



## ADS 135 - Pharmacology and the Physiological Effects of Addiction Course Outline

Approval Date: 12/09/2021

Effective Date: 08/12/2022

### SECTION A

Unique ID Number CCC000525417

Discipline(s) Counseling

Division Counseling

Subject Area Addiction Studies

Subject Code ADS

Course Number 135

Course Title Pharmacology and the Physiological Effects of Addiction

TOP Code/SAM Code 2104.40 - Substance Abuse/Addiction Counseling\* / C - Occupational

Rationale for adding this course to the curriculum Removal of course requisites to corequisites

Units 3

Cross List N/A

Typical Course Weeks 18

Total Instructional Hours

#### Contact Hours

Lecture 54.00

Lab 0.00

Activity 0.00

Work Experience 0.00

Outside of Class Hours 108.00

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Total Contact Hours 54

Total Student Hours 162

Open Entry/Open Exit No

Maximum Enrollment 30

Grading Option Letter Grade Only

Distance Education Mode of Instruction Hybrid

Entirely Online

### SECTION B

General Education Information:

### SECTION C

## Course Description

**Repeatability** May be repeated 0 times

**Catalog Description** The course presents an overview of the physiological processes and impacts of drugs and alcohol on a person including risk factors related to addiction, acute and chronic health problems, communicable diseases, and fetal impact. Medical and pharmacological resources and appropriate community referrals are also reviewed.

**Schedule Description**

## SECTION D

### Condition on Enrollment

#### 1a. Prerequisite(s)

- HSRV 120

1b. Corequisite(s): *None*

1c. Recommended: *None*

1d. Limitation on Enrollment: *None*

## SECTION E

### Course Outline Information

#### 1. Student Learning Outcomes:

- Identify the physiological and pharmacological effects of drugs and alcohol on the human body.
- Review of evidence-based treatment and prevention models for substance abuse.

#### 2. Course Objectives: Upon completion of this course, the student will be able to:

- Identify the behavioral, psychological and physiological and social effects of drugs and alcohol on the body.
- Define the progressive stages of disease of chemical dependency.
- Evaluate the basic metabolic and neurological processes involved in psychoactive drug use, including risk factors & screening techniques.
- Compare and contrast between physical and psychological dependency, tolerance, and withdrawal.
- Analyze the effects of drug and alcohol use on perinatal women, including intervention strategies.
- Identify service needs with clients with HIV/AIDS, hepatitis, STD, or tuberculosis positive.
- Evaluate the medical and pharmacological resources and referrals available in the treatment of substance use disorders.
- H.

#### 3. Course Content

- Effects of drugs and alcohol on the human body
  - Behavioral and cognitive
  - Psychological and emotional
  - Physiological
  - Social implications on family, significant others and the community
- Progressive stages of disease of chemical dependency
  - Social and recreation drinking and drug use
  - Intoxication
  - Withdrawal
  - Detoxification

- e. Recovery
- C. Metabolic and neurological processes in alcohol and drug use
  - a. Risk factors
  - b. Screening techniques for psychoactive substance toxicity, intoxication and withdrawal symptoms
- D. Physical and psychological dependency of drug and alcohol use
  - a. Toxicity and the psychoactive effects
  - b. Intoxication
  - c. Withdrawal symptoms
  - d. Issues of tolerance
  - e. Cultural, ethnicity, age and gender factors affecting dependency issues
- E. Drug and alcohol use on perinatal women
  - a. Symptoms
  - b. Physiological effects on the fetus
  - c. Intervention strategies
- F. Service needs complex health issues
  - a. HIV/AIDS
  - b. Hepatitis
  - c. STD
  - d. Tuberculosis positive
  - e. High risk behaviors
  - f. Prevention and transmission
  - g. Resources available
  - h. Appropriate referrals
- G. Medical and pharmacological resources in substance use disorders
  - a. Literature review of interventions, including assets and liabilities of the interventions
  - b. Role of medical problems and complications in intervention and treatment
  - c. Community resources and referrals for continuum of care
  - d. Insurance and health maintenance options
  - e.

#### 4. Methods of Instruction:

**Discussion:**

**Lecture:**

**Projects:**

**Other:** Lecture, discussion, group work, projects, scenarios, and case review. For example, a lecture on the physiological effects of drugs on the person using and misusing substances will be presented; then discussion and group work that explores the various effects on the human body.

**Online Adaptation:** Discussion, Group Work, Lecture

**3. Methods of Evaluation:** Describe the general types of evaluations for this course and provide at least two, specific examples.

#### Typical classroom assessment techniques

Exams/Tests --

Quizzes --

Papers --

Group Projects --

Class Participation --

Final Exam --

Mid Term --

Additional assessment information:

Grades will be based upon: A final, quizzes, writing exercises, and evaluation of case studies and vignettes.

For example:

1. Utilizing case studies, students will produce a written report that identifies the physiological and pharmacological effects of drugs and alcohol on the body, and provide appropriate referrals for treatment.
2. A multiple choice or short answer quiz covering the chapter on health issues for persons with addictions from the textbook. Students will prepare for the quiz by working in small groups to review the assigned chapter and develop a study guide with the main points of the chapter.

Letter Grade Only

**4. Assignments:** State the general types of assignments for this course under the following categories and provide at least two specific examples for each section.

A. Reading Assignments

Selected readings from the textbook and other periodicals covering the physiological and pharmacological effects of addiction.

Examples:

1. Read the chapter on drug and alcohol use combined with complex health issues in individuals. Define the service and safety needs typical in working with this population.
2. Read the chapter on physical and psychological effects of drugs and alcohol on the human body. In small groups, define and list in writing the effects of specific drugs and how they differ from the effects of alcohol, both on the woman and the fetus/baby.

B. Writing Assignments

Written essays, papers and journal entries related to pharmacology and the physiological effects of addiction.

For example:

1. Writing: Research and write a 3-5 page paper on physiological effects on the body during one of the progressive stages of disease on chemical dependency.
2. Problem Solving: In a large group classroom format, structured and well defined by the instructor, one group will define and present the societal implications on American culture of people with HIV/AIDS, Hepatitis, STD, and Tuberculosis positive who also struggle with addiction. The other group will define and present from the position of the individual who is infected with the above health problems. Each group will write up their perspective (societal implications vs. individual rights) based on research evidence that supports their perspective. As a large group, the class will then try to solve the problem of serving persons with these health problems in a manner sensitive to their individual and cultural needs balanced by the health and safety needs of the staff serving them.

C. Other Assignments

Conducting group work using case studies and vignettes.

For example:

1. Working with a partner or in groups of three, select a specific topic taken from the list given by the instructor on the physiological effects of addiction. Develop a 10-minute presentation using multimedia techniques to communicate your findings.

**5. Required Materials**

**A. EXAMPLES of typical college-level textbooks (for degree-applicable courses) or other print materials.**

Book #1:

Author: Ken Liska  
Title: Drugs & the Human Body  
Publisher: Prentice Hall  
Date of Publication: 2009  
Edition: 2009

Book #2:

Author: Maisto, S.A., Galizo, M. & Connors, G.J.  
Title: Drug Use and Abuse  
Publisher: Cengage Learning  
Date of Publication: 2018  
Edition: 8th

Book #3:

Author: Inaba, Cohen  
Title: Uppers, Downers, and All-Arounders: Physical and Mental Affects of Psychoactive Drugs  
Publisher: CNS Publications  
Date of Publication: 2014  
Edition: 8th

Book #4:

Author: Rosenthal, M  
Title: Drugs: Mind, Body, and Society  
Publisher: Oxford University Press  
Date of Publication: 2018  
Edition: 1st

Book #5:

Author: Federal Government  
Title: Addiction Counseling Competencies: The Knowledge, Skills, and Attitudes of Professional Practice  
Publisher: {Technical Assistance Publication (TAP) Series 21}; SAMHSA Publication No. SMA12-4171  
Date of Publication: 2008  
Edition:

**B. Other required materials/supplies.**