

Substance Abuse and Public Health



Industry Sector: [Health Science and Medical Technology Industry](#)

Pathways: Mental & Behavioral Health, Patient Care Pathway

An overview of the epidemiology and toxicology of substance Abuse and its relevance to public health. An introduction into the concepts of substance abuse and dependence, the definition of licit and illicit drugs, and the pharmacologic, neurologic, and physiologic effects of substances on the human brain. Also discussed will be political, social and economical factors involved in the supply and demand for drugs. Epidemiologic data on the prevalence, incidence, and trends of smoking, alcohol, prescription and other drug dependencies in the U.S. will be covered, as well as risk factors associated with the use and abuse of these substances. Current options for recovery and a survey of local resources will be reviewed.

Textbook: Drugs and Society, 12 edition (Hanson, Venturelli, Fleckenstein)

Last Revised: August 25, 2017

Program Information	CTE Certification Elements
<p>Industries / Pathways: Health Science and Medical Technology Industry: Mental & Behavioral Health and Patient Care Pathways Grade Levels: 11,12 CSU/UC Approval: No Community College Course: Yes Pathway Sequence(s) That Include This Course: 1. Patient Care Pathway Course Sequence: Introduction to Health and Human Service Careers or</p>	<p>Course Level: Concentration CALPADS Pathway: HLT- 198, HLT- 195 CALPADS Course Title: Substance Abuse and Public Health State Course ID: 7921, 7961 Total Hours: 45 Course Length: 1 Semester Local Course Number: HED203:PC, HED203:MH Board Approval: Pending Board Action on 12/7/17</p>

Health Professions and Organizations
 First Aid, Emergency Response and CPR
 Career Explorations
 Anatomy and Physiology
 Introduction to Public Health or Health and Social Justice or
 Medical Terminology
 Hospital/Clinical Internship (10th, 11th, 12th)
 Realities of Nutrition or *Substance Abuse and Public Health*
 CPR Recertification
 Advanced Pre-nursing Seminar or Advanced Internship

2. Mental & Behavioral Health Pathway Course Sequence:

Introduction to Health and Human Service Careers or
 Health Professions and Organizations
 First Aid, Emergency Response and CPR
 Career Explorations
 Anatomy and Physiology

Labor Market Demand: High
Course Type: Career-Technical Preparation

Program Information (continued)

Mental & Behavioral Health Pathway Course Sequence (cont):

Foundations of Mental & Behavioral Health Careers I or
 Health and Social Justice or Introduction to Public Health
 Mental Health Internship (10th, 11th, 12th)
 Foundations of Mental & Behavioral Health Careers II or
Substance Abuse and Public Health or
 Introduction to Social Work
 CPR Recertification
 Specialized Mental Health Seminar Project and Exhibition
 and/or Advanced Mental/Behavioral Health Internship

Standards

California's 2013 CTE Standards (8)

1. CTE.HSMT.E.1.5 [Explain how public health can utilize social and behavioral interventions to improve the health of populations.](#)
2. CTE.HSMT.E.1.9 [Compare the scope of current public health policies with past practices.](#)
3. CTE.HSMT.E.1.10 [Defend health decisions, individual rights, and social responsibilities.](#)
4. CTE.HSMT.F.1.1 [Identify and describe prevention and early intervention barriers to mental health care.](#)
5. CTE.HSMT.F.9.1 [Identify community-based self-help/peer support groups.](#)
6. CTE.HSMT.F.9.3 [Compare and contrast self-help/peer support groups to determine strengths and gaps in service delivery.](#)
7. CTE.HSMT.F.9.5 [Examine the role that natural supports such as spiritual organizations, community centers, and other community-related resources play in an individual's mental health recovery.](#)
8. CTE.HSMT.F.11.4 [Research factors that define cultural differences between and among different ethnic, racial, and special populations.](#)

Reading

1. RST.9-10.3 (9th and 10th) [Follow precisely a complex multistep procedure when carrying out experiments, taking measurements, or performing technical tasks, attending to special cases or exceptions defined in the text.](#)
2. RST.11-12.3 (11th and 12th) [Follow precisely a complex multistep procedure when carrying out experiments, taking measurements, or performing technical tasks; analyze the specific results based on explanations in the text.](#)
3. RST.9-10.9 (9th-10th) [Compare and contrast findings presented in a text to those from other sources \(including their own experiments\), noting when the findings support or contradict previous explanations or accounts.](#)
4. RST.11-12.9 (11th and 12th) [Synthesize information from a range of sources \(e.g., texts, experiments, simulations\) into a coherent understanding of a process, phenomenon, or concept, resolving conflicting information when possible.](#)

Writing

1. WHST.9-10.4, WHST.11-12.4 (9-10 & 11-12) [Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.](#)

Competencies / Outcomes

Upon completion of the course, students will be able to:

1. Describe the psychotherapeutic benefits (if any) and harmful effects of common substances of abuse, and identify the populations most at risk of using these substances. Substances covered include tobacco (cigarettes and dip), alcohol, cocaine, crack, heroin, methamphetamine, steroids, over the counter medication, “herbal medicines” and prescription medicines.
2. Identify the factors associated with the use of specific substances of abuse (e.g., population at risk, age, sex, education, age at first initiation, etc.)
3. Apply basic knowledge of drug laws to evaluate historical legal cases and situations related to substance abuse.
4. Describe and analyze the neurological and physiological consequences of substance abuse.
5. Analyze the current public health perspective on the issue of substance abuse.
6. Analyze reliable public data sources to find statistical and epidemiological data on incidence, and trends in drugs.

Units

Unit 1: Introduction to Drugs and Society

Description

This unit will focus on how drug use is affected by biological, genetic, and pharmacological factors as well as cultural, social and contextual factors. To obtain the basic understanding of drug use and abuse, students will analyze how widespread drug use is and who the potential abusers are and what the commonly abused drugs are. This course will highlight different substances as well as their roles in our society. Students will be able to describe how the mass media promote drug use. Students will also review the CDC website and explore the national survey on drug use and health.

Key Topics/Activities

- Introduction to Drugs and Society
- Licit versus Illicit Drugs
- Major Types of Drugs Commonly Abused
- Drug use: Statistics, Trends, and Demographics
- Review Websites: CDC and national survey on drug use and health.

Key concepts and skills will be assessed through written examination (multiple choice, short answer, and short constructed essay).

Unit 2: Drug Use and Abuse

Description

This unit will cover the content that differentiates drug use and abuse. Students will be able to identify and describe five major contributing factors responsible for addiction. as well as analyze the video, "Addiction and Trust." Students learn how making low-risk and high-risk drug choices directly affects drug use. Through this unit students will explore the National Institute of Drug Abuse website to gain more awareness on how drug addiction can co-occur with various types of mental health disorders.

Key Topics/Activities

- Drug Use and Abuse
- Video: Addiction and Trust: Marc Lewis
- Review Website: National Institute of Drug Abuse

Key concepts and skills will be assessed through written examination (multiple choice, short answer, and short constructed essay).

Unit 3: Drug Use and the Law

Description

Through this unit students will be able to identify the major criteria that determines how society regulates drugs. Students learn about various laws such as the significance of the Pure Food and Drug Act of 1906. Through this law students will learn why it is important to regulate drugs of abuse.

Key Topics/Activities:

- The Road to Regulation and the FDA
- Factors in Controlling Drug Abuse
- Strategies for Preventing Drug Abuse
- Drug Testing

Key concepts and skills will be assessed through written examination (multiple choice, short answer, and short constructed essay).

Unit 4: Homeostatic Systems and Drugs

Description

In this unit students will be able to describe the role of receptors in mediating the effects of hormones, neurotransmitters, and drugs. This unit outlines the principal components of the central nervous system, explain their general function and how it affected with drug use. Students learn the different areas of the brain most likely to be affected by drugs of abuse and how these effects contribute to drug dependence.

Key Topics/Activities

- Nervous System (Central, Peripheral and Autonomic Nervous System)
- Endocrine System
- Comprehensive Explanation of Homeostatic Systems

Key concepts and skills will be assessed through written examination (multiple choice, short answer, and short constructed essay).

Unit 5: Psychological and Physiological effects of Drug Use

Description

This unit will explore the psychological and physiological responses that drugs have on the body. Through this unit students will learn the difference of potency and toxicity. This will help students understand why the same dose of a drug may affect individuals differently. The following terms: threshold dose, plateau effect, and cumulative effect will be defined to allow students to identify and describe the psychological and physical dependence of drug use. Students learn the significance of placebos in drug therapy and drug abuse.

Key Topics/Activities

- Drug Interaction (The Intended and Unintended Effects of Drugs)
- The Role of the Liver in Drug Metabolism
- Drug cravings - Relapse to drug addiction

Key concepts and skills will be assessed through written examination (multiple choice, short answer, and short constructed essay).

Unit 6: Alcohol - The Pharmacological Effects

Description

Students will learn about the pharmacological and behavioral effects of alcohol as well as explore alcohol from a behavioral perspective. In this unit students will analyze the physical effects of prolonged heavy alcohol (ethanol) consumption. This unit will describe why use of alcohol by adolescents is problematic, student will be able to identify and explain the influence of underage drinking and how to address this problem.

Key Topics/Activities

- Alcohol as a Drug
- Alcohol Abuse and Alcoholism
- The Physical Effects of Alcohol on the Organ Systems and Bodily Functions (including Fetal Alcohol Syndrome)
- Video: Alcohol and Your Brain
- Lower the Legal Drinking Age?

Unit 7: Tobacco

Description

In this unit students will learn about social and economic costs of smoking in the United States and the history of tobacco use. Students will be able to describe the pharmacological effects of nicotine and identify several diseases caused by cigarette smoking. The reasons why individuals smoke as well as the consequences of environmental tobacco smoke on nonsmokers will be examined. Through this unit students will be able to list several strategies that aid in smoking cessation.

Key Topics/Activities

- Tobacco Use: Scope of the Problem
- Cigarette Smoking
- Tobacco Use and Exposure Without Smoking
- Reasons for Smoking and Motivation to Quit

Key concepts and skills will be assessed through written examination (multiple choice, short answer, and short constructed essay).

Unit 8: Hallucinogens

Description

The focus of this unit is to explain why hallucinogens became popular during the 1960s, and how hallucinogens alter the senses. Students learn how hallucinogens differ from other commonly abused drugs in terms of their addictive properties and their ability to cause dependence. Through this unit students will be able to analyse and describe the effects that environment and personality have on an individual's response to hallucinogens.

Key Topics/Activities

- The History of Hallucinogen (Psychedelics)
- Sensory and Psychological Effects
- Types of Hallucinogens

Key concepts and skills will be assessed through written examination (multiple choice, short answer, and short constructed essay).

Unit 9: Marijuana

Description

In this unit students will examine what marijuana is and explain why it remains so controversial. The medical uses of medical marijuana will also be researched in this unit along with the characteristics of Cannabis. Students will be able to explain the potential effects of marijuana on the body and how it can become psychologically addictive. Through this unit students will learn how tolerance and dependence affect the response to marijuana and its use.

Key Topics/Activities

- The Effects of Low and High Doses
- Short Term and Long Term Consequences of Smoking Marijuana
- Review Website: The Marijuana Controversy
- Physiological Effects of Marijuana

Key concepts and skills will be assessed through written examination (multiple choice, short answer, and short constructed essay).

Unit 10: OTC - Over the Counter Medications and Prescription Drugs

Description

This unit focuses on the potential abuse problems with OTC, prescription and herbal medications. Students will examine the general difference between prescription and nonprescription drugs. Through this unit student will identify the information, rules and safety measures needed for prescription drugs. Students will compare problems of abuse/addiction of illicit and prescription drugs and explain why prescription abuse has become widespread.

Key Topics/Activities:

- Types of OTC Drugs
- Herbal Options
- Prescription Drugs
- Celebrity Death and Prescription Abuse

Key concepts and skills will be assessed through written examination (multiple choice, short answer, and short constructed essay).

