

(ONE COURSE PER FORM)

1.) DATE: 9-8-09	2.) COMMUNITY COLLEGE: Maricopa Co. Comm. College District
3.) COURSE PROPOSED: Prefix: H	IES Number: 201 Title: Substance Abuse and Behavior Credits: 3
CROSS LISTED WITH: Prefix:	Number: ; Prefix: Number: ; Prefix: Number: ;
Prefix:	Number: ; Prefix: Number: ; Prefix: Number:
	DR: SHARON MCLAUGHLIN, MESA PHONE: 480-
	30-461-7471
ELIGIBILITY: Courses must have a cu not eligible for the General Studies Pro	rrent Course Equivalency Guide (CEG) evaluation. Courses evaluated as NT (non-transferable are ogram.
MANDATORY REVIEW:	
	ergoing Mandatory Review for the following Core or Awareness Area (only one area is permitted; if a Awareness Area, please submit a separate Mandatory Review Cover Form for each Area).
courses every five years, to verify that	(GSC-T) Policies and Procedures requires the review of previously approved community college they continue to meet the requirements of Core or Awareness Areas already assigned to these as the General Studies program evolves.
	SERVE: A course may be proposed for more than one core or awareness area. Although a course
	nd an awareness area requirement concurrently, a course may not be used to satisfy requirements in eously, even if approved for those areas. With departmental consent, an approved General Studies
	e General Studies requirements and the major program of study.
,	E AREA OR AN AWARENESS AREA:
Core Areas: Social and Beha	
 6.) On a separate sheet, please provisition is being proposed. 	ide a description of how the course meets the specific criteria in the area for which the course
7.) DOCUMENTATION REQUIRED	
Course Description	
Course Syllabus	
Table of Contents from the textboo	k required and/or list or required readings/books
Description of how course meets cr	
8.) THIS COURSE CURRENTLY TRA ☐ DEC prefix ⊠ Elective	ANSFERS TO ASU AS:
Current General Studies desigr	nation(s):
Fall	
Effective date: 2010 Spring Co	ourse Equivalency Guide
Is this a multi-section course?	🛛 yes 🔲 no
Is it governed by a common syl	labus? 🗌 yes 🖾 no
Chair/Director:	Chair/Director Signature:
AGSC Action: Date action taken:	Approved Disapproved
Effective Date:	

Proposer: Please complete the following section and attach appropriate documentation.

ASU[SB] CRITERIA A SOCIAL AND BEHAVIORAL SCIENCE [SB] course should meet all of the following criteria. If not, a rationale for exclusion should be provided.			
YES	NO		Identify Documentation Submitted
\boxtimes		 Course is designed to advance basic understanding and knowledge about human interaction. 	Course Comps: 1, 2, 3, 4, 5,6, 7,8,9 10, Text Chapters: 4, 5, 6, 7, 8, 9, 10,11,12,13,14,15,16,
\square		 Course content emphasizes the study of social behavior such as that found in: ANTHROPOLOGY ECONOMICS CULTURAL GEOGRAPHY HISTORY Political Science 	Course Comps: 2, 3, 5, 11,12,13 Text Chapters: 1, 2, 3,17,8
\square		 HISTORY Political Science Course emphasizes: a. the distinct knowledge base of the social and behavioral sciences (e.g., sociological anthropological). OR b. the distinct methods of inquiry of the social and behavioral sciences (e.g., ethnography, historical analysis). 	Course Comps:1, 2, 3, 5, 8, 9, 10, 13 Text Chapters: 1, 2, 4, 5, 6, 7, 8, 9, 10,11,12,13,14,15,1 6,17,18
\boxtimes		 Course illustrates use of social and behavioral science perspectives and data. 	Course Comps: 1, 2, 3, 5, 8, 9, 12,13 Text Chapters: 2,3,4, 5, 17, 18
		THE FOLLOWING TYPES OF COURSES ARE EXCLUDED FROM THE [SB] AREA EVEN THOUGH THEY MIGHT GIVE SOME CONSIDERATION TO SOCIAL AND BEHAVIORAL SCIENCE CONCERNS:	
		Courses with primarily fine arts, humanities, literary, or philosophical content.	
		 Courses with primarily natural or physical science content. Courses with predominantly applied orientation for professional skills or training purposes. 	
		 Courses emphasizing primarily oral, quantitative, or written skills. 	

Course Prefix	Number	Title	Designation
HES	201	Substance Abuse and Behavior	SB

Explain in detail which student activities correspond to the specific designation criteria. Please use the following organizer to explain how the criteria are being met.

Criteria (from checksheet)	How course meets spirit (contextualize specific examples in next column)	Please provide detailed evidence of how course meets criteria (i.e., where in syllabus)
Course is designed to advance	This course provides an	Course Comps: 1, 2, 3, 4,
basic understanding and	overivew of the effects of a	5,6, 7,8,9 10,
knowledge about human	variety of drugs (both legal and	Text Chapters: 4, 5, 6, 7, 8, 9,
interaction.	illegal). The ramifications that	10,11,12,13,14,15,16,
	misuse and abuse of these	
	drugs may have on all aspects	
	of an individual's overall health	
	and wellness (physically,	
	emotionally, socially etc.) is	
	studied in depth. The effects of	
	different drugs will be examined	194
	including the psychological and	
	behavioral changes that occur	
	as a result of drug use and the	
	consequent changes in	
	behavior, communiation and	
	social interaction. Emphasis will	
	be placed on commonly misued	
	and abused drugs in modern	
	society. Sociological research	
	on patterns of drug use among	
	varied cultural groups will be	
	compared (ie: gender, race,	-
	socioeconomic status).	
Course content emphasizes the	The prevalence of drug use and	Course Comps: 2, 3, 5, 11,
study of social behavior such as	abuse in modern society has	12, 13
that found in: Economics and	significant impact on scientific	Text Chapters: 1, 2, 3,17,18
Political Science	exploration, healthcare and	
	economics. This course will	
	provide an overview of the	
	impact drug use and abuse in	
	our society has on economic	
	and political policy. The	K. C.
	evolution of drug laws and	
	enforcement at the federal, state	

Course emphasizes b. the distinct methods of inquiry of the social and behavioral sciences	and local level will be studied. Students will debate and discuss the consequences that drug use has on research and scientific exploration by drug companies. Data will be evaluated to determine the impact that drug use (legal and illegal) has on the country's economy. The appeal for individuals to use and abuse drugs varies. In this course, students will learn the biological, psychological and sociological sources of addiction and substance abuse. Through study of psychological and sociological theory, students will identify risk factors that may make individuals prone to addicitve behaviors as well as evaluate their own personal risk factors.	Course Comps:1, 2, 3, 5, 8, 9, 10, 13 Text Chapters: 1, 2, 4, 5, 6, 7, 8, 9, 10,11,12,13,14,15,16,17,18
Course illustrates use of social and behavioral science perspectives and data	This class will help students to learn the connections between drugs' actions in the body with behavior and social interaction. Case studies will be presented and discussed which show the broad spectrum of the consequences of drug use. Students will also be required to attend a support group meeting for individuals stuggling with addiction and substance abuse problems in order to have first- hand experience and insight in observing the impact of substance abuse and behavior.	Course Comps: 1, 2, 3, 5, 8, 9, 12,13 Text Chapters: 2,3,4, 5, 17, 18

Official Course Description: MCCCD Approval: 02/22/94

HES201 19946-99999

LEC 3 Credit(s) 3 Period(s)

Substance Abuse and Behavior

Principles and factual bases of drug use and abuse. Physiological and socio-psychological effects of drug use and law enforcement of drug abuse. Consultants used extensively to enrich course. Prerequisites: None.

Go to Competencies Go to Outline

MCCCD Official Course Competencies:

HES201 19946-99999 Substance Abuse and Behavior

- 1. Describe the common psychological and behavioral characteristics associated with drug use. (I)
- 2. Identify and describe social conditions in America related to drug use and abuse. (I)
- 3. Identify and describe behavioral and social conditions associated with the contemporary drug scene. (I)
- 4. Identify and describe the major classifications of drugs. (II)
- 5. Identify and use the language of the contemporary drug scene to describe drugs and their effects. (I, II, III)
- 6. Identify and describe the effects of drug usage on the central nervous system. (III)
- Identify and describe the normal functions of major physiological systems within the human organism. (III)
- 8. Describe the physiological effects of drugs on the human body. (III)
- 9. Describe the pharmacology of drug action associated with the use of common substances.(IV)
- 10. Describe the physical and psychological effects of multiple drug use. (IV)
- 11. Cite the current drug laws at the federal, state, and local level. (V)
- 12. Identify contemporary drug enforcement agencies and describe current enforcement techniques. (V)
- 13. Describe the major components of drug abuse prevention, treatment, and rehabilitation programs. (VI)

Go to Description Go to top of Competencies

MCCCD Official Course Outline:

HES201 19946-99999 Substance Abuse and Behavior

- I. Characteristics Associated with Drug Use.
 - A. Behavioral
 - B. Psychological
 - C. Social

D. Drug Cult

II. Classification of Drugs

A. Narcotics/opiates

B. Hallucinogens/psychedelics

C. Sedative/hypnotics

D. Stimulants

E. Depressants

F. Analgesics

G. Other

III. Human Physiology and Drugs

A. Central Nervous System

1. Normal Function

2. Long and Short Term Effects of Drug Usage

IV. Pharmacology of Drugs

A. Potency

B. Tolerance

C. Dependence

D. Multiple Use

E. Placebo Effects

V. Law Enforcement and Drugs

A. Laws

1. Federal

2. State

3. Local

B. Law Enforcement Agencies

1. Tax Supported

2. Voluntary

C. Law Enforcement Techniques

1. Punishment

2. Rehabilitation

3. Other

VI. Drug Abuse Programs

A. Prevention

B. Treatment

C. Rehabilitation

Go to Description Go to top of Competencies Go to top of Outline

Course:	HES 201 – Substance Abuse and Addiction
Term:	Fall
Section #:	15853
Instructor:	Laura Kobar
Office Hours:	By Appointment
Phone:	480-461-7551 Exercise Science office
Email:	laurahkobar@mail.mc.maricopa.edu

Required Text: • Drug

Drugs, Society, and Human Behavior

WebCT

Power Point, Information, Calendar, Movie Clips

Course Objectives:

*Increase awareness and understanding of the biological, psychological and sociological characteristics associated with drug use and abuse.

*Understand the effects of substances on human physiology and the intended and unintended effects of drugs on the human body.

*To present, understand and apply durgs within specific drug classifications and understand each drugs pharmacological effect.

*To analyze cultural attitudes towards drug use and examine the regulations and laws regarding licit and illicit drug use.

*Examine and define the origin and nature of addiction, the addiction cycle and treatment for addiction.

*To investigate drug abuse prevention strategies.

COURSE REOUIREMENTS:

Attendance:

Students are expected to attend every class. Each class is worth 3 points. Reduction in attendance points occurs in the following ways:

Tardiness, arriving late to class or having to leave early: = 2 points each day

Two tardies = 1 absence

A student arriving later that 12:10 p.m. is considered absent from the class session for that day. If a student arrives subsequent to the recording of attendance, it is her/his responsibility to remind the instructor (at the conclusion of class) that she/he did attend the class session. A student who neglects to provide the required reminder will be considered absent for the specific class session.

Students with 3 or fewer absences will be able to drop 1 test score at the end of the semester. One tardy over the limit will disqualify the student. NO EXCEPTIONS!

TOTAL POINTS = 100 POINTS

Personal Insight Paper

You are to write about your personal risks for substance abuse, use, misuse or abuse. Consider if any of the biological, psychological or sociological explanations discussed in the text apply to you.

Format: (10 points)

Typed, double spaced, use of complete sentences, spelling, 4 or more pages in length.

Cover page to include name, title of paper, name of class and date.

Introduction: 1 page - Outline of what you are about to say

Body: 2 -3 pages – The three elements listed below

Conclusion: 1 page – Summarize your thoughts, opinions, attitudes and outlook for the future.

The Elements:

Identity and Strengths: This is who I am. This is how others would describe me. This is what makes me unique. Here are my strengths and here is what others value about me. These are my biological risks for substance misuse or abuse. This is my inherited traits and predisposition toward drug use and misuse. (15 points)

Global risks: Sociological theories that have affected you, the role of significant others and their impact on you, your social learning behaviors with drugs and peers and society in general and your own labeling system. How do you view yourself and how do you perceive others view of you and is their view positive or negative and does their view have an impact on you? What is your Master Status? What role has the subculture theory had on your use or misuse of drugs? Have you engaged in delinquent behavior to gain social status, or has delinquent behavior ever been a means of status frustration or low self-esteem. Has social change ever been a cause for substance abuse? Has social disorganization or strain been a cause to deviate? Because of rapid social changes do you ever feel disconnected or disaffiliated from others? (15 points)

Specific risks: Psychological theories that impact your risk for use, misuse or abuse: need to escape from reality boredom, inability to cope with anxiety, self-indulgence, desiring intoxicants, blind compliance with drug using peers, conscious or unconscious ignorance of harmful effects of drug use or misuse. Describe your personality traits, introversion or extraversion. Do you pursue physical stimulation or dangerous behaviors? If so, why? Have you learned any patterns of abuse? If so, from whom? (15 points)

Total Points: 100 points

OBSERVATION PAPER

Call or check websites and make arrangements to attend and observe a recovery support program of your choice. To attend, the meeting must be identified as open (signified by an "O" on the site). Upon arrival always check in with the person in charge, identify yourself, that you are here to observe the meeting, and that you attend Scottsdale Community College. After the observation, type a 1 -2 page paper on your experience.

Format: Typed, double space, font size 12, spelling correct, complete sentences, clear thoughts, well organized.

Introduction: Name of support group attended, date of attendance, why you chose this type of group, our feelings about attending, demographics of the group: Number of people in attendance, their gender, age socio-economic status etc.

Body: Write a detailed review of the experience. It should be a personal composition of what you experienced, what you learned, how you felt, how it affected you.

Conclusion: Critique the experience, was it worthwhile, would you do it again, would you suggest this to others. Did the experience change any prior behaviors or attitudes?

Observation Paper: 50 points

East Valley AA Meetings (480) 834-9033 <u>www.aamesaaz.org</u>

Narcotic Annonymous

www.na.org

RESEARCH PAPER AND PRESENTATION (150 Points)

2 2

Sign up for a specific substance to research and determine date and time of presentation of topic to the class:

Paper: Format:	Research paper due on Typed, double spaced, font size 12, and sentences, well organized, 5 or	
(20 points)	Cover page: Name, title of paper, na	ame of class, date
Introduction:	General overview of the drug, forma and properties of the drug, current p on society, who uses drug and why	atterns and trends for drug use, impact
(15 points)		
Body:	used and methods for taking substant harvested or processed. Physiologic substance. The impact on special p athletes, etc.). Medicinal values, lo	opulations (men, women, pregnancy, ng-term effects of use, signs of abuse, ultural impacts of drug use and abuse, garding substance, and location on
(35 points)		
Conclusion:	e e i	l together – include: Low risk vs. high future outlook, any additional insight.
(15 points)		
Bibliography: Must include 5 different sources one of which can be the text for this class. No more than 2 internet sources.		
(15 points)		
5		
Presentation		10 points
		10 points

10 points

5 points

3 points

6 points

3 points 3 points

50 points

Knowledge of subject matter

Articulate (loud and clear voice)

Appropriate presentation behaviors

Professional appearance

Eye contact

Total Points

Use of visual aid: power point, movies

CLASS POLICIES

Late work will not be accepted. No make-ups will be given. No late assignments accepted. Work is considered late if turned in after 5:00 p.m. of due date. Work may be sent to instructor via WebCT or left in mailbox (with initials and time by office attendant), however being present in class is first and foremost to the success of the class. Exceptions are only considered with proper documentation from doctors, jury notices or coaches for athletes.

Underage Student Policy: All underage students must complete and pass all asset placement tests and receive department chair and instructor approval prior to registering for the course. Student and parent/guardian of the registered student, must also sign an informed consent form acknowledging their awareness of the course content.

Respect for Diversity: Diversity encompasses age, life experiences, profession, race, religion, sexual orientation, lifestyle, social class, learning style, philosophy of life, personality, mental and physical challenges, customs, values, and gender. Diversity is to be respected in this class.

Accommodations for Disabilities: Students who require additional assistance are responsible for notifying the instructor at the beginning of the semester so that arrangements can be made in a timely manner. Documentation must be filed at the office of Disability Resources and Services. The contact number for services is 480-461-7447.

Academic Dishonesty Policy: All students as part of their obligation to the College, assume the responsibility to exhibit their academic performance the qualities of honesty and integrity. All forms of student dishonesty, which may include but not limited to cheating, fabrication, facilitation academic dishonesty and plagiarism are subject to disciplinary actions.

Cellular Phone Policy: Cellular phones are not to be used for any purpose during the class. If phone makes noise in class that causes disruption student may be asked to leave class for that day.

<u>Tentative Schedule – Subject to Change</u> Unannounced quizzes and assignments may be given during class to assess your attendance and participation.

M Jar	n 14	Welcome/ Introductions
W	16	Syllabus
F	18	Chapter 1
		I
Μ	21	MLK HOLIDAY
W	23	Chapter 2
F	25	Chapter 3
		•
M Jan	. 28	Chapter 3
W	30	Video
F Feb	. 1	Chapter 4
		•
M Feb	4	Chapter 4
W	6	Chapter 5
F	8	Chapter 5
		•
Μ	11	Chapter 6 – Personal Insight Papers Due
W	13	
F	15	Chapter 8
M Feb	. 18	PRESIDENT'S DAY HOLIDAY
W	20	Chapter 8
\mathbf{F}	22	Chapter 9
Μ	25	Chapter 9
W	27	Chapter 10
F	29	Chapter 11
M Ma	ar 3	Chapter 12
W	5	- Review
F	7	MIDTERM EXAM
M Ma	ar 10	SPRING BREAK!!
W	12	
F	14	

M Mar 17	Movie
W 19	Chapter 6
F 21	Chapter 6 – Observation Papers Due
M Mar 24	Chapter 7
W 26	Chapter 7
F 28	Presentation on Depressants
M Mar 31	Chapter 13
W Apr 2	-
F 4	Chapter 14
M 7	Chapter 14
W 9	Movie - Meth
F 11	Presentation on Stimulants
M 14	Chapter 15
W 16	Chapter 15
F 18	Presentations
M Apr 21	Chapter 16
W 23	Chapter 16
F 25	Presentations
M Apr 28	Chapter 17
W 30	Review and Study Day
F May 2	Last Day of Regular Class

FINAL EXAM - MONDAY - MAY 7TH 12:00 P.M. - 2:00 P.M.

SYLLABUS ACKNOWLEDGMENT FORM – SPRING 2008

I, ______, indicate that I have both read and understood the syllabus for HES 201 – Substance Abuse and Addiction.

In particular, I note that I have read and understood the introductory course/instructor information, read and understood the course description and overview, understand that the course requires a text book and I have read and understood the course requirements. I also understand the grading procedure, policies on Academic Dishonesty, Underage Student Policy, Cellular Phone Policy and Respect for Diversity sections of the syllabus.

(Sign Name- first and last)

(Date – month, day and year)

Contents

Section One Drug Use in Modern Society 1

1 Drug Use: An Overview 2 "The Drug Problem" 2 Talking about Drug Use 3 Four Principles of Psychoactive Drugs 4 How Did We Get Here? 5 Have Things Really Changed? 5 Drugs and Drug Use Today 8 Extent of Drug Use 8 Trends in Drug Use 9 Correlates of Drug Use 13 Risk and Protective Factors 13 Race, Gender, and Level of Education 14 Personality Variables 15 Genetics 16 Antecedents of Drug Use 16 Motives for Drug Use 18 Summary 20 Review Questions 21 References 21 Check Yourself: Do Your Goals and Behaviors Match? 23

2 Drug Use as a Social Problem 25 Laissez-Faire 25 Toxicity 26 Categories of Toxicity 26 Drug Abuse Warning Network 27 How Dangerous Is the Drug? 29 Blood-Borne Diseases 30 Substance Dependence: What Is It? 32 Three Basic Processes 32 Changing Views of Dependence 34

Which Is More Important, Physical Dependence or Psychological Dependence? 35
Broad Views of Substance Dependence 37
Is Dependence Caused by the Substance? 37
Is Dependence Biological? 38

Is There an "Addictive Personality"? Is Dependence a Family Disorder? Is Substance Dependence a Disease? Crime and Violence: Does Drug Use Cause Crime? **40** Why We Try to Regulate Drugs Summary **43** Review Questions References Check Yourself: Are You Hooked on an Activity? Check Yourself: What's Your Risk of Drug Toxicity?

3 Drug Products and Their Regulations 51 The Beginnings 52 Reformism 52 Issues Leading to Legislation 52 1906 Pure Food and Drugs Act 55 Harrison Act of 1914 55 Two Bureaus, Two Types of Regulation 56 Regulation of Pharmaceuticals 56 Purity 56 Safety 58 Effectiveness 58 Marketing a New Drug 59 Dietary Supplements 60 Controlled Substances 61 After the Harrison Act 61 Narcotic Control Act of 1956 63 Drug Abuse Control Amendments of 1965 64 Comprehensive Drug Abuse Prevention and Control Act of 1970 64 Anti–Drug Abuse Acts of 1986 and 1988 65 State and Local Regulations 69 Federal Support for Drug Screening 70 Military and Federal Employees 70

www.mhhe.com/hart13e

Transportation Workers 70 Private Employers 70 Public Schools 70 Testing Methods 71 The Impact of Drug Enforcement 72 Budget 73 International Programs 73 Other Federal Agencies 73 Other Costs 73 Effectiveness of Control 75 Summary 75 Review Questions 76 References 76 Check Yourself: Consider the Consequences 77

Section Two How Drugs Work 79

4 The Nervous System 80 Chemical Messengers 80 Components of the Nervous System 81 Glia 81 Neurons 83 Neurotransmission 83 Action Potential 84 The Nervous System(s) 85 Somatic Nervous System 85 Autonomic Nervous System 85 Central Nervous System 86 The Brain 86 Major Structures 86 Chemical Pathways 89 Drugs and the Brain 91 Life Cycle of a Neurotransmitter 91 Examples of Drug Actions 95 Chemical Theories of Behavior 96 Brain Imaging Techniques 96 Summary 97 Review Questions 98 References 98 Check Yourself: What's Your Body's Natural Cycle? 99

5 The Actions of Drugs 101 Sources and Names of Drugs 101 Sources of Drugs 101 Names of Drugs 102 Categories of Drugs 102 Drug Identification 105 Drug Effects 105 Nonspecific (Placebo) Effects 105 Dose-Response Relationships 106 Potency 109 Time-Dependent Factors in Drug Actions 110 Getting the Drug to the Brain 111 A Little "Chemistry" 111 Routes of Administration 111 Transport in the Blood 115 More about the Blood-Brain Barrier 115 Mechanisms of Drug Actions 116 Effects on All Neurons 116 Effects on Specific Neurotransmitter Systems 116 Drug Deactivation 116 Mechanisms of Tolerance and Withdrawal Symptoms 118 Drug Disposition Tolerance 118 Behavioral Tolerance 118 Pharmacodynamic Tolerance 119 Summary 119 Review Questions 120 References 120

Check Yourself: How Do Drugs Work? 121

Section Three Uppers and Downers 123

6 Stimulants 124 Cocaine 124 History 124 Coca Wine 125 Local Anesthesia 125 Early Psychiatric Uses 126 Early Legal Controls on Cocaine 128 Forms of Cocaine 129 Contemporary Legal Controls on Cocaine 130

Contents

ix

Contents

Mechanism of Action 132 Absorption and Elimination 132 Beneficial Uses 132 Causes for Concern 133 Chronic Toxicity 133 Supplies of Illicit Cocaine 134 Current Patterns of Cocaine Use 135 Cocaine's Future 135 Amphetamines 136 History 136 Basic Pharmacology 140 Beneficial Uses 141 Causes for Concern 147 Summary 148 Review Questions 149 References 149 Check Yourself: Sensation-Seeking Scale 151 7 Depressants and Inhalants 153 History and Pharmacology 154 Before Barbiturates 154 Barbiturates 154

Meprobamate 156 Methaqualone 157 Bensodiazepines 157 Mechanism of Action 159 Nonbenzodiazepine Hypnotics 159 Beneficial Uses 160 Anxiolytics 160 As Sleeping Pills 161 As Anticonvulsants 163 Causes for Concern 163 Dependence Liability 163 Toxicity 164 Patterns of Abuse 165 Inhalants 165 Gaseous Anesthetics 166 Nitrites 167 Volatile Solvents 167 GHB (Gamma Hydroxybutyric Acid) 168 Summary 169

8 Medication for Mental Disorders 171 Mental Disorders 171 The Medical Model 171 Classification of Mental Disorders 172 Treatment of Mental Disorders 175 Before 1950 175 Antipsychotics 177 Antidepressants 180 Electroconvulsive Therapy 184 Mood Stabilizers 184 Consequences of Drug Treatments for Mental Illness 186 Summary 187 Review Questions 188 References 188 Check Yourself: Track Your Daily Mood Changes 189

Section Four Alcohol 191

Review Questions 169

References 169

9 Alcohol 192 Alcoholic Beverages 192 Fermentation and Fermentation Products 192 Distilled Products 193 Beer 194 Wine 196 Distilled Spirits 197 Alcohol Use and "The Alcohol Problem" 198 The Temperance Movement in America 199 Prohibition 200 Regulation after 1933 202 Taxation 202 Who Drinks? And Why? 203 Cultural Influences on Drinking 203 Trends in U.S. Alcohol Consumption 203 Regional Differences in the United States 203 Gender Differences 205 Drinking among College Students 206

X

www.inthhe.com/hart13e Alcohol Pharmacology 206 Absorption 206 Distribution 206 Metabolism 208 Mechanism(s) of Action 209 Behavioral Effects 210 Time-out and Alcohol Myopia 211 Driving under the Influence 212 Sexual Behavior 213 Blackouts 215 Crime and Violence 215 Physiological Effects 216 Alcohol Toxicity 216 Hangover 217 Chronic Disease States 218 Brain Damage 218 Liver Disorders 219 Heart Disease 219 Cancer 220 The Immune System 220 Fetal Alcohol Syndrome 221 Alcohol Dependence 222 Withdrawal Syndrome 222 Dependent Behaviors 224 Summary 226 Review Questions 227 References 228 Check Yourself: Do You Have a Drinking Problem? 229

Section Five Familiar Drugs 231

10 Tobacco 232 Tobacco History 232 Early Medical Uses 233 The Spread of Tobacco Use 234 Snuff 235 Tobacco in Early America 235 Chewing Tobacco 235 Cigars 236 Cigarettes 236 Contents

xi

Tobacco under Attack 237 The Quest for "Safer" Cigarettes 240 Current Cigarette Use 241 Smokeless Tobacco 241 Are Cigars Back? 242 Hookahs 243 Causes for Concern 243 Adverse Health Effects 243 Passive Smoking 244 Smoking and Health in Other Countries 246 Smoking and Pregnancy 246 Pharmacology of Nicotine 247 Absorption and Metabolism 248 Physiological Effects 248 Behavioral Effects 249 Nicotine Dependence 249 How to Stop Smoking 251 Summary 252 Review Questions 253 References 253 Check Yourself: Test Your Tobacco Awareness 255

11 Caffeine 257 Caffeine: The World's Most Common Psychostimulant 257 Coffee 257 Tea 261 Chocolate 264 Other Sources of Caffeine 266 Soft Drinks 266 "Energy" Drinks 268 Over-the-Counter Drugs 269 Caffeine Pharmacology 270 Time Course 270 Mechanism of Action 270 Physiological Effects 271 Behavioral Effects 272 Causes for Concern 274 Cancer 274 Reproductive Effects 274

Contents

Heart Disease 274 Caffeinism 275 Summary 275 Review Questions 275 References 276 Check Yourself: How Much Caffeine Do You Consume? 277

12 Dietary Supplements and Over-the-Counter Drugs 279 Dietary Supplements 279 Some Psychoactive Dietary Supplements 284 Saint John's Wort 284 SAMe 285 Ginkgo Biloba 286 Over-the-Counter Drugs 286 FDA Regulation of OTC Products 286 Simplifying Labels 287 Over-the-Counter versus Prescription Drugs 287 Behind-the-Counter Drugs 288 Some Psychoactive OTC Products 288 Stimulants 288 Weight-Control Products 289 Sedatives and Sleep Aids 290 Analgesics 291 People and Pain 291 Aspirin 291 Acetaminophen 295 Ibuprofen and Other NSAIDs 296 Cold and Allergy Products 296 The All-Too-Common Cold 296 Treatment of Cold Symptoms 298 Allergy and Sinus Medications 300 Choosing an OTC Product 300 Summary 301 Review Questions 301 References 301 Check Yourself: Can You Guess What These OTC Products Are Used For? 303

Section Six Restricted Drugs 305

13 Opioids 306 History of Opioids 307 Opium 307 Morphine 311 Heroin 312 Opioid Abuse before the Harrison Act 313 Abuse after the Harrison Act 314 Abuse of Prescripton Opioids 318 Pharmacology of the Opioids 319 Chemical Characteristics 319 Mechanism of Action 320 Beneficial Uses 321 Pain Relief 321 Intestinal Disorders 321 Cough Suppressants 322 Causes for Concern 322 Dependence Potential 322 Toxicity Potential 324 Patterns of Abuse 325 Summary 326 Review Questions 327 References 327 Check Yourself: Street Slang 329

> 14 Hallucinogens 331 Animism and Religion 331 Terminology and Types 332 Phantastica 332 Indole Hallucinogens 333 Catechol Hallucinogens 346 Deliriants 352 PCP 352 Anticholinergic Hallucinogens 355 Amanita Muscaria **358** Salvia Divinorum 360 Summary 360 Review Questions 361 References 361 Check Yourself: Hallucinogens from Plants

xii

www.imhhe.com/hart13e

15 Marijuana 365 Cannabis, the Plant 365 Preparations from Cannabis 366 History 368 Early History 368 The 19th Century: Romantic Literature and the New Science of Psychology 369 "Marijuana, Assassin of Youth" 369 The Marijuana Tax Act of 1937 371 After the Marijuana Tax Act 372 Pharmacology 373 Cannabinoid Chemicals 373 Absorption, Distribution, and Elimination 373 Mechanism of Action 374 Physiological Effects 374 Behavioral Effects 375 Medical Uses of Cannabis 378 Causes for Concern 381 Abuse and Dependence 381 Toxicity Potential 382 Marijuana and American Society 384 Summary 386 Review Questions 387 References 387 Check Yourself: Short-term Memory 389

16 Performance-Enhancing Drugs 391
Historical Use of Drugs in Athletics 392
Ancient Times 392
Early Use of Stimulants 392
Amphetamines 394
International Drug Testing 394
American Football 394
Steroids 395
The BALCO Scandal 395
The Battle over Testing 396
Stimulants as Performance Enhancers 397
Steroids 399
Psychological Effects of Steroids 400
Adverse Effects on the Body 400
Regulation 400

Other Hormonal Manipulations 402 Beta-2 Agonists 403 Creatine 403 Getting "Cut" 403 Summary 404 Review Questions 405 References 405 Check Yourself: How Would You Run the Bace? 407

Section Seven Prevention and Treatment 409

17 Preventing Substance Abuse 410 Defining Goals and Evaluating Outcomes 410 Types of Prevention 411 Prevention Programs in the Schools 412 The Knowledge-Attitudes-Behavior Model 412 Affective Education 414 Anti-drug Norms 415 Development of the Social Influence Model 417 DARE 418 Programs That Work 420 Peers, Parents, and the Community 421 Peer Programs 421 Parent and Family Programs 422 Community Programs 423 Prevention in the Workplace 424 What Should We Be Doing? 424 Summary 425 Review Questions 425 References 425 **Check Yourself: Does Your Family Function** Well? 427

18 Treating Substance Abuse and Dependence 429

Behavioral/Psychosocial Treatments429Defining Treatment Goals430Alcoholics Anonymous430

xiii

Motivational Enhancement Therapy **432** Contingency Management **433** Relapse Prevention **434** Pharmacotherapies (Medication Treatments) **434** Detoxification and Maintenance Phase **434** Alcohol **435** Nicotine **436** Opioids **437** Cocaine **439** Cannabis **439**

Treatment: The Big Picture in the United States 441

ls Treatment Effective? 441 Summary 442 Review Questions 442 References 443

Appendix A Drug Names 445 Appendix B Resources for Information and Assistance 451 Glossary 453 Credits 465 Index 467