USC School of Pharmacy

Pharmacy Undergraduate Programs

SP 2023: RXRS-414: Buzzed: Modern Drugs of Abuse and Addiction

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Course Weight:	4 Units

Day/Time/Location: Monday, Wednesday, 11am - 12:20pm, WPH 103

Catalogue description: Modern perspectives; discovery and use of legal and illicit drugs of addiction including alcohol and opioids. How drugs have helped, shaped, modified or changed individuals and society.

Introduction

In conventional terms, buzzed is the effect encountered after smoking various plants, drinking various alcoholic drinks, or ingesting various substances. Buzzed is the "high" one experiences. This course is designed to investigate what buzzed means in relation to substances of abuse and addiction. Examples of substances that will be discussed include alcohol, opioids, benzodiazepines, synthetic drugs, soda, coffee, and tobacco. Together we will survey the most recent discoveries about substances of abuse like prescription opioids, purple drank, and bath salts. This course will include information about biological and behavioral changes in addiction, distinctive drug effects on the adolescent brain, trends from popular culture related to these drugs, and ethical issues as related to modern substances of abuse. In quick-reference summaries, this class will report on how these drugs enter the body, how they manipulate the brain, their short-term and long-term effects, the different "highs" they produce, and the circumstances in which they can be deadly. This course does not pay homage to the "just say no" doctrine of abstinence, nor does it function as a "how-to" manual for people interested in becoming buzzed. This course will allow people to make informed decisions with accurate

information about these substances, which they may encounter throughout their lives. There exists very little material available to the public on the most up-to-date psychological, legal, and pharmacological research on these drugs. This course aims to provide a clear understanding of how these substances work, the consequences of their use, the policies to regulate them, and the social beliefs surrounding them.

Objectives

This course is designed for undergraduates of both scientific and non-scientific majors with an interest in learning about current trends that mark today's drug climate as they explore the social, psychological, economical, and biological reasons why drug use, misuse and abuse occur. This course will also examine the historical, political, and cultural foundations of drug use in contemporary society by studying pharmacologic, literary, political, economic, philosophical, legal, ethical, and religious traditions as they relate to drug use. For example, the prescription drug abuse crisis and implications of this phenomenon is one way in which we will explore links between illegal use of prescription opioids and the increase in accidental opioid overdose deaths. Students will also learn about drugs of abuse and misuse plaguing the globe over the past forty years. Differences surrounding the ethics of the development and deployment of synthetic chemicals (for example, MDMA) will be presented in ways that are designed to lead to lively discussions during class.

Upon successful completion of this course, the student should be able to participate in a thoughtful debate about:

- Evaluate and provide context to the nature of substances of abuse throughout the world
- Explain and identify the differences between addiction and abuse
- Understand classical features of the most abused drugs, including their general reactions and interactions
- Critique and debate current policies that inhibit or exploit certain substances of abuse
- Describe street capitalism and identify the economics of drug distribution
- Discuss the good, the bad, and the ugly of modern pharmaceutics
- Predict the consequences of improper drug use and abuse and their relationship to health, economy, wellbeing, and society as represented in popular culture

Communication Method

If you have questions or concerns, please contact Dr. Church via email (<u>tdchurch@usc.edu</u>). Your email will be attended as quickly as possible within a 48-hour window. For more urgent or pressing issues, please contact Dr. Church via telephone at 323.442.0241.

Evaluation and Grading

Evaluation will be based on one midterm examination, a final examination, two in-class projects, and two writing assignments (critical report and discussion).

Description	Points	Weight
In-Class Projects 2 (@ 15 pts each)	30 pts	(15%)
Midterm exam	55 pts	(25%)
Final exam (partially cumulative)	100 pts	(30%)
Critical report & discussion (75 pts each x 2)	150 pts	(30%)
Total	335 pts	(100%)

<u>15% In Class Projects</u>: (each worth 7.5% of your class grade) There will be 2 in class projects over the course of the semester. These projects are designed to reinforce course material by having students work in small groups to accomplish specific objectives and apply knowledge from lecture and readings. Specific details will be supplied for each in class project.

<u>25% Midterm</u>: There will be 1 midterm for this course that will cover the first 8 weeks of course material. The midterm will consist of a series of questions involving short answers as well as a longer question requiring critical thought and its articulation in written responses. This midterm exam will help students to generate a critical assessment of key topics in this course, to develop a suitable argument, and to convey their ideas and interpretations through the written word.

<u>30% Final</u>: The Final Exam will be in the form of an in-class examination during exam week. The final exam will be composed of two parts, each having equal weight towards the final grade. The first part of the exam will include questions from the lectures and from the textbook in the form of multiple choice, T/F and fill-in the blank questions. The second part of the final examination will consist of short written answers to demonstrate the students' knowledge regarding topics covered in the course. This latter part of the final exam will allow students to express their ideas based on facts derived from the course.

<u>30% Critical report and debate</u>: 15% awarded for the critical debates and 15% for the written synopses for a total of 30%. Beginning in Week 3 and continuing to Week 14 students will be required to prepare *two* written reports and present *two* oral reports (7.5% per debate and 7.5% per report). These reports will be related to the weekly topic and students will sign-up for two topics on a substance of their choice. Students will prepare a three-page critical response report of their chosen topic and hand in via blackboard. The presentations should be at least 8 minutes but no more than 10 minutes in length. These presentations will be used to guide weekly discussions (general topic ideas per substance can be found on page 8-9). Students will need to research their topics and present on a journal article, news report, legal case, ethical issue, or policy review. The discussion day for the weekly substance topic will have a maximum of 8 speakers. Students should sign-up as it is first come, first served – once all spots are full for a topic week no additional presenters will be accepted. The sign-up sheet is available in blackboard.

Required Text

Kuhn, C.; Swartzwelder, S.; Wilson, W.; Wilson, L. H.; Foster, J.

2014 Buzzed: The straight facts about the most used and abused drugs from alcohol to ecstasy, 4th ed. W. W. Norton & Company: New York, NY. 386 pp.

Supplemental Texts and Multimedia

Chapters from the core textbook will be supplemented with a variety of source materials including online resources, media outlets and cinema. Supplemental materials will be available on blackboard either as documents, media links, or embedded files. The selected materials are intended to provide students with a broader perspective by rounding out the information presented in the required text.

Content Warning

Our course readings and classroom discussions will often focus on mature, difficult, and potentially challenging topics. As with any course dealing with drug use, abuse and addiction, course topics can at times be political *and* personal. Readings and discussions might trigger strong feelings—anger, discomfort, anxiety, confusion, excitement, humor, and even boredom. Some of us will have emotional responses to the readings; some of us will have emotional responses to our peers' understanding of the readings; all of us should feel responsible for creating a space that is both intellectually rigorous and respectful. Above all, be respectful (even when you strongly disagree) and be mindful of the ways that our identities position us in the classroom.

Course Outline

This course will be in the format of a directed seminar/lecture under the guidance of the instructor for the specific session. During each biweekly session the instructor will engage the students with questions and draw comments or interpretations primarily based on the assigned reading. Students are expected to ask questions and participate in an interactive fashion. Because this is an area of rapid change in policies, the readings may vary from one term to the next. Additional readings for each section that may be of added use are listed in the table below.

Course Schedule

The lectures are designed to provide historical, cultural, social, economic, and political overviews of the topics listed. In weeks 3-4, weeks 6-8, weeks 10-11, and weeks 13-14; the Monday lectures will introduce a specific substance by providing a pharmacologic overview, history of use, legal / regulatory practices, and commentary related to any socio-cultural phenomenon surrounding the substance. In weeks 2-4, weeks 6-8, weeks 10-11, and weeks 13-14, the Wednesday lectures will be open forum where students will present their critical reports and together, we will discuss how these issues, reports, and commentary frame a specific

substance. Students are encouraged to provide current information (2018 to present).

Week	Date	Subject	Instructor	Assigned & Supplemental Readings
Week 1	Mon 9 Jan	Course Introduction	Dr. Church	
	Wed 11 Jan	Use, Abuse, and Addiction		Introduction – Buzzed; Garriott Addiction in the Making – blackboard
Week 2	Wed 18 Jan	Alcohol – Lecture The substances to be covered in the lecture on alcohol include:	Dr. Davies	Chapter 1 – Buzzed
		 Liquor / Spirits Wine Beer / Mead / Ale 		
Week 3	Mon 23 Jan	Caffeine – Lecture The substances to be covered in the lecture on caffeine include:	Dr. Church	Chapter 2 – <i>Buzzed</i>
		 Coffee Tea Soda / Energy drinks OTC drugs Chocolate 		
	Wed 25 Jan	Caffeine – Discussion	Student Presentations	
Week 4	Mon 30 Jan	Ecstasy – Lecture The substances to be covered in the lecture on ecstasy include: • MDMA • EDM / dance music festivals	Dr. Church	Chapter 3 – Buzzed; Little, Burger, and Croucher EDM and Ecstasy – blackboard
	Wed 1 Feb	Ecstasy – Discussion	Student Presentations	
Week 5	Mon 6 Feb	 Hallucinogens – Lecture The substances to be covered in the lecture on hallucinogens include: LSD, psilocin, mescaline, & DMT Belladonna alkaloids PCP, Ketamine, & Dextromethorphan Salvia divinorum 	Dr. Church	Chapter 4 – <i>Buzzed</i>
	Wed 8 Feb	Hallucinogens - Discussion	Student Presentations	

Week	Date	Subject	Instructor	Assigned & Supplemental Readings
Week 6	Mon 13 Feb	Herbal Drugs – Lecture The substances to be covered in the lecture on hallucinogens include:	Dr. Church	Chapter 5 – Buzzed
		 Ephedrine St. John's Wort Melatonin Ginseng Gingko 		
	Wed 15 Feb	Herbal Drugs – Discussion	Student Presentations	
Week 7	Wed 22 Feb	Inhalants – Lecture The substances to be covered in the inhalants lecture include:	Dr. Church	Chapter 6 – <i>Buzzed</i>
		NitritesNitrous oxide, halothane, etherSolvents, fuels, paints, glues		
Week 8	Mon 27 Feb	Cannabis – Lecture The substances to be covered during the marijuana lecture include:	Dr. Church	Chapter 7 – Buzzed; Kilmer Medical
		 Cannabis sativa Cannabis indica Cannabis ruderalis Cannabis hybrids 		Marijuana and Marijuana Legalization – blackboard
	Wed 1 Mar	Cannabis – Discussion	Student Presentations	
Week 9	Mon 6 Mar	Mid Term – Review		
	Wed 8 Mar	Mid Term Exam – Via Blackboard / Respondus	Lockdown Brows	er
Week 10	Mar 13, 15	Spring Break		
Week 11	Mon 20 Mar	 Nicotine – Lecture The substances to be covered during the nicotine lecture include: Tobacco, cigars, cigarettes, pipe tobacco Chewing gum Chewing tobacco, snuff E-cigarettes, vaping devices 	Dr. Church	Chapter 8 – Buzzed; Leventhal, Strong, & Kirkpatrick Electronic Cigarette Use - blackboard
	Wed 22 Mar	Nicotine – Discussion	Student Presentations	

Week	Date	Subject	Instructor	Assigned & Supplemental Readings
Week 12	Mon 27 Mar	Opiates – Lecture The substances to be covered during the nicotine lecture include:	Dr. Church	Chapter 9 – Buzzed
		Opium, heroin, morphineCodeine, hydromorphone, oxycodoneHydrocodone, fentanyl, propoxyphene		
	Wed 29 Mar	Opiates – Discussion	Student Presentations	
Week 13	Mon 4 Apr	Sedatives – Lecture The substances to be covered during the sedatives lecture include:	Dr. Church	Chapter 10 – <i>Buzzed</i>
		BenzodiazepinesHypnotics, sedatives, barbituratesGamma-hydroxybutyrate		
	Wed 6 Apr	Sedatives - Discussion	N/A	
Week 14	Mon 10 Apr	 Steroids – Lecture The substances to be covered during the steroids lecture include: Anabolic steroids Athletic "doping" 	Dr. Church	Chapter 11 – Buzzed; Schneider Doping, Cycling, and the Tour de France -
	Wed 12 Apr	Steroids – Discussion	Student Presentations	Blackboard
Week 15	Mon 17 Apr	Stimulants – Lecture The substances to be covered during the stimulants lecture include: • Cocaine • Amphetamine and methamphetamine • Ephedrine and ephedrine substitutes • Methylphenidate • Cathinone • Diet pills	Dr. Church	Chapter 12 – Buzzed; Race, Lea, Murphy, & Pienaar Recreational Drug Use and MSM - Blackboard
	Wed 19 Apr	Stimulants – Discussion	Student Presentations	

Week	Date	Subject	Instructor	Assigned & Supplemental Readings
Week 16	Mon	Legal Issues – Lecture	Dr. Church	Chapter 16 –
	24 Apr			Buzzed
	Wed	Final Exam – Review	Dr. Church	
	26 Apr			
	Final Exam – Wednesday, May 3, 2023, from 11 AM to 1 PM			

In-Class Assignments and Exams Schedule

Material, Subject, or Description	
In-class Assignment 01	
Mid Term Exam / Week 1 – Week 8	
In-Class Assignment 02	
Final Exam 2pm-4pm	

Discussion / General Topic Ideas per Substance

Week	Substance	Potential Topics
Week 3	Caffeine	Caffeine addiction; Caffeine for mental focus; Effects of caffeine on brain, body, or relationships; Stress, panic attacks, and psychosis from caffeine use; Physical or mental enhancement from caffeine; Treatment of headaches and migraines; Soda addiction; Energy drinks and alcohol; Chocolate
Week 4	Ecstasy	MDMA addiction; Effects of MDMA on brain, body, or relationships; MDMA and music subcultures (raves, EDM, other); MDMA purity; MDMA as therapy; Post-MDMA use depression; MDMA and psychological suggestion
Week 6	Herbal Drugs	Supplements and issues of quality; use of herbal drugs by population subtype / demographic; wellness and natural products; quality and safety of unregulated products; food as drugs; herbal vs chemical treatments; traditional medicine and modern medicine; supplement of amino acids; supplement of vitamins; testing and quality.
Week 8	Cannabis	Cannabis and methods of use; Edibles and dosing; Federal versus State governance; Effects of cannabis on brain, body, or relationship; Racial and ethnic stereotyping of cannabis users; Negative stereotype of the name "Marijuana"; Cannabis and music cultures; Cannabis and economics; Politics of Cannabis

Week	Substance	Potential Topics
Week 10	Nicotine	Cultural history of Tobacco; Tobacco and American History; Effects of nicotine on brain, body, or relationships; Political and social control of big tobacco; Legislation and taxation of tobacco (current or historic); Vaping, e- cigarettes, and smokeless tobacco; Marketing of tobacco
Week 11	Opiates	Cultural history of opium; Economics of opium; Effects of opiates on brain, body, or relationships; Over-prescription and opiate addiction; Opiates and crime; Popularization of Junkie Culture; Opium Dens; Heroin Shooting Galleries; Risks of injection drug use
Week 12	Sedatives	Social aspects of sedative abuse; prescription drug abuse; date rape drugs; reversible and irreversible consequences of sedative abuse; positive effects of sedatives; sedative recovery; religion and sedatives; sedatives as a coping mechanism
Week 13	Steroids	Performance enhancing drugs and regulations; Sports and steroids; Steroids and body dysmorphia / body image; Steroids and masculinity; Effects of steroids on brain, body, or relationships
Week 14	Stimulants	ADHD prescription among youth; ADHD medications and performance; Effects of stimulants on brain, body, or relationships; "Party and Play" – meth and gay men; Cultural history of cocaine; Religious use of cocaine; Cocaine and drug cartels; Diet pills and dependence: Stimulants and rise of sexually transmitted infections

Academic Integrity

The University of Southern California is a learning community committed to developing successful scholars and researchers dedicated to the pursuit of knowledge and the dissemination of ideas. Academic misconduct, which includes any act of dishonesty in the production or submission of academic work, comprises the integrity of the person who commits the act and can impugn the perceived integrity of the entire university community. It stands in opposition to the university's mission to research, educate, and contribute productively to our community and the world.

All students are expected to submit assignments that represent their own original work, and that have been prepared specifically for the course or section for which they have been submitted. You may not submit work written by others or "recycle" work prepared for other courses without obtaining written permission from the instructor(s).

Other violations of academic integrity include, but are not limited to, cheating, plagiarism, fabrication (e.g., falsifying data), collusion, knowingly assisting others in acts of academic dishonesty, and any act that gains or is intended to gain an unfair academic advantage.

The impact of academic dishonesty is far-reaching and is considered a serious offense against the university. All incidences of academic misconduct will be reported to the Office of Academic Integrity and could result in outcomes such as failure on the assignment, failure in the course, suspension, or even expulsion from the university.

For more information about academic integrity see <u>the student handbook</u> or the <u>Office of</u> <u>Academic Integrity's website</u>, and university policies on <u>Research and Scholarship Misconduct</u>.

Please ask your instructor if you are unsure what constitutes unauthorized assistance on an exam or assignment, or what information requires citation and/or attribution.

Students and Disability Accommodations:

USC welcomes students with disabilities into all of the University's educational programs. The Office of Student Accessibility Services (OSAS) is responsible for the determination of appropriate accommodations for students who encounter disability-related barriers. Once a student has completed the OSAS process (registration, initial appointment, and submitted documentation) and accommodations are determined to be reasonable and appropriate, a Letter of Accommodation (LOA) will be available to generate for each course. The LOA must be given to each course instructor by the student and followed up with a discussion. This should be done as early in the semester as possible as accommodations are not retroactive. More information can be found at osas.usc.edu. You may contact OSAS at (213) 740-0776 or via email at osasfrontdesk@usc.edu.

Support Systems:

Counseling and Mental Health - (213) 740-9355 – 24/7 on call

Free and confidential mental health treatment for students, including short-term psychotherapy, group counseling, stress fitness workshops, and crisis intervention.

<u>988 Suicide and Crisis Lifeline</u> - 988 for both calls and text messages – 24/7 on call

The 988 Suicide and Crisis Lifeline (formerly known as the National Suicide Prevention Lifeline) provides free and confidential emotional support to people in suicidal crisis or emotional distress 24 hours a day, 7 days a week, across the United States. The Lifeline is comprised of a national network of over 200 local crisis centers, combining custom local care and resources with national standards and best practices. The new, shorter phone number makes it easier for people to remember and access mental health crisis services (though the previous 1 (800) 273-8255 number will continue to function indefinitely) and represents a continued commitment to those in crisis.

<u>Relationship and Sexual Violence Prevention Services (RSVP)</u> - (213) 740-9355(WELL) – 24/7 on call

Free and confidential therapy services, workshops, and training for situations related to genderand power-based harm (including sexual assault, intimate partner violence, and stalking).

Office for Equity, Equal Opportunity, and Title IX (EEO-TIX) - (213) 740-5086

Information about how to get help or help someone affected by harassment or discrimination, rights of protected classes, reporting options, and additional resources for students, faculty, staff, visitors, and applicants.

Reporting Incidents of Bias or Harassment - (213) 740-5086 or (213) 821-8298

Avenue to report incidents of bias, hate crimes, and microaggressions to the Office for Equity, Equal Opportunity, and Title for appropriate investigation, supportive measures, and response.

The Office of Student Accessibility Services (OSAS) - (213) 740-0776

OSAS ensures equal access for students with disabilities through providing academic accommodations and auxiliary aids in accordance with federal laws and university policy.

USC Campus Support and Intervention - (213) 740-0411

Assists students and families in resolving complex personal, financial, and academic issues adversely affecting their success as a student.

Diversity, Equity and Inclusion - (213) 740-2101

Information on events, programs and training, the Provost's Diversity and Inclusion Council, Diversity Liaisons for each academic school, chronology, participation, and various resources for students.

<u>USC Emergency</u> - UPC: (213) 740-4321, HSC: (323) 442-1000 – 24/7 on call

Emergency assistance and avenue to report a crime. Latest updates regarding safety, including ways in which instruction will be continued if an officially declared emergency makes travel to campus infeasible.

<u>USC Department of Public Safety</u> - UPC: (213) 740-6000, HSC: (323) 442-1200 – 24/7 on call Non-emergency assistance or information.

<u>Office of the Ombuds</u> - (213) 821-9556 (UPC) / (323-442-0382 (HSC)

A safe and confidential place to share your USC-related issues with a University Ombuds who will work with you to explore options or paths to manage your concern.

Occupational Therapy Faculty Practice - (323) 442-2850 or otfp@med.usc.edu

Confidential Lifestyle Redesign services for USC students to support health promoting habits and routines that enhance quality of life and academic performance.

Critical Report

During weeks 3-8 and weeks 10-14 students will be required to prepare and present <u>*TWO*</u> oral & written reports. These reports will be related to the weekly topic and students will sign-up for three topics on three different substances of their choice. Students will prepare a three-page synopsis of each report and submit it via blackboard. In addition, students will prepare a powerpoint presentation of their report, this presentation should be at least 8 minutes but no more than 10 minutes in length (~4 or 5 slides, not counting the title or reference slides). These presentations will be used to guide weekly discussions (general topic ideas per substance can be found on page 8-9). Students will need to research their topics and present on at minimum two journal articles, news report, legal cases, ethical issues, or policy reviews.

Grading of the report will be based upon the quality of your analysis and how clearly you present the information within your answers. You are expected to incorporate key terms and concepts you have learned in this course. Points will be deducted for grammar, punctuation, and spelling errors. You should start with a brief outline for each answer, create a rough draft, and then produce a final draft. <u>The final draft of the synopsis and powerpoint are the only documents you need to submit.</u>

These are critical response essays related to the material covered in lecture and in the assigned readings. You must utilize sources not included as part of the weekly class content. Your essays must consist of:

- A. An Introduction paragraph, which contains a minimum of two sentences that introduces your question or topic; and establishes a foundation for the remainder of your essay. This section functions like a roadmap to tell the reader what you will be discussing in the body of your essay.
- B. **Body paragraph(s)**, which present the major content of your answer. Include at least one body paragraph with three or four sentences within the paragraph.
- C. A conclusion paragraph, which contains a minimum of two sentences and summarizes the major points contained in the body paragraphs.

Format Requirements

Carefully follow the format requirements below. Any variation will result in lost points or no credit.

- Margins = 1 inch
- Font type = Arial, Times New Roman, or any Sans type font
- Font size = 11 point
- <u>3 pages (double spaced) (references not included)</u>
- Use a header for each page:
 - Include your first and last name
 - Use week number to indicate your topic (e.g. Week 3 Caffeine)
- Filename should have your last name and first name (e.g.

Trojan_Tommy_ShortEssay1)

- Acceptable file formats:
 - Word (DOC or DOCX) and PowerPoint (PPT or PPTX)
 - *No other formats will be accepted!*

Direct Quotations

These essays are expected to be written in your own words therefore no more than 5% of the essay should be quoted or copied word – for – word. If you submit an essay with more than 5% quoted material, you will be penalized one point for each percentage above 5%. If you submit an essay with more than 15% quoted material, you will receive an automatic zero.

APA Citations

THIS IS NOT AN APA paper; however, you are expected to demonstrate understanding of the rules of plagiarism and expected to use APA style citations appropriately, which include in-text and full citations with a Reference page.

You are expected to cite at least $\frac{2}{5}$ sources (class books and articles, articles from journals, books, etc) per essay. You will be penalized $\frac{-5}{5}$ points for a missing resource.

Do NOT use Wikipedia or any other similar form of wiki to author these essays.

Students will sign up for their topics through Blackboard by going to the Content tab and selecting the Weekly Topics Sign-up link. They will "sign-up" for the weekly topics they are interested in. If a topic of interest is closed, please contact Dr. Church to discuss options.

Submission Requirement

The written reports are to be submitted by 2pm of the Monday after the presentation has been given (see chart below) via Blackboard.

Week Number	Essay Topic	Report Due Date (by 2pm)
3	Caffeine	30 Jan
4	Ecstasy	6 Feb
5	Hallucinogens	13 Feb
6	Herbal Drugs	22 Feb
8	Marijuana	6 Mar

Weekly Report Topics and Submission Dates

Week Number	Essay Topic	Report Due Date (by 2pm)
10	Nicotine	27 Mar
11	Opiates	3 Apr
12	Sedatives	10 Apr
13	Steroids	17 Apr
14	Stimulants	24 Apr