

IVC-4.1 Discuss the effects of development on language acquisition.

Students may indicate this by (performance indicators):

- a. Tracing the stages of language development from infancy to childhood
- b. Contrasting the language development of multilingual children to the development of children who speak only one language (e.g., code switching)
- c. Using case studies such as Genie or the Wild Boy of Aveyron to examine language development

IVC-4.2 Evaluate the theories of language acquisition.

Students may indicate this by (performance indicators):

- a. Comparing the views of Chomsky and Skinner on language development
- b. Describing current theories of language acquisition
- c. Discussing the effect of culture on language acquisition
- d. Debating the advantages and disadvantages of bilingual education

IVC-4.3 Speculate on whether animals acquire and use language.

Students may indicate this by (performance indicators):

- a. Describing the nature of communication in honeybees
- b. Relating conclusions drawn from early attempts to teach language to primates
- c. Discussing contemporary views on whether animals can acquire language

CONTENT STANDARD IVC-5: Links between thinking and language

Students are able to (performance standards):

IVC-5.1 Examine the influence of language on thought and behavior

- a. Evaluating Whorf's linguistic relativity theory that language determines or only influences thought
- b. Providing examples, such as how sexist language can influence thought processes
- c. Comparing differing cultural practices regarding expressions of respect or formal pronoun use

STANDARD AREA IVD: STATES OF CONSCIOUSNESS

Content Standards

After concluding this unit, students understand:

- IVD-1. Nature of consciousness
- IVD-2. Characteristics of sleep and theories that explain why we sleep
- IVD-3. Theories used to explain and interpret dreams
- IVD-4. Basic phenomena and uses of hypnosis
- IVD-5. Categories of psychoactive drugs and their effects

Content Standards With Performance Standards and Suggested Performance Indicators

CONTENT STANDARD IVD-1: Nature of consciousness

Students are able to (performance standards):

IVD-1.1 Define states of consciousness.

Students may indicate this by (performance indicators):

a. Discussing various states of consciousness

IVD-1.2 Describe levels of consciousness.

Students may indicate this by (performance indicators):

a. Differentiating among nonconscious, conscious, preconscious, and conscious awareness

CONTENT STANDARD IVD-2: Characteristics of sleep and theories that explain why we sleep

Students are able to (performance standards):

IVD-2.1 Describe the sleep cycle.

Students may indicate this by (performance indicators):

- a. Drawing and labeling a graph that shows the sleep cycle throughout the night
- b. Charting the differences between REM and non-REM (NREM) sleep

IVD-2.2 Compare theories that explain why we sleep.

Students may indicate this by (performance indicators):

- a. Comparing restorative theories with evolutionary theories
- b. Explaining the effects of sleep deprivation
- c. Evaluating evidence to support various theories

IVD-2.3 Assess types of sleep disorders.

Students may indicate this by (performance indicators):

- a. Providing possible solutions for insomnia
- b. Listing the symptoms of narcolepsy and sleep apnea

CONTENT STANDARD IVD-3: Theories used to explain and interpret dreams

Students are able to (performance standards):

IVD-3.1 Demonstrate an understanding of individual differences in dream content and recall.

- a. Collecting and analyzing data about dream content and recall with an informal survey
- b. Exploring cross-cultural differences in the significance of dreams

IVD-3.2 Compare different theories about the use and meaning of dreams.

Students may indicate this by (performance indicators):

a. Comparing different theories about the significance of dreams (e.g., activation-synthesis, psychodynamic, and cognitive theories)

CONTENT STANDARD IVD-4: Basic phenomena and uses of hypnosis

Students are able to (performance standards):

IVD-4.1 Describe several hypnotic phenomena.

Students may indicate this by (performance indicators):

- a. Discussing why some people are better hypnotic subjects than others
- b. Explaining hypnotic induction, suggestibility, and amnesia
- c. Explaining the relationship of healing practices that use trance induction and altered states of consciousness to hypnosis

IVD-4.2 Explain possible uses of hypnosis in psychology.

Students may indicate this by (performance indicators):

- a. Describing early uses of hypnosis to address psychological symptoms
- b. Evaluating the accuracy of memories recovered by hypnosis
- c. Identifying the uses of hypnosis in pain control and psychotherapy

CONTENT STANDARD IVD-5: Categories of psychoactive drugs and their effects

Students are able to (performance standards):

IVD-5.1 Characterize the major categories of psychoactive drugs and their effects.

Students may indicate this by (performance indicators):

- a. Charting the names, sources, and uses of narcotic, depressant, stimulant, and hallucinogenic drugs
- b. Classifying drugs, such as tobacco, alcohol, and marijuana
- c. Discussing cultural and historical influences on making value judgments

IVD-5.2 Evaluate the effects of narcotic, depressant, stimulant, and hallucinogenic drugs.

- a. Identifying the potential for physiological and psychological dependence
- b. Describing the short-term behavioral, physiological, and cognitive effects
- c. Identifying the neurochemical mechanisms of drugs, such as nicotine or cocaine

STANDARD AREA IVE: INDIVIDUAL DIFFERENCES

Content Standards

After concluding this unit, students understand:

- IVE-1. Concepts related to measurement of individual differences
- IVE-2. Influence and interaction of heredity and environment on individual differences
- IVE-3. Nature of intelligence
- IVE-4. Nature of intelligence testing

Content Standards With Performance Standards and *Suggested* Performance Indicators **CONTENT STANDARD IVE-1: Concepts related to measurement of individual differences** Students are able to (performance standards):

IVE-1.1 Define and understand the nature of test constructs, such as intelligence, personality, and creativity.

Students may indicate this by (performance indicators):

- a. Recounting early attempts to measure human characteristics and develop tests
- b. Comparing and contrasting personality characteristics of two persons

IVE-1.2 Describe basic statistical concepts in testing.

Students may indicate this by (performance indicators):

- a. Describing how test validity and reliability are established and related
- b. Determining which of two tests would be more useful for a particular purpose when given relevant data about validity and reliability

CONTENT STANDARD IVE-2: Influence and interaction of heredity and environment on individual differences

Students are able to (performance standards):

IVE-2.1 Explain how intelligence and personality may be influenced by heredity and environment.

- a. Citing one or more studies demonstrating how environmental variables influence the development of intellectual skills
- b. Characterizing how studies of identical versus fraternal twins help establish the role of heredity in determining individual differences in intelligence
- c. Predicting which of two correlations will be higher: the correlation between the IQs of identical twins or the correlation between the IQs of fraternal twins
- d. Describing how the interaction between children and parents relates to differences in motivation and personality
- e. Explaining the role of cultural and group norms in establishing the frames of reference we use in thinking about individual differences
- f. Describing the link between intelligence testing and the eugenics movement

CONTENT STANDARD IVE-3: Nature of intelligence

Students are able to (performance standards):

IVE-3.1 Link intelligence to the use of cognitive skills and strategies.

Students may indicate this by (performance indicators):

- a. Explaining how cognitive processes, such as analogical reasoning and speed of processing, are involved in intelligence
- b. Discussing the role of planning and self-regulation in intelligence
- c. Contrasting the skills that people typically acquire in school with those that people acquire outside of school and discussing the skills most likely to be related to scores on intelligence tests
- d. Describing how intelligence test scores are derived
- e. Discussing the relationship between intelligence and musical, artistic, and other special abilities

IVE-3.2 Describe theories of intelligence.

Students may indicate this by (performance indicators):

- a. Comparing traditional psychometric theories of intelligence to more recent approaches (e.g., Gardner's multiple intelligences, Sternberg's triarchic theory)
- b. Debating whether intelligence is one or several abilities
- c. Describing emotional intelligence

CONTENT STANDARD IVE-4: Nature of intelligence testing

Students are able to (performance standards):

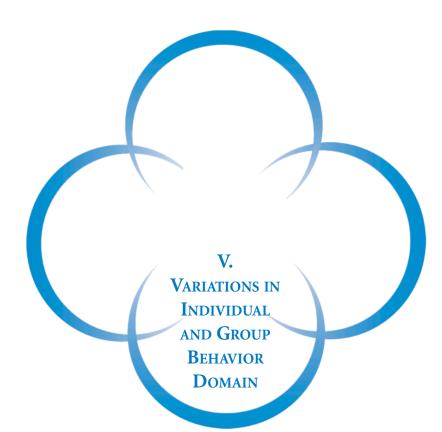
IVE-4.1 Explain why intelligence tests predict achievement.

Students may indicate this by (performance indicators):

- a. Citing correlations between IQ and academic achievement and explaining the correlation
- b. Predicting how intelligence test scores correlate with other measurable variables (e.g., grades, supervisor ratings, etc.)
- c. Explaining why intelligence tests and other aptitude tests correlate with ability to do a job, but tests of motivation and personality increase the ability to predict how well individuals will actually perform
- d. Exploring how ethnicity and gender can moderate achievement predictions based on intelligence tests

IVE-4.2 Explain issues of using conventional intelligence tests.

- a. Describing the abilities commonly measured by intelligence tests
- b. Identifying valid uses of conventional tests
- c. Discussing the research on the cultural context of intelligence tests
- d. Exploring the consequences of using labels derived from testing, such as "genius," "normal," or "developmentally delayed"
- e. Evaluating research on stereotype threat
- f. Explaining the meaning of culture and gender fair testing



STANDARD AREA VA: PSYCHOLOGICAL DISORDERS

Content Standards

After concluding this unit, students understand:

- VA-1. Characteristics and origins of abnormal behavior
- VA-2. Methods used in exploring abnormal behavior
- VA-3. Major categories of abnormal behavior
- VA-4. Impact of mental disorders

Content Standards With Performance Standards and *Suggested* Performance Indicators **CONTENT STANDARD VA-1: Characteristics and origins of abnormal behavior** Students are able to (performance standards):

VA-1.1 Distinguish the common characteristics of abnormal behavior.

Students may indicate this by (performance indicators):

- a. Listing criteria that distinguish normal from disordered behavior
- b. Identifying patterns of behavior that constitute abnormality
- c. Describing how some abnormal behaviors may be designated as abnormal only in particular historical or cultural contexts

VA-1.2 Cite examples of abnormal behavior.

Students may indicate this by (performance indicators):

- a. Describing observable symptoms of abnormal behavior
- b. Distinguishing disorders on the basis of severity of interference with functioning, such as psychotic versus nonpsychotic disorders

VA-1.3 Relate judgments of abnormality to contexts in which those judgments occur.

Students may indicate this by (performance indicators):

- a. Recognizing the influence of context in designating abnormal behavior
- b. Identifying how judgments about abnormality have changed through history (e.g., epilepsy)
- c. Describing some abnormal behaviors specific to particular contexts or circumstances
- d. Acknowledging sociocultural implications of labeling behavior as abnormal
- e. Citing examples of misdiagnosis that may result from evaluator ignorance of relevant cultural and situational norms for behavior

VA-1.4 Describe major explanations for the origins of abnormality.

- a. Describing biological approaches as explaining disorders arising from physiological sources
- b. Characterizing psychological approaches as explaining disorders derived from psychological sources, such as emotional turmoil, distorted thinking, and learning
- c. Identifying sociocultural approaches as explaining how sociocultural factors, such as class and gender, influence diagnosis
- d. Defending spiritually based explanations for abnormal behavior (e.g., soul loss, transgression against ancestor)
- e. Recognizing that a label, such as schizophrenia, does not explain, but only describes abnormal behavior patterns
- f. Exploring the long-term impact of diagnostic labels even after successful treatment

CONTENT STANDARD VA-2: Methods used in exploring abnormal behavior

Students are able to (performance standards):

VA-2.1 Identify the purpose of different research methods.

Students may indicate this by (performance indicators):

- a. Describing methods used in research on abnormal behavior, such as case studies, experiments, and surveys
- b. Justifying the use of one method over another to answer a specific research question
- c. Discussing how animal models of abnormality offer insight into human problems

VA-2.2 Characterize the advantages and limitations of different research methods for studying abnormal behavior.

Students may indicate this by (performance indicators):

- a. Evaluating the quality of research conclusions derived in a specific study
- b. Hypothesizing about the preferred method for answering a specific research question
- c. Discussing validity of findings of research methods with different cultural groups

CONTENT STANDARD VA-3: Major categories of abnormal behavior

Students are able to (performance standards):

VA-3.1 Discuss major categories of abnormal behavior.

Students may indicate this by (performance indicators):

- a. Explaining selected psychological disorders as classified in the Diagnostic and Statistical Manual
- b. Identifying symptoms of selected categories of disorders

VA-3.2 Explore the challenges associated with accurate diagnosis.

Students may indicate this by (performance indicators):

- a. Examining the influence of cultural, ethnic, racial, age, religious, gender, social class, ability/disability, or sexual orientation bias on diagnosis
- b. Explaining how psychologists with different orientations produce different diagnostic conclusions about the same case example
- c. Exploring how definitions of abnormality differ over time and across culture

CONTENT STANDARD VA-4: Impact of mental disorders

Students are able to (performance standards):

VA-4.1 Consider factors that influence vulnerability to abnormal behavior.

- a. Exploring how sociocultural factors influence vulnerability to abnormal behavior
- b. Describing the role of heredity as it influences risk for abnormal behavior
- c. Identifying sociocultural factors that can help to explain the higher incidence of depression in women than in men (e.g., workplace discrimination, family violence, and poverty)

VA-4.2 Discuss the stigma associated with abnormal behavior.

Students may indicate this by (performance indicators):

- a. Citing historic or fictional examples of stigmatized behavior
- b. Hypothesizing about how abnormal conditions might influence acceptance in contemporary life

VA-4.3 Speculate about means for promoting greater understanding of abnormal behavior.

- a. Describing historic efforts to promote tolerance of those stigmatized by mental disorder
- b. Developing a strategy to promote support for individuals (e.g., children, adolescents, and adults) with specific mental disorders

STANDARD AREA VB: TREATMENT OF PSYCHOLOGICAL DISORDERS

Content Standards

After concluding this unit, students understand:

- VB-1. Prominent methods used to treat individuals with disorders
- VB-2. Types of practitioners who implement treatment
- VB-3. Legal and ethical challenges involved in delivery of treatment

Content Standards With Performance Standards and *Suggested* Performance Indicators **CONTENT STANDARD VB-1: Prominent methods used to treat individuals with disorders** Students are able to (performance standards):

VB-1.1 Describe availability and appropriateness of various modes of treatment for individuals (e.g., children, adolescents, and adults) with psychological disorders.

Students may indicate this by (performance indicators):

- a. Describing major treatment orientations used in therapy, such as behavioral, cognitive, psychoanalytic, humanistic, feminist, and biomedical
- b. Distinguishing psychotherapy from medical intervention and spiritual support
- c. Describing different treatment formats, such as individual, couple therapy, or group therapy
- d. Explaining how different treatment orientations will influence the therapy plan
- e. Discussing how theoretical orientations may promote specific treatment biases

VB-1.2 Describe characteristics of effective treatment and prevention.

Students may indicate this by (performance indicators):

- a. Characterizing early attempts to reduce psychological symptoms and speculate about their likelihood of success
- b. Discussing credibility of treatment based upon cultural explanations or beliefs about abnormality or causation of illness
- c. Hypothesizing about factors that prompt ethnic minority group members to stay or leave treatment (sometimes characterized as "premature termination") provided in state or county mental health facilities
- d. Identifying criteria for evaluating successful treatment
- e. Discussing the validity of treatments for different cultural groups
- f. Citing evidence for success of a treatment intervention
- g. Describing prevention strategies that build resilience and promote competence

CONTENT STANDARD VB-2: Types of practitioners who implement treatment

Students are able to (performance standards):

VB-2.1 Identify therapists according to training.

- a. Differentiating various types of intervention specialists (e.g., psychologist, psychiatrist, counselor, social worker)
- b. Debating the advantages and disadvantages of different types of practitioners
- c. Exploring how credibility of treatment professionals or healers varies among diverse groups of people

VB-2.2 Describing strategies for locating appropriate therapists.

Students may indicate this by (performance indicators):

- a. Locating care providers through established systems, such as local mental health associations, hospitals, and mental health clinics
- b. Incorporating the idea of matching the presenting problem to the orientation and expertise of the care provider
- c. Hypothesizing about why disenfranchised group members might mistrust mental health professionals in traditional settings
- d. Discussing validity of findings of research methods with different cultural groups

CONTENT STANDARD VB-3: Legal and ethical challenges involved in delivery of treatment Students are able to (performance standards):

VB-3.1 Describe the intersection between mental health and law.

Students may indicate this by (performance indicators):

- a. Identifying conflicts between individual rights and rights of society, as illustrated by deinstitutionalization and commitment proceedings
- b. Distinguishing "competent to stand trial" versus "legally insane" status
- c. Identifying historic or fictional examples involving mental health judgments in legal settings

VB-3.2 Examine the influence of ethics and professional practice.

- a. Identifying the therapist's ethical obligation to practice competently
- b. Describing how confidentiality protects client privacy
- c. Explaining "right to treatment" as well as "right to refuse treatment"

STANDARD AREA VC: SOCIAL AND CULTURAL DIMENSIONS OF BEHAVIOR

Content Standards

After concluding this unit, students understand:

- VC-1. Social judgment and attitudes
- VC-2. Social and cultural categories
- VC-3. Social influence and relationships

Content Standards With Performance Standards and Suggested Performance Indicators CONTENT STANDARD VC-1: Social judgment and attitudes

Students are able to (performance standards):

VC-1.1 Demonstrate an understanding of person perception.

Students may indicate this by (performance indicators):

- a. Explaining the role of social schemas in person perception
- b. Stating how different kinds of physical attractiveness can influence perceptions of other personal characteristics
- c. Describing how cultural socialization determines social schema development

VC-1.2 Describe how attributions affect our explanations of behavior.

Students may indicate this by (performance indicators):

- a. Explaining differences between internal and external attributions and the role that culture plays in assigning such attributions
- b. Drawing conclusions about the effect of actor-observer bias and the formation of fundamental attribution errors

VC-1.3 Identify sources of attitude formation.

Students may indicate this by (performance indicators):

- a. Providing learning-based interpretations of attitude formation (e.g., Asch)
- b. Explaining the role of expectations and stereotyped thinking as they relate to attitude and behavior (e.g., Milgram)
- c. Discussing the contribution of role–playing to attitude formation (e.g., Zimbardo's prison experiment)

VC-1.4 Assess some methods used to change attitudes.

Students may indicate this by (performance indicators):

- a. Citing research on the effects of advertising and persuasion
- b. Hypothesizing about the potential of media to influence positive attitude change
- c. Creating campaigns to produce social change and evaluate their effectiveness

CONTENT STANDARD VC-2: Social and cultural categories

Students are able to (performance standards):

VC-2.1 Identify basic social and cultural categories.

Students may indicate this by (performance indicators):

a. Identifying major social categories in the U.S. culture (e.g., gender, race, ethnicity, sexual orientation, and disability)

- b. Describing the components of culture (e.g., symbols, language, norms, and values)
- c. Differentiating between culture and society or social structure
- d. Describing and differentiating between rural and urban social structures and diverse populations

VC-2.2 Discuss how social and cultural categories affect behavior.

Students may indicate this by (performance indicators):

- a. Explaining how U.S. culture is both similar to and different from culture in other countries
- b. Discussing how membership in particular social categories (e.g., gender, age, and sexual orientation) can affect how individuals are treated, and how that treatment can change over time and differ across cultures
- c. Hypothesizing about how lives would change if magically transformed into a different social category (e.g., other gender)
- d. Discussing the types of misunderstandings (both verbal and nonverbal) that can occur between people of different cultures (e.g., differences in interpersonal space, attitude toward silence in a conversation)

CONTENT STANDARD VC-3: Social influence and relationships

Students are able to (performance standards):

VC-3.1 Describe effects of the presence of others on individual behavior.

Students may indicate this by (performance indicators):

- a. Applying the concept of social facilitation to performance at a track meet
- b. Providing an example of the bystander effect
- c. Distinguishing differences in social behavior among individuals relative to their exercise of power (e.g., persons with less power may show greater awareness of persons with more power)

VC-3.2 Describe how social structure can affect intergroup relations.

Students may indicate this by (performance indicators):

- a. Discussing conflict and the processes involved in conflict resolution
- b. Describing Sherif's research and explaining its implications about superordinate goals
- c. Giving examples of creating social structures that would foster competition between groups
- d. Differentiating between American and Japanese business models
- e. Providing positive and negative outcomes of group polarization
- f. Giving examples of how a superordinate goal can increase cooperation between groups

VC-3.3 Explore the nature and effects of bias and discrimination.

- a. Describing how social biases create a world where one kind of person is considered to be normative, and other kinds of persons are "different" (e.g., males are normative, whereas females are different; European Americans are normative, whereas other ethnic groups are different)
- b. Examining how bias and discrimination influence behavior
- c. Describing examples from early research on prejudice and discrimination
- d. Relating a personal example of ethnocentrism
- e. Exploring the nature of in-group/out-group dynamics

- f. Describing the sources of opposition to the 1954 Supreme Court's decision regarding Brown vs. Board of Education of Topeka
- g. Predicting how the self-fulfilling prophecy can fuel stereotypes about ethnic groups and gender
- h. Developing strategies for promoting tolerance, cooperation, and equality

VC-3.4 Describe circumstances under which conformity and obedience are likely to occur.

Students may indicate this by (performance indicators):

- a. Explaining the importance of group size as a predictor of conformity
- b. Discussing why obedience to authority is a common phenomenon
- c. Citing examples of disobedience to authority
- d. Analyzing disasters from the perspective of the groupthink hypothesis (e.g., space shuttle disaster, Bay of Pigs)

VC-3.5 Discuss the nature of altruism in society.

Students may indicate this by (performance indicators):

- a. Delineating the arguments for and against the labeling of a given human behavior as altruistic
- b. Debating whether specific actions qualify as altruistic
- c. Discussing the factors that increase or decrease altruism

VC-3.6 Discuss the significance of aggression.

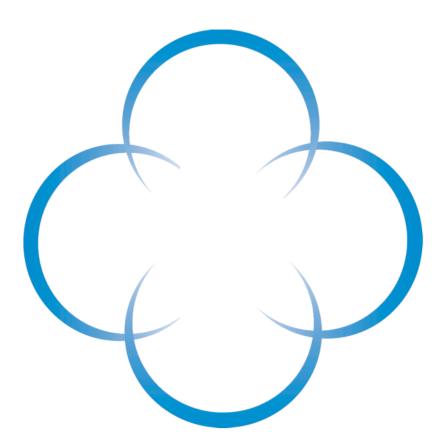
Students may indicate this by (performance indicators):

- a. Explaining aggression from several theoretical orientations (e.g., biomedical, psychodynamic, and social-learning perspectives)
- b. Debating whether media can influence aggressive acts
- c. Discussing ways to reduce aggression and violence in schools and/or in society at large
- d. Describing examples of aggression in animals, other than humans

VC-3.7 Discuss factors influencing attraction.

- a. Identifying the important factors that help or hinder the forming and maintaining of close relationships
- b. Discussing gender and cultural differences in the criteria for, and the process of, mate selection
- c. Explaining how gender and culture may influence attraction

APPENDICES



CONTRIBUTORS TO THE NATIONAL STANDARDS FOR HIGH SCHOOL PSYCHOLOGY CURRICULA (2005 REVISION)

APA Staff

Martha Boenau, Staff Liaison, Education Directorate, American Psychological Association, Washington, DC

Emily Leary, Staff Liaison, Education Directorate, American Psychological Association, Washington, DC

Maureen A. McCarthy, PhD, Staff Liaison, Education Directorate, American Psychological Association, Washington, DC

Mayella Valero, Staff Liaison, Education Directorate, American Psychological Association, Washington, DC

Expert Reviewers

Nancy A. Ator, PhD, John Hopkins University, Baltimore, MD

Harry T. Reis, PhD, University of Rochester, Rochester, NY

Neal F. Johnson, PhD, Ohio State University, Columbus, OH

Morton Ann Gernsbacher, PhD, University of Wisconsin, Madison, Madison, WI

Jacquelynne S. Eccles, PhD, University of Michigan, Ann Arbor, MI

Kenneth J. Sufka, PhD, University of Mississippi, Oxford, MS

James E. Freeman, PhD, University of Virginia, Charlottesville, VA

Susan E. Dutch, PhD, Westfield State College, Westfield, MA

Judith Primavera, PhD, Fairfield University, Fairfield, CT

Holly L. Angelique, PhD, Penn State Harrisburg, Middletown, PA

Editing

Joanne L. Zaslow, American Psychological Association, Washington, DC

Book Design

John Graziano, American Psychological Association, Washington, DC

Reviewers

Charles T. Blair-Broeker, Cedar Falls High School, Cedar Falls, IA

Susan Brandon, Senior Scientist, American Psychological Association (2001)

Gilles O. Einstein, PhD, Furman University, Greenville, SC

Margaret Matlin, PhD, State University of New York Geneseo, Geneseo, New York

Patrick Mattimore, South San Francisco High School, San Francisco, CA

Enedina G. Vazquez, PhD, New Mexico State University, Las Cruces, NM

Contributors

Amy C. Fineburg, Spain Park High School, Hoover, AL

Kent A. Korek, Germantown High School, Germantown, WI

Paul C. Smith, PhD, Alverno College, Milwaukee, WI

APA Governance Review

APA Board for the Advancement of Psychology in the Public Interest

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APA Committee on Psychological Tests and Assessment

APA Committee of Psychology Teachers at Community Colleges

APA Committee on Rural Health

APA Committee of Teachers of Psychology in Secondary Schools

APA Committee on Women in Psychology

CONTRIBUTORS TO THE ORIGINAL NATIONAL STANDARDS FOR HIGH SCHOOL PSYCHOLOGY CURRICULA (1999)¹

Editor

Charles L. Brewer, PhD, Furman University, Greenville, SC

Staff

Peter J. Petrossian, Staff Liaison, Education Directorate, American Psychological Association, Washington, DC

Jill N. Reich, PhD, Executive Director, Education Directorate, American Psychological Association, Washington, DC

Contributors

Bernard C. Beins, PhD, Ithaca College, Ithaca, NY

Ludy T. Benjamin, Jr., PhD, Texas A & M University, College Station, TX

Martha M. Ellis, PhD, Collin County Community College, McKinney, TX

Christine C. Iijima Hall, PhD, Arizona State University West, Phoenix, AZ

Bruce B. Henderson, PhD, Western Carolina University, Cullowhee, NC

Gregory A. Kimble, PhD, Duke University, Durham, NC

Kent A. Korek, Germantown High School, Germantown, WI

Barbara L. Loverich, Hobart High School, Hobart, IN Laura L. Maitland, Mepham High School, Bellmore, NY Virginia Andeoli Mathie, PhD, James Madison University, Harrisonburg, VA

Dale W. McAdam, PhD, University of Rochester, Rochester, NY

Charles G. Morris, PhD, University of Michigan, Ann Arbor, MI

Marissa M. Sarabando, Memorial High School, McAllen, TX

William T. Sharp, Cherry Hill Public Schools, Cherry Hill, NJ

Paul C. Smith, PhD, Alverno College, Milwaukee, WI

Randolph A. Smith, PhD, Ouachita Baptist University, Arkadelphia, AR

Editing

Joanne L. Zaslow, American Psychological Association, Washington, DC

Reviewers

Christopher M. Aanstoos, PhD, West Georgia College, Carrollton, GA

Irwin Altman, PhD, University of Utah, Salt Lake City, UT

Martin A. Anderson, PhD, San Gabriel High School, San Gabriel, CA

Peter Anthony, Bangkok, Thailand

Martha E. Banks, PhD, Broadview Heights, OH

Laura H. Barbanel, EdD, City University of New York, Brooklyn, NY

Martha J. Barry, PhD, Portland, ME

Linda M. Bartoshuk, PhD, Yale University, New Haven, CT

Francine C. Blumberg, PhD, Fordham University, New York, NY

Meg A. Bond, PhD, University of Massachusetts at Lowell, Lowell, MA

Eleanor M. Bouvier, Marlboro, MA

Sheila Brown, Huron High School, Ann Arbor, MI

Susan C. Bryner, Fresno, CA (Student Affiliate)

Samuel M. Cameron, PhD, Beaver College, Glenside, PA

¹ As listed in 1999 publication.

James F. Chace, Jr., Shrewsbury High School, Shrewsbury, MA

Wendy Clark, Queen Anne's County High School, Centreville, MD

Donald Cronkite, PhD, Hope College, Holland, MI Jessica Henderson Daniel, PhD, Harvard Medical School, Boston, MA

Margaret J. Davidson, L. V. Berkner High School, Richardson, TX

Charles Drewes, PhD, Iowa State University, Ames, IA Carol L. Farber, Miami Killian High School, Miami, FL

Alan J. Feldman, Perth Amboy High School, Perth Amboy, NJ

Diane L. Finley, PhD, Towson State University, Towson, MD

Linda M. Forrest, PhD, Michigan State University, East Lansing, MI

Fran Friedrich, PhD, University of Utah, Salt Lake City, UT

Jodi Gabert, PhD, Reed City High School, Reed City, MI

Perilou Goddard, PhD, Northern Kentucky University, Highland Heights, KY

William G. Graziano, PhD, Texas A & M University, College Station, TX

Nancy P. Grippo, Henry M. Gunn High School, Palo Alto, CA

Craig W. Gruber, Walt Whitman High School, Bethesda, MD

Mary Henning-Stout, PhD, Portland, OR

David K. Hogberg, PhD, Albion College, Albion, MI

Abigail N. James, Woodberry Forest School, Woodberry Forest, VA

Wesley P. Jordan, PhD, St. Mary's College, St. Mary's City, MD

B. Dale Kinney, Ralston High School, Omaha, NE

Alfred H. Kirton, Franklin, MA

Joseph I. Lamas, G. H. Braddock Senior High School, Miami, FL

Jann K. Longman, Issaquah, WA

James C. Matiya, Carl Sandburg High School, Orland Park, IL

Patrick Mattimore, South San Francisco High School, South San Francisco, CA

Rob McEntarffer, Lincoln Southeast High School, Lincoln, NE

Ellen H. McGrath-Thorpe, Middletown High School North, Middletown, NJ

George A. Miller, PhD, Princeton University, Princeton, NI

David G. Myers, PhD, Hope College, Holland, MI

Harlow W. Naasz, Newport High School, Mission Viejo, CA

Jack Nation, PhD, Texas A & M University, College Station, TX

Ulric Neisser, PhD, Cornell University, Ithaca, NY

Jacqualyn J. Newman, Stroudsburg High School, Stroudsburg, PA

Amado M. Padilla, PhD, Stanford University, Stanford, CA

Mariann Paolantonia, Rosemont High School, Rosemont, PA

Debra E. Park, West Deptford High School, Westville, NJ

Bob Pettapiece, EdD, Northern High School, Detroit, MI

Cindy Perkovich, Clovis West High School, Fresno, CA

Franceen Puckett, Uxbridge High School, Uxbridge, MA

Russ Reabold, La Puente, CA

Michael J. Renner, PhD, West Chester University, West Chester, PA

Maria P. P. Root, PhD, University of Washington, Seattle WA

Carolyn A. Rosenfeld, Ridgewood High School, Ridgewood, NJ

Nancy Felipe Russo, PhD, Arizona State University Tempe, AZ

John W. Santrock, PhD, University of Texas at Dallas, Richardson, TX

Linda Saville, Upland, CA

Lester M. Sdorow, PhD, Lafayette College, Easton, PA; Beaver College, Glenside, PA

Martin E. P. Seligman, PhD, University of Pennsylvania, Philadelphia, PA

K. Shear, PhD, School of Creative and Performance Arts, Cincinnati, OH

Linda Patia Spear, PhD, Binghamton University, Binghamton, NY

Charles Spielberger, PhD, University of South Florida, Tampa, FL

Robert J. Stahl, PhD, Arizona State University, Tempe, AZ

George Stefano, PhD, State University of New York, Old Westbury, NY

Robert J. Sternberg, PhD, Yale University, New Haven, CT

John S. Sullivan, PhD, West Duxbury Junior-Senior High School, Duxbury, MA

Mark Viebrock, Cleveland High School, Portland OR

Cecilia Wainryb, PhD, University of Utah, Salt Lake City, UT

Kenneth A. Weaver, PhD, Emporia State University, Emporia, KS

Wilse B. Webb, PhD, University of Florida, Gainesville, FL

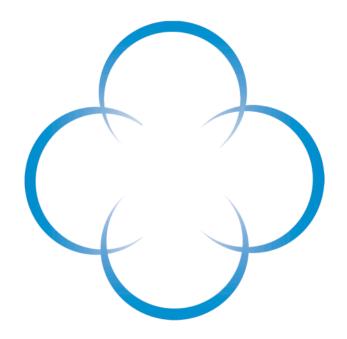
Michael Wertheimer, PhD, University of Colorado, Boulder, CO

Jesse William Whitlow Jr., PhD, Rutgers University, Camden, NJ

Sandra C. Whittemore, Princeton, MA

Deborah Wiebe, PhD, University of Utah, Salt Lake City, UT

Karen F. Wyche, PhD, New York University, New York, NY



HOW TO USE THE NATIONAL STANDARDS FOR HIGH SCHOOL PSYCHOLOGY CURRICULA IN DAY-TO-DAY LESSON PLANS

Accountability legislation typically demands that teachers demonstrate how their lessons and courses align with local, state, and national standards. Some local school districts and state boards of education have adopted standards for teaching high school psychology that are based on these standards. Along with, or in the absence of, local or state guidelines for teaching high school psychology, teachers can use these standards as a starting point for daily lesson planning, once scope and sequence for the course are determined.

Teachers should first note that there are suggested performance indicators for every performance standard. These performance indicators may be used as a starting point for classroom activities or student assignments. They are only suggestions. Teachers will want to substitute and supplement freely as they develop their own courses and lesson plans.

Many other resources can help build the standards into an effective course. APA Teachers of Psychology in Secondary Schools (TOPSS) has been especially active in publishing a series of unit plans designed to help instructors teach a scientifically based course. Each of these plans contains a suggested procedural outline, a content outline, activities, critical-thinking exercises, discussion questions, and a bibliography. Two of the already published units, An Introduction to the Field of Psychology and The Stats Pack, are extremely helpful for developing the Introduction and Research Methods unit, which is the core of these standards. As they are developed, these unit plans are distributed to TOPSS members. Previously published units are available online for current members on the TOPSS Web site

(http://www.apa.org/ed/topss/unitlesson.html). Paper and electronic copies of unit lesson plans can be obtained from the Education Directorate at APA. In addition, various groups within the APA produce products that are especially beneficial to high school psychology teachers. The vast expertise of the members of the APA is a rich resource for enhancing a

person's own knowledge of psychology and for enriching course content for high school students. Becoming an APA High School Teacher Affiliate/TOPSS member can be beneficial because APA resources can be key tools for planning, preparing, and teaching a high school psychology course. Appendix C provides additional information about TOPSS.

Teachers can also use materials provided with psychology textbooks. Most books have an extensive package of materials that can be used to teach content more effectively. Perhaps the most helpful of these materials is the instructor's manual, which generally contains background information for the concepts covered in the text, lecture ideas, and suggestions for activities, demonstrations, and assignments. The usefulness of this information may vary, and one way to help select the most valuable information is to use the instructor's manual in conjunction with these standards. Time is at a premium for most teachers, so the standards can be helpful in choosing what to emphasize. Ideally, the teacher can relate every class activity to these standards.

From software to electronic mailing lists, technological resources also provide teachers with support in the form of specific classroom activities, and can be used in conjunction with these standards. Software can enhance the teaching of high school psychology by promoting active learning; most of the major textbook publishers have developed software to accompany their introductory psychology textbooks, and other distributors have marketed relevant software. Electronic mailing lists provide teachers with the opportunity to communicate with many other teachers with relative ease and convenience and are an excellent way to get answers to questions about the teaching of psychology. Electronic mailing lists allow groups of people to carry on dialogue (called "threads") and share ideas. Appendix C contains information on print, video, and computer resources, and lists several electronic mailing lists that are of particular interest to psychology teachers.

The best thing for a teacher to do is to start with the basic framework provided by the standards to determine which parts of the textbook will be taught. The teacher should join TOPSS to tap into a source of high-quality curriculum materials (as well as a professional connection with other high school psychology teachers and a variety of student-oriented benefits, among other things). The teacher needs to explore other sources of information to continually refine and improve the psychology course. As long as the materials and activities used fit the standards suggested in this document, students will experience an accurate, high-quality introduction to the science of psychology.

This section contains a Lesson Planning Sheet to help connect teachers' present teaching strategies and materials to the psychology curricula standards and to develop new lessons designed specifically to meet one or more performance standards. The format of the sheet makes it possible to integrate the standards quickly and efficiently into the curriculum in a practical, useful way. To show how the Lesson Planning Sheet might be used, a blank planning sheet and a sample lesson are included at the end of this section.

SUGGESTED SCOPE AND SEQUENCE FOR A HIGH SCHOOL PSYCHOLOGY COURSE

Deciding what to teach and when to teach it is the first decision teachers must face in any course, and psychology is no exception. Psychology teachers have many options for determining scope and sequence of their courses based on the standards contained in this document. Ideally, psychology should be a yearlong course covering the units within each standard area in a relatively equitable fashion. In a year-long course, teachers can take roughly 2 weeks to teach each standard area, thus providing enough time to cover the material adequately and leave time for discussions, active learning, and inevitable interruptions in school schedules.

Not all teachers, however, have the luxury of teaching psychology as a year-long course. Block scheduling and priority for required courses may leave schools that want to offer psychology little choice other than to offer it as a one-semester course. A one-semester course does not provide sufficient time to teach units (standard areas) that enable students to achieve all of the standards. However, these stan-

dards do provide flexibility for teachers whose schedules are limited. The authors and editors of the psychology curriculum standards recommend that teachers design courses to highlight each of the five core domains found in the standards (Methods, Biopsychological, Cognitive, Developmental, and Variations in Individual and Group Behavior). Designing a domain-driven course gives teachers avenues to solve the scope and sequence problem in semester courses with creativity. The domain-driven course exposes students to the diversity of scholarship in psychology. This section provides some sample course outlines for 5-unit to 15-unit courses of study that use the five domains of the standards as the driving force behind curricular decisions.

Curricular decisions are made for a variety of reasons, and a teacher might choose one outline or another based on any of several factors. For example, instructors may choose outlines that put the areas with which they are most comfortable earlier than other areas. Alternatively, the choice may be made to time content areas to correspond with related current events (e.g., aligning the Social and Cultural Dimensions of Behavior unit to occur near an important election or the Life Span Development lessons to occur shortly before graduation). An instructor whose students participate in a science fair may choose to emphasize units that seem most likely to generate ideas for research projects. A 5-unit semester course may be desirable when the teacher chooses depth over breadth, whereas a 10- or 15-unit semester course may be preferable if the teacher wants students to recognize the wide diversity of the field. Each of the outlines meets these recommendations. Whatever choice the instructor makes, these outlines provide structure for a course that covers psychology at an appropriate level and with appropriate breadth.

PLAN 1

Unit	Domain
Introduction and Research Methods	Methods
Biological Bases of Behavior	Biopsychological
Memory	Cognitive
Life Span Development	Developmental
Psychological Disorders	Variations in Individual and Group Behavior

Introduction and Research Methods	Methods
Sensation and Perception	Biopsychological
Memory	Cognitive
Life Span Development	Developmental
Social and Cultural Dimensions of Behavior	Variations in Individual and Group Behavior

SAMPLE OUTLINES FOR A SEVEN-UNIT SEMESTER

These outlines highlight each domain, but focus on one or two domains depending on student interest or teacher specialization.

PLAN 1

Unit	Domain
Introduction and Research Methods	Methods
Social and Cultural Dimensions of Behavior	Variations in Individual and Group Behavior
Psychological Disorders	Variations in Individual and Group Behavior
Treatment of Psychological Disorders	Variations in Individual and Group Behavior
Biological Bases of Behavior	Biopsychological
Memory	Cognitive
Life Span Development	Developmental

Introduction and Research Methods	Methods
Life Span Development	Developmental
Biological Bases of Behavior	Biopsychological
States of Consciousness	Cognitive
Memory	Cognitive
Psychological Disorders	Variations in Individual and Group Behavior
Social and Cultural Dimensions of Behavior	Variations in Individual and Group Behavior

SAMPLE OUTLINES FOR A 10-UNIT COURSE

These outlines highlight each domain, but allow for greater depth of coverage because all units are not included.

PLAN 1

Unit	Domain
Introduction and Research Methods	Methods
Biological Bases of Behavior	Biopsychological
Learning	Cognitive
Memory	Cognitive
Life Span Development	Developmental
Individual Differences	Cognitive
Motivation and Emotion	Biopsychological
Sensation & Perception	Biopsychological
Psychological Disorders	Variations in Individual and Group Behavior
Treatment of Psychological Disorders	Variations in Individual and Group Behavior

Introduction and Research Methods	Methods
Life Span Development	Developmental
Biological Bases of Behavior	Biopsychological
Sensation & Perception	Biopsychological

SAMPLE OUTLINES FOR A 10-UNIT COURSE (CON'T)

These outlines highlight each domain, but allow for greater depth of coverage because all units are not included.

PLAN 2 (con't)

Learning	Cognitive
Memory	Cognitive
Personality and Assessment	Developmental
Individual Differences	Cognitive
Psychological Disorders	Variations in Individual and Group Behavior
Treatment of Psychological Disorders	Variations in Individual and Group Behavior

Introduction and Research Methods	Methods
Social and Cultural Dimensions of Behavior	Variations in Individual and Group Behavior
Learning	Cognitive
Memory	Cognitive
Biological Bases of Behavior	Biopsychological
Thinking and Language	Cognitive
States of Consciousness	Cognitive
Life Span Development	Developmental
Motivation and Emotion	Biopsychological
Stress, Coping, and Health	Biopsychological

SAMPLE OUTLINE FOR A 15-UNIT COURSE

This outline includes all standard areas or units. This sequence is based on a traditional textbook sequence. The sequence can be adjusted depending on student interest or teacher preference.

Unit	Domain
Introduction and Research Methods	Methods
Life Span Development	Developmental
Biological Bases of Behavior	Biopsychological
Sensation & Perception	Biopsychological
Motivation and Emotion	Biopsychological
Stress, Coping, and Health	Biopsychological
Learning	Cognitive
Memory	Cognitive
States of Consciousness	Cognitive
Thinking and Language	Cognitive
Individual Differences	Cognitive
Personality and Assessment	Developmental
Psychological Disorders	Variations in Individual and Group Behavior
Treatment of Psychological Disorders	Variations in Individual and Group Behavior
Social and Cultural Dimensions of Behavior	Variations in Individual and Group Behavior

LESSON PLANNING SHEET

LESSON PLANI	NING SHEET (for day of a day unit)
Standard	d Area(Unit Name):
Domain	u:
Targeted	d Content Standard(s):
Targeted	d Performance Standard(s):
Performa	ance Objective: :
Material	ls Needed:
Notes:	

SAMPLE LESSON PLANNING SHEET

LESSON PLANNING SHEET (for day of a day unit)
Standard Area (Unit Name): Stress, Coping, and Health
Domain: Biopsychological
Targeted Content Standard(s): CONTENT STANDARD IID-2: Physiological reactions to stress
Targeted Performance Standard(s):
Performance Objective IID-2.1: List and explain possible physiological reactions to stress
A. Teaching strategy to be used: Discussion of stress, its sources, and how it affects health B. Performance indicator (assessment technique): Relevant activity C. Estimated time required: One period of class time and out-of-class assignment
Materials Needed: Materials for activity
Notes:

ACHIEVING PROFICIENCY IN TEACHING HIGH SCHOOL PSYCHOLOGY

Teacher certification in psychology should be addressed by each school district in which psychology is taught. The first step for each district is to determine whether or not present teachers of psychology meet the certification requirements for its state board of education.

A survey of certification requirements for psychology teachers reveals a wide variation from state to state. Some states have no specific requirements, and others require a degree in psychology. The purpose of this document is not to supersede previous state board of education mandates. Rather, it is intended to inform:

- Teachers and future teachers who are trying to determine whether they have the recommended background in the discipline necessary to teach a scientific psychology course
- School districts preparing to offer their first psychology courses
- School districts seeking to provide germane in-service opportunities for their experienced psychology teachers

To function adequately in a scientific psychology course, teachers will need a background in or seek to enrich their understanding of content areas typically covered in such a course. Undergraduate or graduate level course work will help teachers achieve:

- Proficiency in the scientific method and research skills
- Increased understanding of socialemotional issues

- Increased sensitivity to social-emotional issues
- Expertise in biologically based behavioral phenomena
- Familiarity with cognitive components of behavior
- Knowledge of developmental processes

Many teachers may be deficient in one or more of the domains listed above. Teachers who are not as well prepared in these areas can take college courses aimed at eliminating the particular deficiency, or enroll in one of the many psychology teacher workshops held throughout the country. For more information about workshops or professional development opportunities for high school teachers, contact the Education Directorate of the American Psychological Association at: 750 First Street, NE, Washington, DC, 20002-4242, (202) 336-5500.

The ever-changing nature of psychology requires continuing education for all high school psychology teachers.

APPENDIX C— RESOURCES

High school psychology teachers can join APA as High School Teacher Affiliates; High School Teacher Affiliates automatically become members of the APA Teachers of Psychology in Secondary Schools (TOPSS). The mission of TOPSS is to promote the scientific nature of introductory and advanced high school psychology, to meet curricular needs of secondary school teachers, and to provide opportunities for high school students to be recognized and rewarded for their academic excellence. Benefits of teacher affiliate status with APA include access to TOPSS unit lesson plans, a yearly subscription to the Psychology Teacher Network quarterly newsletter, discounts on APA books and journals, access to online databases, discounted registration fees to the annual APA convention and to TOPSS workshops, and multiple opportunities to network with other psychology teachers and professionals. For information on joining APA as a High School Teacher Affiliate, contact the APA Membership Department at 750 First Street, NE, Washington, DC, 20002, or by e-mail or telephone at membership@apa.org or (800) 374-2721.

Since 1995, TOPSS has maintained a Web site (www.apa.org/ed/topss/homepage.html) designed for high school psychology teachers. The site contains:

- Information on TOPSS, including how to join
- Items to assist teachers of psychology in their classroom planning (e.g., TOPSS unit lesson plans, *National Standards for High School Psychology Curricula*)
- Items for professional growth and development, including upcoming workshops and conferences for high school psychology teachers
- A listing of current members of the TOPSS Committee and their e-mail addresses
- Teacher resources, including links to Web sites of interest to psychology teachers

- A Speakers Bureau to enable teachers to find and contact local psychologists
- Current and past issues of the *Psychology Teacher Network* newsletter
- Information on involving high school students in research
- Information on a project to recruit ethnic minority students into psychology
- Scholarship competitions for high school students

In addition, the following resources for teachers and interested policymakers have been compiled and are available through the APA TOPSS Web site at http://www.apa.org/ed/topss/resources.html:

- Popular books on psychology
- Psychology related videos and DVDs
- Sites on the Internet for Psychology Teachers
- Psychology Related Software Available
 From Publishers

Electronic Mailing Lists (listservs)

The following lists are of particular interest to psychology teachers:

- Psych-News is designed for people interested in the teaching of psychology at the high school level. Most of the list members are high school psychology teachers, although many college and university teachers are members as well. To join Psych-News, send the message "subscribe Psych-News your name" to the address "listserv@listserv.uh.edu"
- TIPS, Teaching in the Psychological Sciences, is designed more for teachers at the college and university level. Many high school teachers are

members, but the discussions usually center on post-high school education. Please be aware that TIPS can generate a large amount of e-mail. If your service provider limits the size of your mailbox, you may not want to subscribe to TIPS. To join TIPS, send the message "subscribe TIPS your name" to the address "listserv@fre.fsu.umd.edu"

- PsychTeacher is an electronic mailing list sponsored by the Society for the Teaching of Psychology and designed for both the high school and the college and university level. The electronic mailing list is monitored, which means each message is reviewed before being sent to the list. To subscribe to PsychTeacher, send the message "subscribe PsychTeacher your name" to the address "listserv@list.kennesaw.edu"
- APA TOPSS also has a listsery for high school psychology teachers. For more information on how to subscribe to the TOPSS listsery, visit the TOPSS Web site at http://www.apa.org/ ed/topss/homepage.html.

