



# LEWIS & CLARK COLLEGE

## GRADUATE SCHOOL OF EDUCATION AND COUNSELING

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### **DRUGS, BRAIN AND BEHAVIOR / MHCA 545\_01**

Time & Day: Wednesdays 5:30-8:45 pm – January 13 to April 21, 2021  
Class Room: Online  
Instructor: Mark Douglass, LPC, CADC III, CGAC II  
Phone & voice mail (971) 570-2118  
Email: mdouglass@lclark.edu

Office Hours: I am adjunct faculty and do not have an office on campus. Therefore, if you want to talk to me between class sessions, please contact me via phone or email me at mdouglass@lclark.edu.

### **PROGRAM OBJECTIVES**

To develop:

- Highly skilled & compassionate mental health and addiction counseling professionals
- Excellent counselors/therapists
- Counselors who are effective in providing both individual and group counseling
- Counselors who are effective in diverse settings
- Counselors who emphasize the client-counselor relationship
- Counselors have a thorough understanding of mental health issues
- Counselors who utilize a developmental perspective with clients
- Professionals who are committed to equity and social justice when assisting children, adolescents and adults
- Reflective practitioners
- Ethical practitioners
- Agents of change, advocates for equity and social justice
- Creative leaders
- Lifelong learners
- Contributors to the advancement of the counseling profession

### **CACREP 2009 COUNSELING OBJECTIVES AND STUDENT LEARNING OUTCOMES**

AC.A.6 Knows the behavioral, psychological, physical health, and social effects of psychoactive substances and addictive disorders on the user and significant others.

AC.A.7 Recognizes the potential for addictive disorders to mimic a variety of medical and psychological disorders and the potential for medical and psychological disorders to coexist with addiction and substance abuse.

AC.G.4 Understands basic classifications, indications and contraindications of commonly

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prescribed psychopharmacological medications so that appropriate referrals can be made for medication evaluations and so that the side effect of such medications can be identified.

AC.K.2 Knows the impact of co-occurring addictive disorders on medical and psychological disorders.

### **COURSE PURPOSE & OBJECTIVES**

#### ***At the end of the course, the student will be able to:***

1. Discuss the fundamental concepts of pharmacological properties and effects of all psychoactive substances. [Section I,A,3,K,a: p.16]\*\*
2. Relate detailed knowledge of the continuum of drug use, such as initiation, intoxication, harmful use, abuse, dependence, withdrawal, craving, relapse, and recovery. [Section I,A,3,K,b: p.16]
3. Discuss with depth the behavioral, psychological, social, and health effects of psychoactive substances. [Section I,A,3,K,c: p.16]
4. Describe the philosophies, practices, policies, and outcomes of pharmacotherapy for psychoactive substance use disorders (e.g., methadone treatment). [Section I,B,1,K,a-1&b: p.17]
5. Demonstrate familiarity with medical and pharmacological resources in the treatment of substance use disorders including:
  - current literature regarding medical and pharmacological interventions;
  - assets and liabilities of medical and pharmacological interventions;
  - health practitioners in the community who are knowledgeable about
  - addiction and addiction treatment. [Section I,C,6,K,a,b,c: p.21]
6. Demonstrate in-depth knowledge of symptoms of intoxication, withdrawal, and toxicity for all psychoactive substances, alone and in interaction with one another. [Section II, A,3,a: p.31]
7. Relate the physical, pharmacological, and psychological implications of psychoactive substance use. [Section II, A,3,b: p.31]
8. Discuss the effects of chronic psychoactive substance use or intoxication on cognitive abilities. [Section II, A,3,c: p.31]
9. Demonstrate knowledge of:
  - when to refer for toxicity screening or additional professional help;
  - the basic concepts of toxicity screening options, limitations, and legal
  - implications;
  - toxicology reporting language and the meaning of toxicology reports.
  - [Section II, A,3,e,f,g: p.31]
10. Discuss the relationship between psychoactive substance use and violence. [Section II, A,3,h: p.31]
11. List and discuss mental and physical conditions that mimic drug intoxication, toxicity, and withdrawal. [Section II, A,3,j: p.31]
12. Describe the warning signs, symptoms, and the course of substance use disorders. [Section VI, 4: p.87]

\*\*Brackets refer to TAP 21: Addiction Counseling Competencies: The Knowledge, Skills and Attitudes of Professional Practice, U. S. Department of Health and Human Services, SAMHSA, DHHS Publication No. (SMA)98-3171, 1998.

### **COURSE REQUIREMENTS:**

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|----------------------------------------------|-----------|
| 1) Abstinence Project and Reflection Paper   | 25 points |
| 2) Current Event Presentation and Discussion | 25 points |

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- 3) Chapter/Topic Quizzes
  - 4) Online Class Participation

25 points  
25 points

### ASSIGNMENTS:

1. Abstinence Project and Reflection Paper: Clients with substance use disorders will have experienced, and will likely be seeking to avoid, withdrawal symptoms. This project provides an opportunity for students to experience the symptoms of substance withdrawal, and to reflect on their effects on various domains of functioning. Grading will be based on thoroughness with which the reflection questions are answered, not on successful achievement of abstinence.
  - a. For a two-week period of the student's choosing, they will abstain from consuming all of the following legal (state of Oregon), non-nutritive substances: Caffeine, Nicotine, Alcohol, Sugars (including honey, agave, and other sweeteners), Cannabis, Artificial Sweeteners. If the student is already abstaining from regular consumption of any of these substances, they should talk with the instructor about possible acceptable alternatives. (It is assumed that the student is not consuming substances that are prohibited by law – if you are, please seek appropriate treatment resources.)
  - b. The student will complete a daily journal charting withdrawal symptoms experienced, intensity/duration, and any impact on mood or emotions (available on Moodle).
  - c. At the completion of two weeks, the student will write a reflection paper no less than 5 typed, double-spaced pages, in APA format, responding to the following questions.
    - i. Prior to the beginning the two-week abstinence period, what has been your experience of abstaining from the use of substances, legal or otherwise? Discuss both physical and psychological symptoms (thoughts and emotions).
    - ii. Did you have any anticipatory thoughts or emotions prior to your start date for the abstinence period? Did you make any arrangements to help you manage your abstinence (for example, titration or interpersonal support)?
    - iii. Reviewing your daily journal, reflect on the three most difficult symptoms you experienced. What was their impact on your ability to function socially, occupationally, and in other life domains? Did they change at all over time, increasing/decreasing/maintaining over the two weeks?
    - iv. Did you experience cravings or urges to return to substance use? What was your experience of the cravings, both physically and psychologically? If you managed your cravings, how did you do so? If you returned to substance use (once or multiple times), what was the effect when you did so?
    - v. Reviewing your daily journal, reflect on any events occurring during the two week period that may have increased stress (in either a positive or negative way). Was there a relationship between your experience of stress and your experience of symptoms? Describe your observations.

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- vi. Reflect on the experience of clients with substance abuse disorders that you may encounter. What do you expect their struggles will be? How would you respond?
  - vii. If you have successfully attained abstinence, will you return to using these substances? If so, how often? What are the benefits and costs of occasional versus regular use?
  - viii. If you did not successfully attain abstinence, do you imagine that you would try again to abstain? What are the benefits and costs of abstinence from these substances?
- d. Time will be allocated during class each session to give and receive support for participation and completion of this assignment. The student is encouraged to recruit additional support through their informal networks of friends and family.
  - e. Reflection papers may be turned in at any point that the two-week project is completed, but are due no later than **Wednesday, April 7, 11:55 pm**. Papers may be uploaded as Google doc, Word doc, or PDF into the specified assignment module on Moodle.
2. Current Event Presentation and Discussion: Drugs are present in a wide range of social, cultural, and public-policy issues throughout the world. In groups of 4-5, students will choose a news article reflecting 1) the class of substances on which the group is reporting, 2) an event occurring no more than six months from the presentation date. The group will then create a presentation about the event, and moderate a group learning activity (discussion, debate, project, etc.) among the class. Presentation and discussion together should take approximately 45 minutes (40-50 minutes). Grading will be based on adherence to the time frame, thoroughness of presentation, and level of participation/engagement by the class in the group learning activity. The news article used for the presentation should be made available to the professor to post on Moodle in the week before the presentation, for students to review prior to class.
- a. For the presentation, include the following information:
    - i. What is the specific issue? What substances are involved, and what is the effect of those substances on human physiology?
    - ii. Where does it take place? Is there a primary location, or does it manifest in the presence of certain conditions? What are those conditions?
    - iii. When did this issue begin? What historical events have led to its current manifestation?
    - iv. Who is impacted or involved in the issue? What social, cultural, racial, ethnic, religious, or other factors are related to the issue?
    - v. Why is this issue significant? What impact will it have on alcohol and drug counselors, both now and in the future?
    - vi. How is the issue being currently addressed? What alternative solutions have been tried? What current alternative solutions are available?
  - b. For the group learning activity, consider the following approaches:

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- i. **Application of knowledge:** Do you know another instance where...? Could this have happened in...? What factors would you change if...? What questions would you ask of...? Would this information be useful if you had a ...?
    - ii. **Analysis:** Which events could have happened...? If ... happened, what might the ending have been? How was this similar to...? What do you see as other possible outcomes? Why did ... changes occur? Can you compare your ... with that presented in...? Can you explain what must have happened when...?
    - iii. **Evaluation:** Is there a better solution to...? Can you defend your position about...? Do you think ... is a good or a bad thing? How would you have handled...? What changes to ... would you recommend?
    - iv. **Creation:** Can you design a ... to ...? Can you see a possible solution to...? If you had access to all resources how would you deal with...? What would happen if...? How many ways can you...?
  3. **Chapter/Topic Quizzes:** Engagement with the required text (below) will include out-of-class reading and preparation, lectures, presentations, class discussion, and case studies. Material for the weekly quizzes posted to Moodle will be drawn from these resources, and will include multiple-choice questions, matching questions, fill-in-the-blank questions, and at least one case study with questions for reflection. Each quiz is open-book, pass/fail with a minimum passing score of 80%. You may take each quiz twice. The final case study will be submitted for grading by the professor, and must also pass with a minimum 80% grade. Please contact the professor if you need additional time or accommodation for the quizzes.
  4. **Online Class Participation:** Class activities will be divided into synchronous (large group) learning activities and asynchronous (small group/individual) activities. Asynchronous activities can be completed on your own schedule during the week. Synchronous activities will include lecture/discussion as well as opportunities for breakout group reflection and assignments during class time. In addition to attendance, students are expected to participate in all activities as part of their grade.

**TEXT:** **Required:** Inaba, Daryl S. & William E. Cohen, *Uppers, Downers, All Arounders: Physical and Mental Effects of Psychoactive Drugs*. Eighth Edition. CNS Publications, Inc., 2014.

**NOTES ON THE ABOVE:**

1) Students are expected to **attend each session** and to **actively participate** in the class discussions and presentations. Assigned reading needs to be completed before the class session. See CPSY departmental attendance policy found below in this syllabus.

2) This class requires the student to cover a lot of detailed information in order to become familiar with pharmacological and neurological terminology as well as the specifics of each psychoactive drug of abuse and psychotropic medication. Consequently **it is imperative that the readings be done thoroughly and on time.**

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3) To facilitate learning, there is a web site associated with the Inaba and Cohen text for students at [www.cnsproductions.com/7essg/](http://www.cnsproductions.com/7essg/), which includes:

- Chapter overviews and outlines;
- Interactive guided chapter reviews;
- Practice tests;
- Keywords and phrases;
- Drug identification table (using classifications and street names);
- Glossary;
- Video presentations for each chapter;
- Addiction education blogs.

The procedure for student viewing of the long-chapter videos is as follows:

- You must create your own account - using your email address as your username and creating a password of your own choice.
- You will still need an ACCESS CODE to view the videos. The current access code will be good until the end of the year. The new access will be given to you the first day of class.

Following is a step-by-step set of instructions. Note: these instructions pop up when you click on the student tab at the top of CNS's home page.

1. Register an account. If you have already done so, please go on to the next step.
2. Log in.
3. Enter the access code given to you on the first day of class.
4. Watch the video series!

(For access problems, contact Howard LaMere at CNS Productions, Inc.: [www.cnsproductions.com](http://www.cnsproductions.com), 800.888.0617 or 541.779.3361.

### **CATALOG DESCRIPTION**

Psychopharmacology of alcohol and drug abuse. Major drugs and classes of abused substances. Mechanisms of action in the brain, patterns of physiological response in abuse, addiction (dependence) and recovery. Impact on the brain function, cognition, emotions, behavior, social effects. Pharmacological adjuncts to detoxification and treatment.

### **COURSE DESCRIPTION**

The course is specifically designed to present the current knowledge of how psychoactive and psychotropic substances work at the level of neurobiology.

The primary purpose of the course is to acquaint the student with knowledge of symptoms of intoxication, withdrawal and toxicity for all psychoactive substances, alone and with one another. Consequently, how psychoactive drugs of abuse affect the user physically and cognitively resulting in changes in cognition, behavior and affect will be addressed in detail.

A central focus of this class will be a basic overview of the factors that influence the absorption, distribution, metabolism and excretion of drugs (i.e., pharmacokinetics), and the interactions of psychoactive drugs and the receptors responsible for the action of the drugs in the body (i.e., pharmacodynamics).

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Each major classification of psychoactive drugs will be explored in depth: stimulants, opiates, sedative-hypnotics, and psychedelics. A special emphasis will be placed on alcohol. The current state of the use of prescribed drugs to facilitate recovery, including agonist treatment (i.e., methadone et. al.) will be explored.

We will explore how drugs of abuse interact with major psychotropic drugs used for treatment of co-existing mental and emotional disorders.

### **NON-DISCRIMINATION POLICY/SPECIAL ASSISTANCE**

*Lewis & Clark College adheres to a nondiscriminatory policy with respect to employment, enrollment, and program. The College does not discriminate on the basis of race, color, creed, religion, sex, national origin, age, handicap or disability, sexual orientation, or marital status and has a firm commitment to promote the letter and spirit of all equal opportunity and civil rights laws.*

### **PARTICIPATION IN THE LEARNING COMMUNITY**

Students are required to attend and actively participate in all scheduled class meetings. This includes being on time, being prepared, following through on group activities, and otherwise engaging with colleagues as fellow professionals. Becoming a counselor/therapist involves looking closely at values, our beliefs, biases, and ourselves. This can be a very personal, and sometimes emotional, process. Treating colleagues with respect, listening deeply to their experiences, and being open to diverse world views encourages a collaborative milieu of care in which we can all challenge ourselves and each other to critically examine and develop our skills and perspectives. In order to prepare for each class, students should carefully read and study all assigned materials to be ready to discuss, debate, and apply the content of readings. Class discussion and interaction with colleagues are fundamental to the process of learning to be a therapist and all sessions include necessary information. Therefore, if you must miss a class, fellow students and the instructor may ask you to contribute to learning community in another way. If you must be absent or late, please email the instructor at least 8 hours prior to class.

### **MHCA DEPARTMENTAL ATTENDANCE POLICY**

Class attendance is expected and required. Completing extra assignments designed by the instructor will make up any missed class time. Missing more than ten percent of class time may result in failure to complete the class. This would be 4.5 hours of a 45-hour class (3 credits), 3.0 hours for a 30-hour class (2 credits) or 1.5 hours for a 15-hour class (1 credit.) In case of extreme hardship and also at the discretion of the instructor, a grade of incomplete may be given for an assignment or the entire course. In such cases, the work to be submitted in order to remove the incomplete must be documented appropriately and stated deadlines met. Students are expected to be on time to class and tardiness may be seen as an absence that requires make-up work.

### **SPECIAL ASSISTANCE**

The Student Support Services Office, located in the Templeton Student Center, is a resource for students with disabilities. A variety of services are available through this office according to the particular needs of each student. Students interested in such services may contact Student Support Services at 503-768-7191. This contact is the necessary first step for receiving appropriate accommodations and support services. Please inform me if you need accommodations in class.

### **GRADING**

93-100 = A                      90-92 = A-

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88-89 = B+

83-87 = B

80-82 = B-

78-79 = C+

73-77 = C

70-72 = C-

68-69 = D+

60-67 = D

< 60 = F

"A" grades will be reserved for particularly outstanding work. Grades on the border may be determined by attendance and demonstration of completing readings prior to each class session.



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## WEEKLY TOPICS, READINGS, and ASSIGNMENTS DUE:

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**WEEK-1:** (1/13/2021)

Course Introduction and Syllabus Review. Diagnosis of Substance Use Disorders, Basic Pharmacology.

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**WEEK-2:** (1/20/2021)

History of Substance Use, Classification of Psychoactive Substances.

**READINGS:** **Chapter 1 - *Uppers, Downers, All Arounders***

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**WEEK-3:** (1/27/2021)

Pharmacokinetics, Neuroanatomy, Pharmacodynamics.

**READINGS:** **Chapter 2.1 – 2.31, “How Psychoactive Drugs Affect People” - *Uppers, Downers, All Arounders***

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**WEEK-4:** (2/3/2021)

Effects of Psychoactive Drugs, Addiction Theory, Heredity and Environment

**READINGS:** **Chapter 2.31 – 2.45, “From Experimentation to Addiction” - *Uppers, Downers, All Arounders***

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**WEEK- 5:** (2/10/2021)

CNS Stimulants including Caffeine and Nicotine.

Current event presentation #1

**READINGS:** **Chapter 3 - *Uppers, Downers, All Arounders***

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**WEEK-6:** (2/17/2021)

Opiates/Opioids, Pain Control, Sedative-Hypnotics

Current event presentation #2

**READINGS:** **Chapter 4 - *Uppers, Downers, All Arounders***

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**WEEK-7:** (2/24/2021)

Alcohol Absorption, Effects, Health Consequences

**READINGS:** **Chapter 5.1 – 5.21 – *Uppers, Downers, All-Arounders***

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**WEEK-8:** (3/3/2021)

Alcohol Addiction and Epidemiology.

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Current event presentation #3

**READINGS:** Chapter 5.21 – 5.44 - *Uppers, Downers, All Arounders*

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**WEEK-9:** (3/10/2021)

Psychedelics with emphasis on Cannabis.

Current event presentation #4

**READINGS:** Chapter 6 - *Uppers, Downers, All Arounders*

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**WEEK-10:** (3/17/2021)

Other Drugs, Compulsive Behaviors

Current event presentation #5

Guest Presenter:

**READINGS:** Chapter 7 - *Uppers, Downers, All Arounders*

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**3/24/2021: SPRING BREAK – NO CLASS**

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**WEEK 11:** (3/31/2021)

Basic Prevention Concepts.

**READINGS:** Chapter 8 - *Uppers, Downers, All Arounders*

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**WEEK 12:** (4/7/2021)

Treatment: Psychotropic Psychiatric Medications; Interactions with Recreational Drugs.

Abstinence project reflection papers due

**READINGS:** Chapter 9 - *Uppers, Downers, All Arounders*

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**WEEK 13:** (4/14/2021)

Mental Health and Co-occurring Disorders.

**READINGS:** Chapter 10 - *Uppers, Downers, All Arounders*

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**WEEK 14:** (4/21/2021)

Course Summary and Review. Guest Speaker.