

LEWIS & CLARK COLLEGE **GRADUATE SCHOOL OF EDUCATION &** **COUNSELING**

CLASS OUTLINE: CPSY 545
Drugs, The Brain and Behavior
Fall Semester 2007
Mondays 5:30 p.m. to 8:45 p.m.
September 10, 2007 to December 10, 2007

Class Instructor:

Thomas G. Ten Eyck (Adjunct Faculty)
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Description of Course:

Catalogue 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 Purpose:

This course provides a presentation of the various classifications of psychoactive drugs and other drugs of abuse, a basic overview of the factors which influence the absorption, distribution, metabolism and excretion of drugs (pharmacokinetics), and the interactions of psychoactive drugs and the receptors responsible for the action of the drug in the body (pharmacodynamics). The current state of drug use in recovery, including agonist treatment (i.e., methadone et. al.) will be presented. There will be presentations about the major drugs used for co-existing mental and emotional disorders, how these drugs interact with drugs of abuse, and how they are used in the recovery process. The cognitive, behavioral, and affective changes for psychoactive use, abuse and addiction will be addressed in detail. There will be a short unit on the concepts of prevention and patterns of use with special populations.

This course is designed for presentation to counseling psychology graduate students who are focusing on addictions counseling, and is not designed for

pharmacology or other science students.

The following TAP 21* competencies will be directly addressed. Therefore, at the end of the course, the student will be able to:

- < Discuss the fundamental concepts of pharmacological properties and effects of all psychoactive substances. [Section I,A,3,K,a: p.16]*
- < 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]
- < Discuss with depth the behavioral, psychological, social, and health effects of psychoactive substances. [Section I,A,3,K,c: p.16]
- < 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]
- < 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]
- < 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]
- < Relate the physical, pharmacological, and psychological implications of psychoactive substance use. [Section II, A,3,b: p.31]
- < Discuss the effects of chronic psychoactive substance use or intoxication on cognitive abilities. [Section II, A,3,c: p.31]
- < 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]
- < Discuss the relationship between psychoactive substance use and violence. [Section II, A,3,h: p.31]
- < List and discuss mental and physical conditions that mimic drug intoxication, toxicity, and withdrawal. [Section II, A,3,j: p.31]
- < 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.

In addition to the above stated TAP 21 competencies and recommended

knowledge bases, at the end of the course the student will be able to:

- < Demonstrate knowledge of the basic pharmacokinetics and pharmacodynamics of the major drug classifications of psychoactive and other drugs of abuse.
- < Relate how the action of drugs in the central nervous system relates to behavior and the process of addictions.
- < Discuss both on a peer level and on a client level the meaning, negative and positive, of physical and psychopharmacological aspects psychoactive and other drugs of abuse.
- < Discuss the current theories of addictions (including process addictions) in terms of brain transmitter actions.
- < Discuss the major differences between pathological gambling and substance abuse and dependence.
- < Begin to integrate all of the above into the process of case conceptualization, treatment planning, and direct clinical work.

Course Texts:

Required:

1) *Uppers, Downers, All Arounders: Physical and Mental Effects of Psychoactive Drugs*. Sixth Edition. William S. Inaba, Pharm. D., William E. Cohen, CNS Publications, Inc., Ashland, Oregon, 2007.

2) *Streetdrugs-university*. This is a web site maintained by Publishers. You need to apply for membership. The address is www.streetdrugs-university.org, and the fee is \$5.00 per year. This is an excellent overall reference which is continually updated. It is used by students, counselors, attorneys, law enforcement, medical personnel.

Suggested Web Resources:

<http://samhsa.gov/about.sitemap.aspx>.

<http://www.nfattc.org>

Course Requirements:

- 1) Attendance is required -- role will be taken..... 25% of grade
- 2) Streetdrugs-university tests.....25% of grade
- 3) Study-CD tests (See note below).....25% of grade
- 4) A brief in-class summary test.....25% of grade

NOTES ON THE ABOVE:

1) *Students are expected to attend each session and to actively participate in the class discussions. Any reading assigned needs to be completed before the class session.*

2) *On the web site, Streetdrugs-university, there are brief tests for each drug listed. You will need to complete the test at home and hand in the results for*

each of the drugs we discuss in class.

3) There are 25-question multiple choice tests are on the CD that is included in the Inaba textbook. There is one test for each chapter. You need to take these short tests at home after you have read the chapter assigned and then turn in a copy of the completed test on the day that specific chapter is discussed. See the class outline below for dates.

4) The brief in-class summary test will be questions compiled from all of the take-home tests.

Evaluation and Grades:

92% — 100%	A
86% — 92%	A-
80% — 86%	B+
74% — 80%	B
70% — 74%	B-
<70% —	C

Class Experiences and Expectations:

I. 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, the exercises, most of which are done at home, are designed to:

- < facilitate retention of the material;
- < help the student keep up with the assignments in a timely manner;
- < give the student “hands on” use of relevant resources.

Therefore, it is imperative that these exercises are turned in on time.

II. You are expected to have read the assigned material *before* the class session indicated.

III. The text (Inaba) has a study CD. The student is encouraged to use that CD and its web connection while reading specific chapters as a resource to better absorb the information presented.

Instructor Contact:

Since I am adjunct faculty, I do not have an office on campus. However, I want to make access to me as easy as possible. Therefore, if you need to talk to me between class sessions, please call me at (503) 668-9286, or email me at teneyckt@earthlink.net. This number and email address are for my office in my home. I also have a mailbox in the Counseling Psychology Office and will pick up mail weekly only on Monday afternoons.

I am willing to meet with any student about specific problems if the need

arises. Please call me and we can make an appointment that is convenient to both of us. When you call or when leaving a message, please state that you are a Lewis and Clark Student in the 545 course.

Furthermore, I arrive for Monday's classes by 4:45 p.m. and am available at that time for meeting with any student on an ad hoc basis. I am also willing to stay after class on Monday evenings for consultation as needed.

Special Needs:

Any student who because of a disability requires some special arrangements in order to meet course requirements should contact the instructor as soon as possible to make necessary accommodations.

READINGS:

All assigned readings are from Inaba/Cohen text.

Wk	Date	Reading – Due Dates	Topic
I	9/10		Introductions, Syllabus, Presentation of study CD, Discussion.
II	9/17	Ch 1, pp. 1-45	Introduction; History; Classification of Psychoactive Drugs.
III	9/24	Ch 2, pp. 45-93	Basic Pharmacology; Levels of Use; Theories of Addiction
IV	10/1	Ch 2, Con't.	Continued
V	10/8	Ch. 3, pp. 93-159	CNS Stimulants including Caffeine and Nicotine.
VI	10/15	Ch. 4, pp. 159-186	Opiates/Opioids, Pain Control.
VII	10/22	Ch 4, 186-207 & Ch 5, pp. 207-257	Sedative-Hypnotics (con't), Alcohol.
VIII	10/29	Ch.5, con't.	Alcohol (cont't), Fetal Alcohol Spectrum Disorders: Video: <i>Recovering Hope</i>
IX	11/5	Ch 6, pp. 257-303	Psychedelics, Marijuana, Club Drugs.
X	11/12	Ch. 7, pp. 303-330 & Ch. 8, pp.365-433	Inhalants, Sports & Drugs. Prevention Concepts, User Groups
XI	11/19	Ch. 7, pp. 330-365	Behavioral Health (Process Addictions)
XII	11/26	Continued	Behavioral Health con't with emphasis on gambling.
XIII	12/3	Ch 10, pp. 513-549	Psychiatric Medications, Herbal Supplements, OTC Preparations
XIV	12/10	Ch. 10, con'	Continued.

ASSIGNMENTS DUE

Chapters refer to Inaba/Cohen; all others refer to www.streetdrugs-university.org

Wk	Date	Topic	Streetdrugs-Univ.
I	9/10	Introduction	
II	9/17	History, Classifications	<u>DUE:</u> Test Chapter 1
III	9/24	Basic Pharmacology	
IV	10/1	Continued	<u>DUE:</u> Test Chapter 2
V	10/8	Stimulants	<u>DUE:</u> Test Chapter 3 <u>DUE:</u> Amphetamine, Cocaine, Crack Cocaine, Khat, Meth Labs, Methamphetamine, Ritalin, Tobacco.
VI	10/15	Opiates/Opioids	<u>DUE:</u> Test Chapter 4 <u>DUE:</u> Heroin, Morphine, Narcotics.
VII	10/22	Sedative-Hypnotics	<u>DUE:</u> Test Chapter 5 <u>DUE:</u> Barbiturates, GHB.
VIII	10/29	Alcohol	<u>DUE:</u> Alcohol
IX	11/5	Psychedelics, Marijuana, Club Drugs.	<u>DUE:</u> Test Chapter 6 <u>DUE:</u> Club Drugs, Ecstasy, Hashish, Marijuana, Mescaline, Mushrooms, Raves.
X	11/12	Inhalants, Sports Drugs.	<u>DUE:</u> Inhalants, Anabolic Steroids.
XI	11/19	Behavioral Health.	<u>DUE:</u> Test Chapter 7
XII	11/26	Continued	
XIII	12/3	Psychiatric Medications	<u>DUE:</u> Prescription Drugs.
XIV	12/10	Continued.	<u>DUE:</u> Test Chapter 10 <u>Final Quiz in Class.</u>