



# LEWIS & CLARK COLLEGE

## GRADUATE SCHOOL OF EDUCATION AND COUNSELING

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### **DRUGS, THE BRAIN AND BEHAVIOR / MHCA 545\_02**

Time & Day: Mondays 5:00-8:15 pm – January 8 to April 22, 2023

Class Room: York 121

Instructor: Mark Douglass, LPC, CADC III, CGAC II  
Phone, voice mail, text: (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.

### **CATALOG DESCRIPTION**

Psychopharmacology of alcohol and drug abuse. Major drugs and classes of abused substances.

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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).

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.

### **COURSE REQUIREMENTS:**

1) Abstinence Project and Reflection Paper	25 points
2) Public Research and Action Project	25 points
3) Chapter/Topic Quizzes	25 points
4) Class Participation	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 and/or process 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.

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- a. For a two-week period of the student's choosing, they will abstain from consuming all, or any combination, 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.) Two important notes about this project:
    - i. If you are medically recommended to not abstain from any of the above substances, please contact the instructor individually for other options.
    - ii. If you have strong reservations about participating in the project based on physiological or psychological factors, please advocate for yourself by discussing your concerns with the instructor and providing an alternative means of completing the project. No reasonable proposals will be refused.
  - 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 of 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 your previous 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 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.
    - 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?

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- 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 each class 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 **Monday, April 1, 11:55 pm**. Papers may be uploaded as a PDF into the specified assignment module on Moodle.
2. Public Research and Action Project: Our work of treating addiction and mental health issues in our clients is important work. Equally important is being able to understand and address the “upstream” issues related to our clients’ struggles. This project involves researching a specific local issue affected by policies, politics, or cultural factors related to addiction; analyzing structures of power and influence that contribute to the issue; organizing an action plan for creating change in the local community; and carrying out the plan along with a follow-up reflection.

As a whole class we will identify a specific local issue where addiction results in a negative impact. Students will research the issue both by engaging secondary information (news articles, research studies, etc) as well as primary information (your own direct experience, experiences of people you know, interviews with people affected, etc), construct a power analysis of the social, cultural, economic, and legal factors impacting the issue, then create an action plan for addressing the issue within your local community.

This project will evolve over the course of the semester, with two “benchmark” due dates:

- **Monday, March 4:** An initial presentation proposing an action plan based on initial research and reflection, for a small panel (the instructor and a local community organizer). The presentation should be relatively brief (about 15 min) and acknowledge each student’s individual contributions. Use an SBAR format for the presentation:
  - Situation – What is the issue to be addressed? Who is affected, and how are they affected by the issue?
  - Background – What factors (historical, social, psychological, biological, etc) contribute to the issue? What impact do these factors have on the population in question? Include both primary and secondary sources of information.
  - Assessment – Using the power analysis frame introduced in class, identify what needs to happen to create beneficial change for those involved in the issue. Identify strengths and resilience factors as well as needs and risk factors to address.
  - Recommendation – What specific course of action do you recommend to create change? Outline your recommendation as a SMART goal:
    - Simple – One action (rather than several/multiple)

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- Measurable – The outcome of the action can be clearly measured
  - Attainable – The action can be accomplished by the people involved with the resources available
  - Relevant – The action has a direct impact on the situation
  - Time Limited – The action can be completed and evaluated before the final class (April 22)
  - **Monday, April 22 (last class):** Final presentation for a larger panel of experts in public policy and leadership. The presentation will be updated to reflect feedback from the midterm presentation, along with an analysis of the action and its outcome. The presentation will be followed by a discussion with the panelists regarding what was learned and what mid/long term impact the action might have.

A couple notes on this project:

- Grading this project will be based on: 1) Involvement and contribution of all students in the project, 2) use of both primary and secondary research (a minimum of one each per student), 3) incorporation of feedback resulting in changes from drafts to final proposal, 4) accuracy and verifiability of power analysis based on research sources, 5) an action plan that follows its SMART goals.
  - Grade will not depend on a successful outcome or result of the action, however a reflection on the results and impact of the action should be included.
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. Class Participation: Students and professor together co-create the learning environment each week in the classroom, and absences as well as lack of participation detract from that learning environment. In addition to the attendance policy (see below), participation will be graded on observed active contributions to both large group discussion and small-group activities held in class.

Per campus policy a Zoom link will be made available for students who are ill or who have unforeseen obstacles to attending in-person. Please do not request use of a Zoom link for avoidable obstacles (personal travel plans, work scheduling issues, etc), instead please discuss your concerns with the professor to find solutions that will allow you to be present in person. If you are having emotional or psychological issues that are affecting your ability to participate in

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person, please contact student services to request accommodation. Overuse of the Zoom resource may negatively impact your participation 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.**

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.

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

**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. 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

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students and the instructor may ask you to contribute to the 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 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 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 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 accommodation and support services. Please inform me if you need accommodation in class.

**GRADING**

93-100 = A	90-92 = A-	
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

**WEEKLY TOPICS, READINGS, and ASSIGNMENTS DUE:**

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**WEEK-1:** (1/8/2023)

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

**READINGS: None**

**Quiz: Diagnosing SUD's**

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**1/15/2023: MARTIN LUTHER KING JR HOLIDAY – NO CLASS**

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**WEEK-2:** (1/22/2023)

History of Substance Use, Classification of Psychoactive Substances.

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



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**Quiz: Chapter 1**

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**WEEK-3:** (1/29/2023)

Pharmacokinetics, Neuroanatomy, Pharmacodynamics.

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

**Quiz: Brain Regions**

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**WEEK-4:** (2/5/2023)

Effects of Psychoactive Drugs, Addiction Theory, Heredity and Environment

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

**Quiz: Chapter 2**

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**WEEK- 5:** (2/12/2023)

CNS Stimulants including Caffeine and Nicotine.

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

**Quiz: Chapter 3**

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**WEEK-6:** (2/19/2023)

Opiates/Opioids, Pain Control, Sedative-Hypnotics

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

**Quiz: Chapter 4**

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**WEEK-7:** (2/26/2023)

Alcohol Absorption, Effects, Health Consequences

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

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**WEEK-8:** (3/4/2023)

Alcohol Addiction and Epidemiology.

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

**Quiz: Chapter 5**

**Initial Public Research and Action presentation.**

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**WEEK-9:** (3/11/2023)

Psychedelics with emphasis on Cannabis.

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

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**Quiz: Chapter 6**

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**WEEK-10:** (3/18/2023)

Other Drugs, Compulsive Behaviors

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

**Quiz: Chapter 7**

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**3/25/2023: SPRING BREAK – NO CLASS**

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**WEEK 11:** (4/1/2023)

Basic Prevention Concepts.

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

**Abstinence Project Reflection Paper Due**

**Quiz: Chapter 8**

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**WEEK 12:** (4/8/2023)

Treatment: Psychotropic Psychiatric Medications; Interactions with Recreational Drugs.

Abstinence project reflection papers due

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

**Quiz: Chapter 9**

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**WEEK 13:** (4/15/2023)

Mental Health and Co-occurring Disorders.

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

**Quiz: Chapter 10**

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**WEEK 14:** (4/22/2023)

Course Summary and Review.

**Final Public Research and Action presentation.**

**Quiz: Final Case Study**

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