

Psychopharmacology

HSCD 620 Spring 2018

Meeting Times

Classroom: Tuesdays, Jan 17 & 31, Feb 14 & 28, Mar 21, Apr 4, 18, 6-9pm, FH L119
This is a hybrid course with substantial online assignments and discussions between classroom sessions.

Faculty

Therissa Libby, Ph.D.
Office: Saint Paul Campus, St. John's Hall, room 208B
Office Hours: see D2L for schedule or by appointment
Telephone: 651-793-1501
E-Mail: therissa.libby@metrostate.edu
Social Media: ProfLibbyMetro

Purpose of the Course

Course Description

This course provides a broad understanding of psychopharmacology related to substance use and co-occurring disorders. Following a review of pharmacokinetics, pharmacodynamics and synaptic and behavioral mechanisms of addictive drugs, the course focuses on medications used to treat substance use and psychiatric disorders. Students distinguish among the major classes of psychotherapeutic and anti-addiction medications, and evaluate the evidence base for clinical effectiveness of psychiatric medications for co-occurring disorders and medication-assisted treatments for substance use disorders.

Competence Statement

Students demonstrate knowledge of the actions of addictive drugs and psychiatric and anti-addiction medications on the brain and behavior, and demonstrate application of this knowledge as would be expected in clinical settings.

Learning Objectives

Having completed this course, participants can:

- demonstrate understanding of basic concepts in neuroanatomy and neurotransmission at a level appropriate for advanced non-scientist clinicians
- distinguish among addictive drugs and psychiatric and anti-addiction medications regarding their pharmacological classifications, synaptic sites of action and effects on behavior
- critique the evidence base for the utility of psychiatric and anti-addiction medications, including a review of the approval process and industry research practices

- educate clients and families about addictive drugs as part of countering misinformation and shame and fostering common understanding
- educate clients and families about psychiatric and anti-addiction medications in a manner that supports informed client choice and adherence to treatment
- educate policymakers about addictive drugs, psychiatric medications and anti-addiction medications in the service of stigma reduction and advocacy
- evaluate clients for admission and/or referral to appropriate services, include detoxification, psychiatric and medication-assisted treatment services

Learning Strategies and Activities

Review of Texts and Scholarly Literature

Case Studies

Written Assignments

Recorded Presentations

Texts, Materials, Media and Resources

Textbooks

Advokat CD, Comaty JE and Julien RM (2014) *Julien's Primer of Drug Action, 13th ed.* New York: Worth Publishers. Referred to as **Julien** in the course schedule.

Meyer JS and Quenzer LF (2013) *Psychopharmacology: Drugs, The Brain, and Behavior, 2nd ed.* Cary, NC: Sinauer Associates/Oxford University Press. Referred to as **M&Q** in the course schedule.

D2L Brightspace

This course includes library and online elements. You will make extensive use of D2L throughout the course for a variety of purposes, such as obtaining course documents and submitting written assignments. If you are not conversant with D2L, please contact me right away. You can obtain help with D2L from Metro State's Center for Online Learning (COL); for more, see <http://www.metrostate.edu/msweb/explore/col/>.

Video Materials

Required and recommended video materials will be posted on or linked to in D2L.

Library

Building skill in performing research online will be important in each of your graduate classes. The Metropolitan State University Library has many resources, including search engines, collections and instructional videos. For more, see <http://www.metrostate.edu/msweb/resources/library/> or contact our library liaison, Christine Larson (christine.larson@metrostate.edu).

Assignments and Evaluation Criteria

Discussion

Students will participate in one discussion during the first week of the semester. The discussion question is meant to elicit what students already know, not to encourage new research. Posts are due by midnight on Sun, Jan 14. Responses to other students' posts are due by 5pm on Wed, Jan 17 (at least two comments, but students are to read all posts). The discussion will close at the due date and time and will not be reopened. Points for participation: 10 pts

Instructor Lectures and Questions/Comments in VoiceThread

Twenty recorded lectures will be posted in VoiceThread (VT), an online tool for presentations and discussions. Each student is to view each lecture and add questions and/or comments. A grading rubric will be posted in D2L. Due dates are listed in the Course Schedule. Total possible points: 20 lectures x 15 pts each = 300 pts

Case Studies

Students will be presented with a series of case studies of a client with substance use or co-occurring disorders and a set of questions. Case studies and accompanying questions will be provided in MS Word documents and are to be answered in essay form; expected length of answers will be included with the questions. A grading rubric will be posted in D2L. Due dates are listed in the Course Schedule. Total possible points: 8 case studies x 30 pts each = 240 pts

Portfolio: Medications and Counseling

The majority of individuals in counseling for co-occurring disorders are prescribed one or more medications. Counselors are not prescribers or nurses, yet they provide essential support for those whose treatment includes medication. In this paper, students will discuss how they will integrate their understanding of psychopharmacology with the client care they provide. A handout detailing this assignment and a grading rubric will be posted in D2L. Due date is May 1. Total possible points: 200

Discussion	10 pts
Instructor VT Lectures/Questions/Comments	300 pts
Case Studies	240 pts
Portfolio: Medications and Counseling	<u>200 pts</u>
Total	750 pts

Determination of final letter grade:

93-100%	A
90-92.9%	A-
87-89.9%	B+
83-86.9%	B
80-82.9%	B-
77-79.9%	C+
73-76.9%	C
<73	F

The following is Metro State policy for all graduate programs: “To remain in good standing and to be qualified for graduation, you must maintain a cumulative grade point average of at least 3.0. Grades below C do not apply to program requirements, but are calculated in the cumulative grade point average.”

Note that this course makes use of two methods for communication between class sessions.

- *Remind*: The Remind app and www.remind.com are used for text-based communication. The instructor will make every effort to respond to Remind communications before the end of the day they are sent. The link for this course is <https://www.remind.com/join/620sp18>. This link is also posted in the Announcements section in D2L.
- *VoiceThread*: This online discussion tool is used for instructor lectures and student discussions of them. A VoiceThread (VT) explaining it is available to practice its use. Each VT link will be posted in the Announcements section in D2L.

Instructor and Institutional Policies

Policies applicable to all graduate programs can be found at <http://www.metrostate.edu/student/course-info/course-info/graduate-policies-and-procedures>.

Deadlines: All assignments are submitted via D2L. Assignment due dates are listed in the Course Schedule and in D2L. Late submission of assignments will result in a loss of 10% of your score per day. For example, if an assignment is turned in three days late, I will score it, then subtract 30% of my score.

Integrity: You don't succeed in this independent study unless you are doing your own work (regardless of what grade you receive). You're expected to maintain academic integrity in fulfilling all course requirements. Cheating, plagiarizing and other violations of academic integrity are dishonest and unacceptable practices, and consequences for them may include failing an assignment, failing the course, probation, suspension or expulsion from the program. See the D2L MS ADC MS CODC Program site for the document entitled “AIP_Student_Guide.” It is Metro State policy that faculty report

violations of the academic integrity policy. This course makes use of the Turnitin feature in D2L as an originality checker for most assignment submissions.

Diversity and Disability Statement: Our institution values diversity and inclusion; we are committed to a climate of mutual respect and full participation. Our goal is to create learning environments that are usable, equitable, inclusive and welcoming. If there are aspects of the instruction or design of this course that result in barriers to your inclusion or accurate assessment or achievement, please notify the instructor as soon as possible. Students with disabilities are also welcome to contact the Center for Accessibility Resources to discuss a range of options to removing barriers in the course, including accommodations. The Center for Accessibility Resources is located in New Main, room L223, and can be reached at 651-793-1549 or Accessibility.Resources@metrostate.edu.

Changes to Course Content: This syllabus and the content of the course are subject to change by the instructor. Changes will be announced in the D2L Announcements section and via email.

Incompletes: An Incomplete will be granted only in cases of documented extreme hardship (medical or family emergencies) and only if you have already completed most (75-80%) of the coursework. The instructor determines what constitutes appropriate documentation. If you are granted an incomplete, all coursework must be completed within an agreed-upon time. In any event, all coursework must be completed by the end of the following semester.

Email: All outgoing email from Metro State, including D2L updates, course announcements, program announcements, reminders, etc., goes to your Metro State email account. For a variety of security reasons, it is Metro State policy that all incoming email from students be sent from Metro State email accounts. Students bear sole responsibility for any email communication that does not get delivered or read because it is sent from an outside account.

HSCD 620 Spring 2018 Course Schedule

Date	Topics	Assignments and Due Dates
Week 1 Jan 8-14	Overview of Pharmacology Concepts	<i>For Week 2</i> Readings: <ul style="list-style-type: none"> • M&Q ch. 1 Assignments: <ul style="list-style-type: none"> • Discussion #1: You have a brain. What for? Posts due Jan 14, comments due Jan 17
Week 2 Jan 15-21 Class Jan 17	Syllabus and Assignment Review More on Pharmacology Concepts	<i>For Week 3</i> Readings: <ul style="list-style-type: none"> • Julien ch 1 • M&Q ch. 2 Assignments: <ul style="list-style-type: none"> • Instructor VTs: Neurotransmission I; Neurotransmission II • Comments on VTs due Jan 23
Week 3 Jan 22-28	Neurotransmission	<i>For Week 4</i> Readings: <ul style="list-style-type: none"> • Julien ch. 3 • Berridge (2016) Assignments: <ul style="list-style-type: none"> • Instructor VTs: Pharmacodynamics; Drug Classification • Comments on VTs due Jan 30
Week 4 Jan 29-Feb 4 Class Jan 31	More on Neurotransmission Pharmacodynamics Drug Classification	<i>For Week 5</i> Readings: <ul style="list-style-type: none"> • Julien chs. 2 and 4 • M&Q ch. 9 Assignments: <ul style="list-style-type: none"> • Instructor VTs: Pharmacokinetics; Neuroscience of Addiction • Comments on VTs due Feb 6

<p>Week 5 Feb 5-11</p>	<p>Pharmacokinetics Acute and Chronic Drug Effects</p>	<p><i>For Week 6</i> Readings: <ul style="list-style-type: none"> • Julien chs. 6 (sections on nicotine) and 7 • M&Q ch. 5 Assignments: <ul style="list-style-type: none"> • Instructor VTs: Psychostimulants; Nicotine • Comments on VTs due Feb 13 </p>
<p>Week 6 Feb 12-18 Class Feb 14</p>	<p>More Pharmacokinetics More Acute and Chronic Drug Effects Psychostimulants Nicotine</p>	<p><i>For Week 7</i> Readings: <ul style="list-style-type: none"> • Julien, chs. 5 (sections on alcohol) and 13 (section on sedative-hypnotics) • Muncie et al. (2014) Assignments: <ul style="list-style-type: none"> • Case Study #1 due Feb 17 • Instructor VTs: Alcohol and Other Sedatives; Opioids • Comments on VTs due Feb 20 </p>
<p>Week 7 Feb 19-25</p>	<p>Depressants: Alcohol, Other Sedatives and Opioids</p>	<p><i>For Week 8</i> Readings: <ul style="list-style-type: none"> • Julien chs. 8 and 9 • Morean et al. (2015) Assignments: <ul style="list-style-type: none"> • Case Study #2 due Feb 24 • Instructor VTs: Cannabinoids; Psychedelics • Comments on VTs due Feb 27 </p>
<p>Week 8 Feb 26-Mar 3 Class Feb 28</p>	<p>More on Depressants Cannabinoids Psychedelics</p>	<p><i>For Week 9</i> Readings: <ul style="list-style-type: none"> • SAMHSA_MedTx_AUD • SAMHSA_MAT_OUD • M&Q ch. 10 (sections on medications to treat alcohol use disorders) and ch. 11 (sections on medications to treat opioid use disorders) Assignments: <ul style="list-style-type: none"> • Case Study #3 due Mar 3 • Instructor VTs: Medications Used in the Treatment of Substance Use Disorders • Comments on VTs due Mar 13 </p>

Mar 4-11	Spring Break	
Week 9 Mar 12-18	Medications Used in the Treatment of Substance Use Disorders	<i>For Week 10</i> Readings: <ul style="list-style-type: none"> • SAMHSA_GeneralPrinciples • Julien ch. 12 • M&Q ch. 6 Assignments: <ul style="list-style-type: none"> • Instructor VTs: Psychiatric Medications: General Principles; Antidepressants I • Comments on VTs due Mar 20
Week 10 Mar 19-25 Class Mar 21	Medications Used in the Treatment of Substance Use Disorders General Principles Antidepressants	<i>For Week 11</i> Readings: <ul style="list-style-type: none"> • M&Q ch. 18 • Becker and Midoun (2016) • Gaynes (2014) Assignments: <ul style="list-style-type: none"> • Instructor VTs: Antidepressants II; Anxiolytics • Comments on VTs due Mar 27
Week 11 Mar 25-Apr 1	More on Antidepressants Anxiolytics	<i>For Week 12</i> Readings: <ul style="list-style-type: none"> • Julien ch. 11 • M&Q ch. 20 (section on second-generation therapeutics) Assignments: <ul style="list-style-type: none"> • Case Study #4 due Mar 31 • Instructor VT: Antipsychotics • Comments on VT due Apr 3
Week 12 Apr 1-7 Class Apr 4	More on Antidepressants Anxiolytics Antipsychotics	<i>For Week 13</i> Readings: <ul style="list-style-type: none"> • Julien ch. 14 • M&Q ch. 19 (sections on mood stabilizers) Assignments: <ul style="list-style-type: none"> • Case Study #5 due Apr 6 • Instructor VT: Mood Stabilizers • Comments on VT due Apr 10

<p>Week 13 Apr 8-14</p>	<p>Mood Stabilizers</p>	<p><i>For Week 14</i> Readings: <ul style="list-style-type: none"> • Julien ch. 15 • Findling et al. (2014) Assignments: <ul style="list-style-type: none"> • Case Study #6 due Apr 13 • Instructor VT: Medications Commonly Used with Children and Adolescents • Comments on VT due Apr 17 </p>
<p>Week 14 Apr 14-20 Class Apr 18</p>	<p>More on Mood Stabilizers Medications Commonly Used with Children and Adolescents Course Completion</p>	<p>Assignments: <ul style="list-style-type: none"> • Case Study #7 due Apr 19 </p>
<p>Completion</p>		<p>Assignments: <ul style="list-style-type: none"> • Case Study #8 due Apr 26 • Portfolio: Medications and Counseling due May 1 </p>