

UNIVERSITY OF LETHBRIDGE
FACULTY OF HEALTH SCIENCES
ADCS 3140 – BEHAVIOURAL PHARMACOLOGY
Course Syllabus – Fall, 2017

INSTRUCTOR

Robert Williams, Ph.D., R.Psych.
Clinical Psychologist & Professor
Faculty of Health Sciences
University of Lethbridge
Office: Markin Hall 3017
403-382-7128
robert.williams@uleth.ca

LOCATION

AH 175

TIME

10:50 a.m. – 1:30 p.m. Thursdays

DATES

Sep 7, 14, 21, 28
Oct 5, 12 (**TEST 1**), 19, 26
Nov 2, 9, 23 (**TEST 2**), 30

OFFICE HOURS

1:00 – 3:00 p.m. Mondays

COURSE DESCRIPTION

- An examination of the neurobiology of addiction, as well as the behavioural and physiological effects of drugs and the neurological and pharmacological mechanisms by which drugs have their effects on mental health and substance use/abuse.
- Canadian Centre for Substance Abuse Core Technical Competencies met in this course: pharmacology, mental health, understanding substance use, abuse, and dependency.

TEXTBOOK

- There is an optional textbook that will further your understanding of material in this course:
Advokat, C.D., Comaty, J.E. & Julien, R.J. (2014). *Julien's Primer of Drug Action (13th edition)*. Worth Publishers.

EVALUATION

- There are two midterm tests and a final exam. These tests/exams are based on class lectures and discussions. Tests will consist of multiple choice and short answer questions. Missed tests are excused only for important medical, family, or religious reasons. A note from the appropriate authority is required, and a makeup test will normally be given.
 - **Test 1** is worth **20%** of your mark and will be administered in class on October 12.
 - **Test 2** is worth **20%** of your mark and will be administered in class on November 23. It will only cover the lectures, discussions, and assigned readings since Test 1.
 - The **Final Exam** is worth **25%** of your mark and will be administered during the Final Examination period. It will be 2 hours in length and will cover the entire course material.
- **35%** of the mark is allocated to a **Class Debate or Paper**.
 - **Debate.** Two topics will be debated: Should illicit drugs be legalized? and Does psychiatric medication cause more harm than good? There will be 4 people on each side of the 1-hour debate. Each side has 15 minutes to argue their case followed by 10 minutes to rebut the other side's points. This is followed by 10 minutes of questions from the class. Fifty percent of the mark is based on 'quality of the presentation' and % is based on 'quality of the arguments'. Fifty percent of the mark is assigned by the class and 50% by the instructor. People participating in the debate need to supply a 1-2 page summary of their main points to the class.
 - **Paper.** Students who do not participate in one of the debates will write an essay on a specific drug or group of drugs discussed in class, using the same organization as the lectures: Introduction; Metabolism, Mechanism & Short-Term Effects; Long-Term Effects. Essays must be 12 point font or smaller; single spaced, but APA format in all other respects; and at least 10 pages with at least 10 references. The paper is graded primarily on how scholarly it is (i.e., Does it comprehensively cover the topic? Are the points accurate and well substantiated with up-to-date references?). However, some marks are also allocated for a

clear and well-organized writing style. Papers must be submitted via email by 11:59 p.m. on [November 20](#). Late papers are deducted 5% for every day they are late.

GRADING BREAKDOWN

The grading system for this course is consistent with that established in the Faculty of Health Sciences, effective May 2002.

Letter	GPA	Percent	Descriptor
A+	4.0	95 - 100%	
A	4.0	91 - 94.9%	Excellent
A-	3.7	87 - 90.9%	
B+	3.3	83 - 86.9%	
B	3.0	79 - 82.9%	Good
B-	2.7	75 - 78.9%	
C+	2.3	71 - 74.9%	
C	2.0	67 - 70.9%	Satisfactory
C-	1.7	63 - 66.9%	
D+	1.3	59 - 62.9%	
D	1.0	55 - 58.9%	Minimal Pass
F	0	0 - 54.9%	Failure

PLAGIARISM STATEMENT

The University of Lethbridge subscribes to Turnitin.com, a plagiarism detection service. Please be advised that student work submitted for credit in this course may be submitted to this system to verify its originality. Students must be able to submit both electronic and hard copy versions of their work upon request.

ACCOMMODATIONS FOR STUDENTS WITH A DISABILITY

Reasonable accommodations are available for students who have a documented disability. If you have been diagnosed with a disability, there is no need to face the challenge of University without support.

Please contact the Accommodated Learning Centre to set up an appointment at 403-329-2766

<http://www.uleth.ca/ross/counselling/index.html>. After registering with the Accommodated Learning Centre, your instructor will be notified by a formal letter of any accommodations you require. In addition, students are responsible for requesting accommodations from the instructor at least ***two weeks*** in advance of the evaluation date. The instructor and student are jointly responsible for arranging the resources needed for the evaluation process.

COPYRIGHT STATEMENT

All University of Lethbridge students, faculty and staff must comply with Canadian law and institutional license agreements pertaining to copyright. At the same time, keeping abreast of our copyright obligations and options is a complex task as copyright matters locally and globally are in flux and are likely to remain so for at least the near future.

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- answers to common copyright questions (see the [FAQs](#)),
- guidance on whether you need permission or a license to copy a particular work (see the [Copyright Permissions Flow Chart](#)),
- guidance on assessing whether fair dealing may apply to specific instances of copying you wish to undertake (see the [Guidelines for Copying under Fair Dealing](#)), and
- a [permissions look-up tool](#) to help you determine the kinds of copying and other uses permitted by the Library's license agreements covering specific online journals and other online resources.

You are encouraged to contact the University Copyright Advisor (copyright@uleth.ca) for assistance with any copyright questions or issues.

TOPIC(S)	CHAPTERS	DATE
INTRODUCTION <ul style="list-style-type: none"> • Drug definition and classification • History of recreational drug use and abuse • Current prevalence and features of recreational drug use and abuse • History of medication for mental health problems • Current prevalence and features of mental health medication 		Sep 7
NEUROBIOLOGY OF DRUG EFFECTS <ul style="list-style-type: none"> • Absorption into the bloodstream • How drugs reach their site of action • The neuron and synaptic transmission • Drug alteration of synaptic transmission • Mind-brain relationship • Organization of the nervous system • Termination of drug action and excretion • Tolerance and dependence • Psychological considerations 	1, 2, 3, 4	Sep 14 Sep 21 Sep 28 Oct 5
NEUROBIOLOGY OF ADDICTION		
DEPRESSANTS <ul style="list-style-type: none"> • Barbiturates • Minor tranquilizers • Inhalants/volatile organic solvents • Alcohol 	5	Oct 5 Oct 12 TEST 1
STIMULANTS <ul style="list-style-type: none"> • Amphetamine • Cocaine • Caffeine • Nicotine 	6, 7	Oct 19
PSYCHEDELICS & HALLUCINOGENS <ul style="list-style-type: none"> • Acetylcholine psychedelics (atropine, scopolamine, muscarine) • Dopamine & norepinephrine psychedelics (e.g., mescaline, DOM, MDMA) • Serotonin psychedelics (e.g., LSD, psilocybin, bufotenin, DMT) • Glutamate psychedelics (phencyclidine) • Opiod psychedelics (e.g., salvinorin) • Cannabis 	8, 9	Oct 26 Nov 2
ANALGESICS <ul style="list-style-type: none"> • Centrally acting opiates (e.g., morphine, codeine, heroin) • Peripherally acting analgesics (e.g., aspirin, acetaminophen, ibuprofen) 	10	Nov 9 DEBATE
CLASS DEBATE: Should Illicit Drugs be Legalized?		
PSYCHOTHERAPEUTIC DRUGS <ul style="list-style-type: none"> • Attention Deficit Hyperactivity Disorder • Acute Anxiety; Insomnia; Generalized Anxiety; Panic Disorder • Obsessive-Compulsive Disorder • Depression • Bipolar • Schizophrenia • Eating disorders • Anger & aggression • Dementia • Addictions 	11, 12, 13, 14	Nov 23 TEST 2 Nov 30 DEBATE
CLASS DEBATE: Does Psychiatric Medication Cause more Harm than Good?		
FINAL EXAM	2 – 4 pm Dec 15	