

Contents



©Andrey_Popov/Shutterstock
MODULE 1

Preface xxvi Making the Grade xxxvi

CHAPTER 1

Introduction to Psychology 1

Psychologists at Work 3

The Subfields of Psychology: Psychology's Family Tree 4 Working at Psychology 7 AP Summary 10 AP Test Practice 11

MODULE 2

A Science Evolves: The Past, the Present, and the Future 12
The Roots of Psychology 13
Today's Five Major Perspectives 14

API APPLYING PSYCHOLOGY IN THE 21ST CENTURY: Psychology Matters 18

AP Summary 19 AP Test Practice 19

MODULE 3

Psychology's Key Issues and Controversies 20

EXPLORING DIVERSITY: Understanding How Culture, Ethnicity, and Race Influence Behavior 22

Psychology's Future 23

API NEUROSCIENCE IN YOUR LIFE: Enhancing Your Mind 24

BECOMING AN INFORMED CONSUMER OF PSYCHOLOGY: Thinking Critically About Psychology: Distinguishing Legitimate Psychology from Pseudo-Psychology 25 AP Summary 25

AP Test Practice 26



©Philippe Psaila/Science Source MODULE 4

CHAPTER 2

Psychological Research 28

The Scientific Method 30

Theories: Specifying Broad Explanations 30





Hypotheses: Crafting Testable Predictions 31

AP Summary 32 AP Test Practice 32

MODULE 5

Conducting Psychological Research 33

Archival Research 33

Naturalistic Observation 33

Survey Research 34

The Case Study 35

Correlational Research 35 Experimental Research 37

AP Summary 42 AP Test Practice 43

MODULE 6

Critical Research Issues 44

The Ethics of Research 44

EXPLORING DIVERSITY: Choosing Participants Who Represent the Scope of Human Behavior 45

API NEUROSCIENCE IN YOUR LIFE: The Importance of Using

Representative Participants 46

Should Animals Be Used in Research? 46

API APPLYING PSYCHOLOGY IN THE 21ST CENTURY: Finding Research Participants

on Facebook 47

Threats to Experimental Validity: Avoiding Experimental Bias 47

BECOMING AN INFORMED CONSUMER OF PSYCHOLOGY: Thinking Critically

About Research 48

AP Summary 49

AP Test Practice 50



©DGLimages/Shutterstock

MODULE 7

CHAPTER 3

Neuroscience and Behavior 52

Neurons: The Basic Elements of Behavior 54

The Structure of the Neuron 54

How Neurons Fire 55

Where Neurons Meet: Bridging the Gap 57

Neurotransmitters: Multitalented Chemical Couriers 59

AP Summary 61 AP Test Practice 61





MODULE 8

The Nervous System and the Endocrine System:

Communicating Within the Body 62

The Nervous System: Linking Neurons 62

The Evolutionary Foundations of the Nervous System 65 The Endocrine System: Of Chemicals and Glands 66

AP Summary 68
AP Test Practice 69

MODULE 9

The Brain 70

Studying the Brain's Structure and Functions: Spying on the Brain 70

API APPLYING PSYCHOLOGY IN THE 21ST CENTURY: Bypassing Broken Neural Pathways

with a Chip in the Brain 72

The Central Core: Our "Old Brain" 73

The Limbic System: Beyond the Central Core 74

The Cerebral Cortex: Our "New Brain" 75

Neuroplasticity and the Brain 78

API NEUROSCIENCE IN YOUR LIFE: The Plastic Brain 79

The Specialization of the Hemispheres: Two Brains or One? 79

EXPLORING DIVERSITY: Human Diversity and the Brain 81 The Split Brain: Exploring the Two Hemispheres 81

BECOMING AN INFORMED CONSUMER OF PSYCHOLOGY: Learning to Control Your

Heart—and Mind—Through Biofeedback 83

AP Summary 83 AP Test Practice 84



©Uppercut/SuperStock
MODULE 10

CHAPTER 4

Sensation and Perception 87

Sensing the World Around Us 89

Absolute Thresholds: Detecting What's Out There 89

Difference Thresholds: Noticing Distinctions Between Stimuli 91

Sensory Adaptation: Turning Down Our Responses 92

AP Summary 93 AP Test Practice 93

MODULE 11

Vision: Shedding Light on the Eye 94

Illuminating the Structure of the Eye 94

API NEUROSCIENCE IN YOUR LIFE: Recognizing Faces 99

Color Vision and Color Blindness: The 7-Million-Color Spectrum 100





AP Summary 102 AP Test Practice 102

MODULE 12

Hearing and the Other Senses 103

Sensing Sound 103 Smell and Taste 107

API APPLYING PSYCHOLOGY IN THE 21ST CENTURY: Sniffing out Flash Drives 109

The Skin Senses: Touch, Pressure, Temperature, and Pain 110

BECOMING AN INFORMED CONSUMER OF PSYCHOLOGY: Managing Pain 113

How Our Senses Interact 114

AP Summary 115 AP Test Practice 116

MODULE 13

Perceptual Organization: Constructing Our

View of the World 117

The Gestalt Laws of Organization 117 Top-Down and Bottom-Up Processing 118 Depth Perception: Translating 2-D to 3-D 119

Perceptual Constancy 121

Motion Perception: As the World Turns 122

Perceptual Illusions: The Deceptions of Perceptions 122

EXPLORING DIVERSITY: Culture and Perception 124

AP Summary 126 AP Test Practice 127



MODULE 14

CHAPTER 5

States of Consciousness 129

Sleep and Dreams 131

The Stages of Sleep 132

REM Sleep: The Paradox of Sleep 133

Why Do We Sleep, and How Much Sleep Is Necessary? 134

API APPLYING PSYCHOLOGY IN THE 21ST CENTURY: Sleeping to Forget 135

API NEUROSCIENCE IN YOUR LIFE: Why Are We So Emotional When We Don't Get

Enough Sleep? 136

The Function and Meaning of Dreaming 137 Sleep Disturbances: Slumbering Problems 140

Circadian Rhythms: Life Cycles 141 Daydreams: Dreams Without Sleep 142





BECOMING AN INFORMED CONSUMER OF PSYCHOLOGY: Sleeping Better 143

AP Summary 144 AP Test Practice 145

MODULE 15

Hypnosis and Meditation 146

Hypnosis: A Trance-Forming Experience? 146

Meditation: Regulating Our Own State of Consciousness 148 **EXPLORING DIVERSITY:** Cross-Cultural Routes to Altered States

of Consciousness 150 AP Summary 150 AP Test Practice 151

MODULE 16

Drug Use: The Highs and Lows of Consciousness 152

Stimulants: Drug Highs 154 Depressants: Drug Lows 157

Narcotics, Opiates, and Opioids: Relieving Pain and Anxiety 160

Hallucinogens: Psychedelic Drugs 161

BECOMING AN INFORMED CONSUMER OF PSYCHOLOGY: Identifying Drug and

Alcohol Problems 163 AP Summary 164 AP Test Practice 164



©MJTH/Shutterstock

CHAPTER 6

Learning 167

Classical Conditioning 169 MODULE 17

The Basics of Classical Conditioning 169

Applying Conditioning Principles to Human Behavior 172

Extinction 173

Generalization and Discrimination 174

Beyond Traditional Classical Conditioning: Challenging

Basic Assumptions 175

AP Summary 175

AP Test Practice 176

MODULE 18

Operant Conditioning 177

Thorndike's Law of Effect 177

The Basics of Operant Conditioning 178

API APPLYING PSYCHOLOGY IN THE 21ST CENTURY: How Uber and Lyft Put Themselves in the Driver's Seat 186





BECOMING AN INFORMED CONSUMER OF PSYCHOLOGY: Using Behavior Analysis and

Behavior Modification 188

AP Summary 189
AP Test Practice 190

MODULE 19

Cognitive Approaches to Learning 191

Latent Learning 191

Observational Learning: Learning Through Imitation 193

API NEUROSCIENCE IN YOUR LIFE: Learning Through Imitation 194

EXPLORING DIVERSITY: Does Culture Influence How We Learn? 196

AP Summary 197
AP Test Practice 198



©Eugenio Marongiu/Shutterstock

MODULE 20

CHAPTER 7

Memory 200

The Foundations of Memory 202

Sensory Memory 203 Short-Term Memory 204 Working Memory 206

Long-Term Memory 207

API NEUROSCIENCE IN YOUR LIFE: Superior Memory 212

AP Summary 213
AP Test Practice 213

MODULE 21

Recalling Long-Term Memories 214

Retrieval Cues 214

Levels of Processing 215

Explicit and Implicit Memory 216

Flashbulb Memories 217

Constructive Processes in Memory: Rebuilding the Past 218

API APPLYING PSYCHOLOGY IN THE 21ST CENTURY: Memories Are Made to Be Meaningful 221

EXPLORING DIVERSITY: Are There Cross-Cultural Differences in Memory? 222

AP Summary 223 AP Test Practice 224

MODULE 22

Forgetting: When Memory Fails 225

Why We Forget 226

Proactive and Retroactive Interference: The Before and After of Forgetting 227



xvii



Memory Dysfunctions: Afflictions of Forgetting 228

BECOMING AN INFORMED CONSUMER OF PSYCHOLOGY: Improving Your Memory 230

AP Summary 230 AP Test Practice 231



MODULE 23

©Chris Robbins/Moodboard/Glow Images

CHAPTER 8

Cognition and Language 233

Thinking and Reasoning 235

Mental Images: Examining the Mind's Eye 235

Concepts: Categorizing the World 237 Reasoning: Making Up Your Mind 238

Computers and Problem Solving: Searching for Artificial Intelligence 240

Does Playing Video Games Improve Your Thinking? 240

API APPLYING PSYCHOLOGY IN THE 21ST CENTURY: Are Our Attention

Spans Becoming Shorter? 241

AP Summary 242 AP Test Practice 242

Problem Solving 243 MODULE 24

Preparation: Understanding and Diagnosing Problems 243

Production: Generating Solutions 247 Judgment: Evaluating Solutions 249

Impediments to Solutions: Why Is Problem Solving Such a Problem? 249

Creativity and Problem Solving 251

BECOMING AN INFORMED CONSUMER OF PSYCHOLOGY: Thinking Critically and

Creatively 253 AP Summary 254 AP Test Practice 255

Language 256 MODULE 25

Grammar: Language's Language 256

Language Development: Developing a Way with Words 257

The Influence of Language on Thinking: Do Eskimos Have More Words for Snow

Than Texans Do? 260

Do Animals Use Language? 261

EXPLORING DIVERSITY: Teaching with Linguistic Variety:

Bilingual Education 262

API NEUROSCIENCE IN YOUR LIFE: Being Bilingual Affects the Brain 263

AP Summary 264 AP Test Practice 264





©Digital Vision

MODULE 26



CHAPTER 9

Intelligence 267

What Is Intelligence? 269

Theories of Intelligence: Are There Different Kinds of Intelligence? 270 The Biological Basis of Intelligence 271

API NEUROSCIENCE IN YOUR LIFE: What Makes Someone Intelligent? 273 Practical and Emotional Intelligence: Toward a More Intelligent View of Intelligence 274

Assessing Intelligence 276

Contemporary IQ Tests: Gauging Intelligence 277

BECOMING AN INFORMED CONSUMER OF PSYCHOLOGY: Scoring Better

on Standardized Tests 282

AP Summary 282
AP Test Practice 283

MODULE 27

Variations in Intellectual Ability 284

Intellectual Disabilities 284

API APPLYING PSYCHOLOGY IN THE 21ST CENTURY: Does a Hidden Genius Lie Within Us? 286

The Intellectually Gifted 287

AP Summary 288

AP Test Practice 288

MODULE 28

Group Differences in Intelligence: Genetic and Environmental Determinants 289

EXPLORING DIVERSITY: Can We Develop Culture-Fair IQ Tests? 289

IQ and Heritability: The Relative Influence of Genetics

and Environment 290 AP Summary 293 AP Test Practice 293



©Yasuyoshi Chiba/AFP/Getty Images

MODULE 29

CHAPTER 10

Motivation and Emotion 296

Explaining Motivation 298

Instinct Approaches: Born to Be Motivated 299

Drive-Reduction Approaches: Satisfying Our Needs 299 Arousal Approaches: Beyond Drive Reduction 300





Incentive Approaches: Motivation's Pull 302

Cognitive Approaches: The Thoughts Behind Motivation 302

Maslow's Hierarchy: Ordering Motivational Needs 303 Applying the Different Approaches to Motivation 304

AP Summary 305 AP Test Practice 306

MODULE 30

Human Needs and Motivation: Eat, Drink, and Be Daring 307

The Motivation Behind Hunger and Eating 307 Eating Disorders 311

API APPLYING PSYCHOLOGY IN THE 21ST CENTURY: A Losing Battle for The Biggest Losers 312

BECOMING AN INFORMED CONSUMER OF PSYCHOLOGY: Dieting and Losing Weight Successfully 313

The Need for Achievement: Striving for Success 315
The Need for Affiliation: Striving for Friendship 315
The Need for Power: Striving for Impact on Others 316

AP Summary 317
AP Test Practice 317

MODULE 31

Understanding Emotional Experiences 318

The Functions of Emotions 319

Determining the Range of Emotions: Labeling Our Feelings 319

The Roots of Emotions 320

API NEUROSCIENCE IN YOUR LIFE: Emotion and the Brain 324

EXPLORING DIVERSITY: Do People in All Cultures Express Emotion Similarly? 325

AP Summary 327
AP Test Practice 327



©Jade/Getty Images

MODULE 32

CHAPTER 11

Sexuality and Gender 330

Gender and Sex 332

Gender Roles: Society's Expectations for Women and Men 332

Sexism on the Job 333

Gender Differences: More Similar Than Dissimilar 337

API NEUROSCIENCE IN YOUR LIFE: Do Women's Brains Differ from Men's? 339 Sources of Gender Differences: Where Biology and Society Meet 340





AP Summary 343 AP Test Practice 343

MODULE 33

Understanding Human Sexual Response: The Facts of Life 344

The Basic Biology of Sexual Behavior 344

Physiological Aspects of Sexual Excitement: What Turns People On? 345

The Phases of Sexual Response: The Ups and Downs of Sex 346

EXPLORING DIVERSITY: Female Circumcision: A Celebration of Culture—or Genital

Mutilation? 347 AP Summary 348 AP Test Practice 349

MODULE 34

The Diversity of Sexual Behavior 350

Approaches to Sexual Normality 351

Surveying Sexual Behavior: What's Happening Behind Closed Doors? 352

Heterosexuality 353

API APPLYING PSYCHOLOGY IN THE 21ST CENTURY: Teen Sexting 355

Homosexuality and Bisexuality 356

Transgenderism 358

Sexual Difficulties and Issues 358

AP Summary 364
AP Test Practice 364



©Nancy Mao Smith/Shutterstock MODULE 35

CHAPTER 12

Development 367

Nature and Nurture: The Enduring Developmental Issue 369

Determining the Relative Influence of Nature and Nurture 371

Developmental Research Techniques 371

AP Summary 372 AP Test Practice 373

MODULE 36

Prenatal Development: Conception to Birth 374

The Basics of Genetics 374
The Earliest Development 376
AP Summary 380

AP Test Practice 380

MODULE 37

Infancy and Childhood 381

The Extraordinary Newborn 381

API NEUROSCIENCE IN YOUR LIFE: Emotional Responses in Infancy 384 Infancy Through Childhood 384





AP Summary 396 AP Test Practice 397

MODULE 38

Adolescence: Becoming an Adult 398

Physical Development: The Changing Adolescent 398

Moral and Cognitive Development: Distinguishing Right from Wrong 400

Social Development: Finding One's Self in a Social World 402

EXPLORING DIVERSITY: Rites of Passage: Coming of Age Around the World 406

AP Summary 407
AP Test Practice 407

MODULE 39

Adulthood 408

Physical Development: The Peak of Health 409

Social Development: Working at Life 410

Marriage, Children, and Divorce: Family Ties 411

Changing Roles of Men and Women 411 Later Years of Life: Growing Old 412

Physical Changes in Late Adulthood: The Aging Body 412

Cognitive Changes: Thinking About—and During—Late Adulthood 413

API APPLYING PSYCHOLOGY IN THE 21ST CENTURY: How Do Cognitive Abilities Rise and

Fall as We Age? 416

BECOMING AN INFORMED CONSUMER OF PSYCHOLOGY: Adjusting to Death 418

AP Summary 419 AP Test Practice 419



©santypan/Shutterstock

MODULE 40

CHAPTER 13

Personality 422

Psychodynamic Approaches to Personality 424

Freud's Psychoanalytic Theory: Mapping the Unconscious Mind 424

The Neo-Freudian Psychoanalysts: Building on Freud 430

AP Summary 432 AP Test Practice 433

MODULE 41

Trait, Learning, Biological and Evolutionary, and Humanistic Approaches to Personality 434

Trait Approaches: Placing Labels on Personality 434 Learning Approaches: We Are What We've Learned 437

Biological and Evolutionary Approaches: Are We Born with Personality? 440

API NEUROSCIENCE IN YOUR LIFE: The Neurological Underpinnings of Personality 441





API APPLYING PSYCHOLOGY IN THE 21ST CENTURY: Does Personality Shift

from Generation to Generation? 442

Humanistic Approaches: The Uniqueness of You 444

Comparing Approaches to Personality 445

AP Summary 446 AP Test Practice 446

MODULE 42

Assessing Personality: Determining What Makes Us

Distinctive 447

EXPLORING DIVERSITY: Should Race and Ethnicity Be Used to Establish Test

Norms? 448

Self-Report Measures of Personality 449

Projective Methods 451

Behavioral Assessment 452

BECOMING AN INFORMED CONSUMER OF PSYCHOLOGY: Assessing Personality

Assessments 453 AP Summary 453 AP Test Practice 454



©Fancy Collection/SuperStock

MODULE 43

CHAPTER 14

Health Psychology: Stress, Coping, and Well-Being 456

Stress and Coping 458

Stress: Reacting to Threat and Challenge 458

The High Cost of Stress 461

Coping with Stress 465

API NEUROSCIENCE IN YOUR LIFE: The Neuroscience of Resilience 467

API APPLYING PSYCHOLOGY IN THE 21ST CENTURY: Does Using Facebook

Make You Feel Bad? 469

BECOMING AN INFORMED CONSUMER OF PSYCHOLOGY: Effective Coping Strategies 469

AP Summary 470

AP Test Practice 471

MODULE 44

Psychological Aspects of Illness and Well-Being 472

The As, Bs, and Ds of Coronary Heart Disease 472

Psychological Aspects of Cancer 473

Smoking 474

EXPLORING DIVERSITY: Hucksters of Death: Promoting Smoking

Throughout the World 476

AP Summary 477

AP Test Practice 477





MODULE 45

Promoting Health and Wellness 478

Following Medical Advice 478
Well-Being and Happiness 481
AP Summary 483
AP Test Practice 483



©Andrey_Popov/Shutterstock
MODULE 46

CHAPTER 15

Psychological Disorders 486

Normal Versus Abnormal: Making the Distinction 488

Defining Abnormality 488

Perspectives on Abnormality: From Superstition to Science 490

Classifying Abnormal Behavior: The ABCs of DSM 493

AP Summary 495
AP Test Practice 496

MODULE 47

The Major Psychological Disorders 497

Anxiety Disorders 497

Obsessive-Compulsive Disorder 499

Somatic Symptom Disorders 501

Dissociative Disorders 502

Mood Disorders 503

Schizophrenia 507

API NEUROSCIENCE IN YOUR LIFE: Brain Networks Related to Memory Deficits in

Schizophrenia 510

Personality Disorders 511

Disorders That Impact Childhood 513

Other Disorders 513

AP Summary 514

AP Test Practice 515

MODULE 48

Psychological Disorders in Perspective 516

The Social and Cultural Context of Psychological Disorders 517

API APPLYING PSYCHOLOGY IN THE 21ST CENTURY: Is the Newest Generation of College Students More Psychologically Disordered Than Their Predecessors? 518

EXPLORING DIVERSITY: DSM and Culture—and the Culture of DSM 519

BECOMING AN INFORMED CONSUMER OF PSYCHOLOGY: Deciding When

You Need Help 520

AP Summary 521

AP Test Practice 521





©urbancow/Getty Images

CHAPTER 16

Treatment of Psychological Disorders 524

MODULE 49

Psychotherapy: Psychodynamic, Behavioral, and Cognitive Approaches to Treatment 526

Psychodynamic Approaches to Therapy 527 Behavioral Approaches to Therapy 529 Cognitive Approaches to Therapy 533

API NEUROSCIENCE IN YOUR LIFE: How Cognitive Behavioral Therapy Changes Your Brain 535

AP Summary 535
AP Test Practice 536

MODULE 50

Psychotherapy: Humanistic, Interpersonal, and Group Approaches to Treatment 537

Humanistic Therapy 537 Interpersonal Therapy 538

API APPLYING PSYCHOLOGY IN THE 21ST CENTURY: Click Here for Therapy 539

Group Therapies 539

Evaluating Psychotherapy: Does Therapy Work? 541

EXPLORING DIVERSITY: Racial and Ethnic Factors in Treatment: Should Therapists Be

Color-Blind? 543 AP Summary 544 AP Test Practice 545

MODULE 51

Biomedical Therapy: Biological Approaches to Treatment 546

Drug Therapy 546

Electroconvulsive Therapy (ECT) 549

Psychosurgery 550

Biomedical Therapies in Perspective 551

Community Psychology: Focus on Prevention 551

BECOMING AN INFORMED CONSUMER OF PSYCHOLOGY: Choosing the Right

Therapist 553
AP Summary 553
AP Test Practice 554





©Ingram Publishing/SuperStock
MODULE 52



Social Psychology 556

Attitudes and Social Cognition 558

Persuasion: Changing Attitudes 558

Social Cognition: Understanding Others 561

EXPLORING DIVERSITY: Attribution Biases in a Cultural Context: How Fundamental

Is the Fundamental Attribution Error? 565

AP Summary 566 AP Test Practice 566

MODULE 53 Social Influence and Groups 567

CHAPTER 17

Conformity: Following What Others Do 567

Compliance: Submitting to Direct Social Pressure 570

Obedience: Following Direct Orders 572

AP Summary 574 AP Test Practice 574

MODULE 54

Prejudice and Discrimination 575

The Foundations of Prejudice 575

API NEUROSCIENCE IN YOUR LIFE: The Prejudiced Brain 577

Measuring Prejudice and Discrimination: The Implicit Association Test 578 Reducing the Consequences of Prejudice and Discrimination 578

API APPLYING PSYCHOLOGY IN THE 21ST CENTURY: Helping More Women Succeed as Engineers 580

AP Summary 580 AP Test Practice 581

MODULE 55

Positive and Negative Social Behavior 582

Liking and Loving: Interpersonal Attraction and the Development of Relationships 582

Aggression and Prosocial Behavior: Hurting and Helping Others 586

Helping Others: The Brighter Side of Human Nature 589

BECOMING AN INFORMED CONSUMER OF PSYCHOLOGY: Dealing Effectively with Anger 591

AP Summary 592 AP Test Practice 592





©Shutterstock/Rawpixel.com

EPILOGUE

Diversity, Culture, Conflict, and Cooperation E-1

Diversity and Culture E-3

EXPLORING DIVERSITY: The Culture of Agression E-9

Conflict and Cooperation: Striving for a Just and Peaceful World E-12

BECOMING AN INFORMED CONSUMER OF PSYCHOLOGY: Reducing War, Promoting

Peace, and Creating a Just World E-15

Glossary G1-G12 References R1-R68 Name Index NI1-NI35 **Subject Index SI1-SI16 AP Practice Exam PE1-PE22**

