

HSAD 020: BIOMEDICAL PHARMACOLOGY

Originator

amsimmons

Justification / Rationale

Add approved C-ID to course description.

Effective Term Fall 2019

Credit Status Credit - Degree Applicable

Subject HSAD - Human Services/Alcohol Drug

Course Number 020

Full Course Title Biomedical Pharmacology

Short Title BIOMED PHARMACOLOGY

Discipline

Disciplines List

Addiction Paraprofessional Training

Modality

Face-to-Face

Catalog Description

This course investigates the effects of alcohol and drugs on human behavior. Models and biomedical principles of the disease process and treatment are presented. Interpretations and evaluations of the strategies utilized in recovery by various treatment modalities are studied. This course can be taken concurrently with HSAD 001, if HSAD 001 not previously completed. This is a required course for the Alcohol and Drug Studies Certificate.

Schedule Description

This course investigates the pharmacological affects of psychoactive drugs on human behavior. Prerequisite: HSAD 001 or concurrent enrollment Advisory: ENG 061

Lecture Units

3

Lecture Semester Hours 54

Lab Units

0

In-class Hours

Out-of-class Hours

Total Course Units

3



Total Semester Hours

162

Prerequisite Course(s) HSAD 001 or concurrent enrollment Advisory: ENG 061

Required Text and Other Instructional Materials

Resource Type

Book

Formatting Style

Author

Advokat, C.D., Comaty, J.E. Julien, R. M.

Title

Julien's Primer of Drug Action

Edition

14

City New York

Publisher MacMillian Learning

Year

2019

College Level

Yes

ISBN # 10: 1-319-01585-9

Class Size Maximum

45

Entrance Skills

Recognize the current Diagnostic and Statistical Manual of Mental Disorders interpretation of substance abuse and dependence.

Entrance Skills

Recognize major legislation that regulates and controls drug availability

Prerequisite Course Objectives

HSAD 001-Recognize major legislation that regulates and controls drug availability.

Entrance Skills

Describe the physical/chemical reactions of the human body to various drugs

Prerequisite Course Objectives

HSAD 001-Describe the physical/chemical reactions of the human body to various drugs



Entrance Skills

Identify the dynamics and interaction of family life, work life, social life, and recreational activities resulting in the use of drugs.

Prerequisite Course Objectives

HSAD 001-Identify the dynamics and interaction of family life, work life, social life, and recreational activities resulting in the use of drugs.

Entrance Skills

Define the terms associated with drug use and abuse.

Prerequisite Course Objectives

HSAD 001-Define the terms associated with drug use and abuse.

Entrance Skills

Express an understanding of the educational requirements and work experience necessary for obtaining an Alcohol/Drug certificate.

Prerequisite Course Objectives

HSAD 001-Express an understanding of the educational requirements and work experience necessary for obtaining an Alcohol/Drug certificate.

Entrance Skills

Recognize the facts as they pertain to drug use and abuse.

Prerequisite Course Objectives

HSAD 001-Recognize the facts as they pertain to drug use and abuse

Entrance Skills

ADVISORY SKILLS: Read texts and respond in writing at the literate level.

Prerequisite Course Objectives

ENG 061-Demonstrate the ability to read and respond in writing beyond the literal interpretation of the text.

Course Content

- 1. Classification of psychoactive drugs
- 2. Principles of drug action
- 3. Central nervous system depressants: concepts and traditional agents
- 4. Central nervous system depressants: benzodiazepines, "second generation" anxiolytics, and antiepileptic drugs; alcohol
- 5. Psychostimulants: cocaine, amphetamine, methamphetamine, caffeine and nicotine
- 6. Pharmacotherapy of mood disorders: drugs for treating major depression, bipolar disorder
- 7. Analgesics and opiates
- 8. First, second and third generation antipsychotic neuroleptics
- 9. Psychedelic drugs: mescaline, LSD, and other hallucinogens
- 10. Marijuana
- 11. Anabolic-androgenic steroids
- 12. Drugs and society: priorities and alternatives
- 13. Integration of drugs and psychotherapy in treating mental disorders
- 14. Basic anatomy of the central nervous system
- 15. Physiology of the neuron
- 16. Synaptic transmission, neurotransmitters, and information transfer in the CNS



Course Objectives

	Objectives
Objective 1	Define the medical/pharmacological terminology and describe and demonstrate how it relates to drug actions, interactions, and receptor mechanisms.
Objective 2	Describe the unique characteristics and the classification of mind-altering drugs.
Objective 3	Interpret the potential for tolerance, cross tolerance and synergistic effects resulting from drug interaction.
Objective 4	Illustrate the neurological aspects of drug actions/interactions on the anatomy and physiology of the central and peripheral nervous system.
Objective 5	Illustrate the actions/interactions of drugs on body systems (i.e.: cardiovascular, renal, endocrine, gastrointestinal and respiratory)
Objective 6	Interpret how this knowledge pertaining to the effects of drugs on the human body and the various systems is interpreted and differently by various treatment modalities.
Objective 7	Interpret chemical dependence and addiction as a disease.
Objective 8	Demonstrate an understanding of medical complications associated with chronic drug use and to recognize the signs and symptoms of the various withdrawal syndromes.

Student Learning Outcomes

	Upon satisfactory completion of this course, students will be able to:		
Outcome 1	Recognize the meaning and application of pharmacokinetics.		
Outcome 2	Recognize the meaning and application of pharmacodynamics.		
Outcome 3	Recognize basic knowledge of pharmacology of specific drugs and drug actions on the brain and behavior.		

Methods of Instruction

Method	Please provide a description or examples of how each instructional method will be used in this course.
Lecture	Weekly content will be covered requiring note taking and reading sections of the book.
Discussion	Students will be required to restate and respond to questions on the lecture material.
Activity	Students may work on bingo cards - generating definitions for the terms for this activity.

Methods of Evaluation

Method	Please provide a description or examples of how each evaluation method will be used in this course.	Type of Assignment
Mid-term and final evaluations	There were be 3-4 examinations over the semester.	In Class Only
Group activity participation/observation	There will be an activity - Bingo or another group or individual activity that will result in points.	In Class Only
Student participation/contribution	Students will contribute definitions and other elements for in class activities that will be graded.	Out of Class Only
Tests/Quizzes/Examinations	Students will complete the study guide in preparation for the 3-4 examinations over the semenster.	Out of Class Only

Assignments

Other In-class Assignments

a. Attend the class sessions.

b. Take detailed notes of lecture.

c. Participate in discussion and activities.

Other Out-of-class Assignments

a. Read the textbook and all the recommended literature.

b. Work on the detailed study guides for all the examinations.



c. Work on lists of definition of terms/processes to bring to class and share to contribute to the group for required activities.

Grade Methods

Letter Grade Only

MIS Course Data

CIP Code 51.1501 - Substance Abuse/Addiction Counseling.

TOP Code 210440 - Alcohol and Controlled Substances

SAM Code C - Clearly Occupational

Basic Skills Status Not Basic Skills

Prior College Level Not applicable

Cooperative Work Experience Not a Coop Course

Course Classification Status Credit Course

Approved Special Class Not special class

Noncredit Category Not Applicable, Credit Course

Funding Agency Category Not Applicable

Program Status Program Applicable

Transfer Status Transferable to CSU only

C-ID ADS 140X

Allow Audit No

Repeatability No

Materials Fee No

Additional Fees? No

Approvals

Curriculum Committee Approval Date 02/21/2019



Academic Senate Approval Date

02/28/2019

Board of Trustees Approval Date 03/15/2019

Course Control Number CCC000320140

Programs referencing this course

Alcohol and Drug Studies Certificate of Achievement (http://catalog.collegeofthedesert.eduundefined?key=147) Alcohol and Drug Studies AS Degree (http://catalog.collegeofthedesert.eduundefined?key=66)