



SAINT LOUIS UNIVERSITY
MADRID

Psychopharmacology PSY-4140-M01 Fall 2017

Class Days and Time: Tuesday, Thursday; 12.30-13.45

Classroom: PRH 3

Credits: 3

Instructor: Dr Anya M Hillery

Instructor's Email: anya.hillery@slu.edu

Instructor's Campus Phone: 91 554 58 58

Office: Health Science Office, Padre Arrupe Hall (Top Floor)

Office Hours: Tuesday and Thursday, 10:00- 11:00; 14.00-14.30; 15.45-16.15

Course Description:

This course provides a basic introduction to psychopharmacology: the study of the effects of drugs on the brain and human behaviour.

The course is divided into 3 main parts:

Part I: An introduction to psychopharmacology

Part II: Study of individual drugs and drug classes

Part III: Clinical Considerations: psychotherapeutics; treatment and prevention of substance-use disorders

Course Goals and Student Learning Outcomes:

At the end of the course, students will:

- understand the concepts of drugs, drug use, drug dependence and drug abuse
- understand the origins and changes in drug use in society
- understand the principles of pharmacokinetics, with particular respect to routes of drug administration and the ADME processes
- understand the principles of pharmacodynamics
- understand the fundamentals of neuropsychology, specifically the anatomy and physiology of the nervous system, neurons, neural transmission and neurotransmitter systems; and thus how psychoactive drugs work in the brain and produce their effects
- understand the principles of drug testing
- understand behavioural pharmacology, drug user and environmental effects
- understand the history, pharmacokinetics, mechanism of action, and pharmacological and physical effects, of the following classes of psychoactive drugs:
 - cocaine, amphetamines and related stimulants
 - the opiates
 - alcohol
 - nicotine
 - hallucinogens
 - marijuana
 - psychotherapeutic medications (including anxiolytics, sedatives, anti-psychotics, anti-depressants, mood-stabilizing drugs); other prescription and OTC drugs

- be able to identify social, psychological and physical consequences of drug-taking on the individual and society
- understand the different methods of treatment and prevention of drug-abuse and to discuss ways of educating the public as to the outcomes of taking drugs
- have worked in a small team to prepare an informational poster and brochure, aimed at increasing public understanding about drug abuse and prevention
- have worked in a small team to prepare an oral presentation on drug abuse

Saint Louis University - Madrid Campus is committed to excellent and innovative educational practices. In order to maintain quality academic offerings and to conform to relevant accreditation requirements, the Campus regularly assesses its teaching, services, and programs for evidence of student learning outcomes achievement. For this purpose anonymized representative examples of student work from all courses and programs is kept on file, such as assignments, papers, exams, portfolios, and results from student surveys, focus groups, and reflective exercises. *Thus, copies of student work for this course, including written assignments, in-class exercises, and exams may be kept on file for institutional research, assessment and accreditation purposes.* If students prefer that Saint Louis University - Madrid Campus does not keep their work on file, they need to communicate their decision in writing to the professor.

Required Texts and Materials:

Maisto, S. A., Galizio, M., & Connors, G. J. (2014). *Drug use and abuse*. 7th edition. Cengage Learning.

The following books, stocked in the library, are also recommended:

- Drug use and abuse, 7th edition, (Maisto, Galzo, Connor)
- Psychopharmacology: drugs, the brain and behaviour (Meyer and Quenzer)
- Understanding drugs and behaviour (Parrott)
- Annual Editions: Drugs Society and Behavior 2009/2010
- A Primer of Drug Action: a Concise, Non-Technical Guide to the Actions, Uses and Side Effects of Psychoactive Drugs (Julien)
- Basic Psychology (Gleitman, Fridlund and Reisberg)
- Pharmacology for Nursing Practice (Guierrez and Queener)
- Principles of Anatomy and Physiology (Tortora & Grabowski)
- Drug Delivery: Fundamentals and Applications (Hillery and Park)

Relevant websites will be recommended throughout the course.

Extensive use of the SLU Blackboard Learning System will be employed: <http://slu.blackboard.com>. All lectures will be posted there, as well as many additional support features (including lecture summaries and tutorials) and it should be checked daily for announcements.

Attendance Policy:

Class attendance is obligatory. Absence from class must be accounted for. Unaccountable absence will negatively affect the final grade. More than four unaccountable absences will result in a drop in the final grade. Continual lateness to class is disruptive and not acceptable.

Course Requirements and Grading Rationale/System:

There are two group assignments, one involves a written project and the other is an oral presentation. More information on these assignments will be given in class.

There are three main exams for this course: two mid-terms and a final exam. The exams are not cumulative, thus the first mid-term will examine the material covered up to this exam. The second mid-term will examine the material covered *after* the first mid-term and the final exam will examine the material covered *after* the second mid-term.

However, there is also a comprehensive final exam that examines **all** of the course material. This exam is obligatory for students who fail or miss either mid-term exam. It is voluntary for any students who, having done their mid-terms, would like to try and improve their grade (but a poor result may obviously reduce the grade).

Students who miss an exam are required to provide written documentation of the circumstances, e.g. doctor's medical certificate, letter from university counsellor, etc.

There will also be two Quizzes, taken in class, a week before the two mid-terms. The aim of these quizzes is to encourage study and revision for the mid-terms.

The final grade is calculated as follows:

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| Mid-term 1: | 25% |
| Mid-term 2: | 25% |
| Final Exam: | 30% |
| Assignments: | 20% (10% each) |

E-mail:

Campus and course announcements will often be handled by e-mail. Students should check their "@slu.edu" e-mail regularly.

University Statement on Academic Integrity:

Academic integrity is honest, truthful and responsible conduct in all academic endeavors. The mission of Saint Louis University is "the pursuit of truth for the greater glory of God and for the service of humanity." Accordingly, all acts of falsehood demean and compromise the corporate endeavors of teaching, research, health care and community service via which SLU embodies its mission. The University strives to prepare students for lives of personal and professional integrity, and therefore regards all breaches of academic integrity as matters of serious concern.

The governing University-level Academic Integrity Policy can be accessed on the Provost's Office [website](#) at:. Additionally, SLU-Madrid has posted its academic integrity policy online: <http://www.slu.edu/madrid/academics>. As a member of the University community, you are expected to know and abide by these policies, which detail definitions of violations, processes for reporting violations, sanctions and appeals.

The professor will review these matters during the first weeks of the term. Please direct questions about any facet of academic integrity to your faculty, the chair of the department of your academic program or the Academic Dean of the Madrid Campus.

University Title IX Statement:

Saint Louis University and its faculty are committed to supporting our students and seeking an environment that is free of bias, discrimination, and harassment. If you have encountered any form of sexual misconduct (e.g. sexual assault, sexual harassment, stalking, domestic or dating violence), we encourage you to report this to the University. If you speak with a faculty member about an incident of misconduct, that faculty member must notify SLU's Title IX deputy coordinator, Marta Maruri, whose office is located on the ground floor of Padre Rubio Hall, Avenida del Valle, 28 (mmaruri@slu.edu; 915-54-5858, ext. 213) and share the basic fact of your experience with her. The Title IX deputy coordinator will then be available to assist you in understanding all of your options and in connecting you with all possible resources on and off campus.

If you wish to speak with a confidential source, you may contact the counselors at the SLU-Madrid's Counseling Services on the third floor of San Ignacio Hall (counselingcenter-madrid@slu.edu; 915-54-5858, ext. 230) or Sinews Multipletherapy Institute, the off-campus provider of counseling services for SLU-Madrid (www.sinews.es; 917-00-1979). To view SLU-Madrid's sexual misconduct policy and for resources, please visit the following web address: <http://www.slu.edu/Documents/Madrid/campus-life/SLUMadridSexualMisconductPolicy.pdf>.

Students with Special Needs:

In recognition that people learn in a variety of ways and that learning is influenced by multiple factors (e.g., prior experience, study skills, learning disability), resources to support student success are available on campus. Students who think they might benefit from these resources can find out more about:

- Course-level support (e.g., faculty member, departmental resources, etc.) by asking your course instructor.
- University-level support (e.g., tutoring/writing services, Disability Services) by visiting the Academic Dean's Office (San Ignacio Hall) or by going to <https://www.slu.edu/madrid/campus-life/student-services/disability-services>

Students with a documented disability who wish to request academic accommodations must contact Disability Services to discuss accommodation requests and eligibility requirements. Once successfully registered, the student also must notify the course instructor that they wish to access accommodations in the course. Please contact Disability Services at disabilityservices-madrid@slu.edu or +915 54 58 58, ext. 230 for an appointment. Confidentiality will be observed in all inquiries. Once approved, information about the student's eligibility for academic accommodations will be shared with course instructors via email from Disability Services. For more information about academic accommodations, see "Student Resources" on the SLU-Madrid webpage.

Note: Students who do not have a documented disability but who think they may have one are encouraged to contact Disability Services.

Fall 2017 Course Schedule:

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| Monday, September 4 | |
| Tuesday, September 5 | General concepts: definitions, classification, drug use, drug dependence and abuse |
| Wednesday, September 6 | |
| Thursday, September 7 | Origins and changes in drug use in society, legal aspects |
| Friday, September 8 | |
| Saturday, September 9 | |
| Sunday, September 10 | |
| Monday, September 11 | |
| Tuesday, September 12 | The nervous system and drug-receptor interactions |
| Wednesday, September 13 | |
| Thursday, September 14 | The nervous system and drug-receptor interactions |
| Friday, September 15 | |
| Saturday, September 16 | |
| Sunday, September 17 | Last Day to Drop a Class Without a Grade of W and /or Add a Class, choose Audit (AU) or Satisfactory/Unsatisfactory (S/U) Options |
| Monday, September 18 | |
| Tuesday, September 19 | Pharmacokinetics and pharmacodynamics |
| Wednesday, September 20 | |
| Thursday, September 21 | Pharmacokinetics and pharmacodynamics |
| Friday, September 22 | |
| Saturday, September 23 | |
| Sunday, September 24 | |
| Monday, September 25 | |
| Tuesday, September 26 | Behavioural pharmacology |
| Wednesday, September 27 | |
| Thursday, September 28 | Behavioural pharmacology QUIZ 1 |
| Friday, September 29 | |
| Saturday, September 30 | |

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| Sunday, October 1 | |
| Monday, October 2 | |
| Tuesday, October 3 | Cocaine, amphetamines and related stimulants |
| Wednesday, October 4 | |
| Thursday, October 5 | <u>MID-TERM I</u> |
| Friday, October 6 | |
| Saturday, October 7 | |
| Sunday, October 8 | |
| Monday, October 9 | |
| Tuesday, October 10 | Cocaine, amphetamines and related stimulants |
| Wednesday, October 11 | |
| Thursday, October 12 | Fall Break |
| Friday, October 13 | |
| Saturday, October 14 | |
| Sunday, October 15 | |
| Monday, October 16 | |
| Tuesday, October 17 | Opiates |
| Wednesday, October 18 | |
| Thursday, October 19 | Opiates |
| Friday, October 20 | |
| Saturday, October 21 | |
| Sunday, October 22 | |
| Monday, October 23 | |
| Tuesday, October 24 | Alcohol |
| Wednesday, October 25 | |
| Thursday, October 26 | Alcohol |
| Friday, October 27 | |
| Saturday, October 28 | |
| Sunday, October 29 | |
| Monday, October 30 | Last Day to Drop a Class and Receive the Grade of W. |
| Tuesday, October 31 | Nicotine |
| Wednesday, November 1 | University Closed |
| Thursday, November 2 | Nicotine <u>QUIZ II</u> Spring Registration Opens! |
| Friday, November 3 | |
| Saturday, November 4 | |
| Sunday, November 5 | |
| Monday, November 6 | |
| Tuesday, November 7 | Hallucinogens |
| Wednesday, November 8 | |
| Thursday, November 9 | University Closed |
| Friday, November 10 | |
| Saturday, November 11 | |
| Sunday, November 12 | |
| Monday, November 13 | |
| Tuesday, November 14 | <u>MID-TERM II</u> |
| Wednesday, November 15 | |
| Thursday, November 16 | Hallucinogens |
| Friday, November 17 | |
| Saturday, November 18 | |

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| Sunday, November 19 | |
| Monday, November 20 | |
| Tuesday, November 21 | Marijuana |
| Wednesday, November 22 | |
| Thursday, November 23 | Marijuana |
| Friday, November 24 | |
| Saturday, November 25 | |
| Sunday, November 26 | |
| Monday, November 27 | |
| Tuesday, November 28 | Psychotherapeutic medications |
| Wednesday, November 29 | |
| Thursday, November 30 | Psychotherapeutic medications |
| Friday, December 1 | |
| Saturday, December 2 | |
| Sunday, December 3 | |
| Monday, December 4 | |
| Tuesday, December 5 | Treatment of substance-use disorders |
| Wednesday, December 6 | University Closed |
| Thursday, December 7 | Treatment of substance-use disorders |
| Friday, December 8 | University Closed |
| Saturday, December 9 | |
| Sunday, December 10 | |
| Monday, December 11 | |
| Tuesday, December 12 | Prevention of substance abuse |
| Wednesday, December 13 | |
| Thursday, December 14 | Final Exam – Day 1 |
| Friday, December 15 | Final Exam – Day 2 |
| Saturday, December 16 | |
| Sunday, December 17 | |
| Monday, December 18 | Final Exam – Day 3 Midyear Commencement! |
| Tuesday, December 19 | Final Exam – Day 4 |
| Wednesday, December 20 | <u>FINAL EXAM PSYCHOPHARMACOLOGY 12.00-15.00</u> |
| Saturday, December 23 | Grades Due to Registrar |
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