**NEW MEXICO STATE UNIVERSITY**

**APA Designated Post-Doctoral Education & Training in Clinical Psychopharmacology**

**COURSE OUTLINE**

**Class #15**

**Course #:** RXPP 604

**Official Title**: Clinical Psychopharmacology II

**Topic:** The Treatment of Bipolar Affective & Post-Traumatic Stress Disorders

**Credit Hours**: 3.0

**Continuing Education:** 13.5 CE (Provided by SIAP, Sponsored by APA)

*SIAP is approved by the American Psychological Association*

*to sponsor continuing education for psychologists*

*SIAP maintains responsibility for the program and its content*

**Location:** Online only <http://nmsu.adobeconnect.com/psypharm>

**Class Meeting Dates**: Oct 17 & 18, 2020, 8:00am-6:00pm MDT

**Instructor(s)**: Marlin Hoover, PhD, MSCP, ABPP Prescribing Psychologist

**Required Text:** Sadock, B., Sadock, V., Ruiz, P. (2017). *Kaplan & Sadock’s comprehensive*

*textbook of psychiatry*(10th ed). Wolters Kluwer.

Review: mood stabilizers & antimanics; antidepressants; Alpha and Beta Blockers.

Stahl, S. M.(2017). *Prescriber's guide: Stahl's essential psychopharmacology* (6th ed.). Cambridge*.*

Review: Chapter 13 - Sections 13.3, 13.7, 13.9, & Chapter 17

**Recommended Texts:** Muse, M., Moore, B.A. (2012). *Handbook of Clinical Psychopharmacology**for*

*Psychologists*(1st Ed.). John Wiley & Sons Inc.

Review: Chapter 6, esp. serum monitoring of lithium and valproic acid

Procyshyn, R.M., Beschlibnyk-Butler, K., Jeffiries, J.J. (2019). *Clinical Handbook of Psychotropic Drugs* (23rd Ed.). Hogrefe Publishing.

Review: Mood stabilizers and antimanics; antidepressants; Alpha and BetaBlockers will be reviewed online during class – Subscription to the online version recommended for use during the remaining courses.

**Required Articles:** Bhatt, S., Hillmer, A., Girgenti, M., Rusowicz, A., Kapinos, M., Nabulsi, N.,

Huang, Y., Matuskey, D., Angarita, G., Esterlis, I., Davis, M.,Southwick, S., Friedman, M., Duman, R., Carson, R., Krystal, J., Pietrzak, R., & Cosgrove. (2020). PTSD is associated with neuroimmune suppression: evidence from PET imaging and postmortem transcriptomic studies. *Nature Communications*, *11*(1), 1–11. <https://doi.org/10.1038/s41467-020-15930-5>

Duffy, A., Goodday, S., Keown-Stoneman, C., & Grof, P. (2019). The Emergent

Course of Bipolar Disorder: Observations Over Two Decades From the

Canadian High-Risk Offspring Cohort. *American Journal of Psychiatry*, *176*(9), 720–729. <https://doi.org/10.1176/appi.ajp.2018.18040461>

Merikangas, K., Swendsen, J., Hickie, I., Cui, L., Shou, H., Merikangas, A. Zhang, J., Lamers, F., Crainiceanu, C., Volkow, N., & Zipunnikov, V. (2019). Real-time mobile monitoring of the dynamic associations among motor activity, energy, mood, and sleep in adults with Bipolar Disorder. *JAMA Psychiatry, 76*(2), 190-198. <https://doi.org/10.1001/jamapsychiatry.2018.3546>

Webster, K. D. & Michalowski, S. (2020) Management of Bipolar Disorder and Post-Traumatic Stress in a Patient During and Post Breast Cancer Treatment*. Journal of Women’s Health & Development, 3*(2), 125-130.

**Course Description:** In this RXPP 604 class we begin our study of clinical psychopharmacology through the study of the treatment of bipolar disorder (Day 1) and Post-Traumatic Stress Disorder (Day 2). Objectives of this course are to understand the biochemical mechanism(s) underlying the pharmacological efficacy of antimanic and PTSD treatments; the biochemical, physiological and anatomical bases of adverse effects associated with antimanic and PTSD treatments; different classes of antimanic drugs and treatments and drugs used to aid in the treatment of PTSD; typical antipsychotic medications, atypical antipsychotics, electroconvulsive therapy (ECT), lithium (Li+), anticonvulsants, and other treatments for bipolar disorder; symptom modifying medications and treatments for PTSD; and to be able to effectively prescribe these medications and manage the medical issues that arise from their use.

***This course is congruent with the College of Education's Conceptual Framework in that it provides a general knowledge background, addresses assessment competencies, and integrates content knowledge and professional knowledge***.

**Day Objectives:** Students will be able to:

1. Describe the mechanism of action of five psychotropic medications (e.g. Lithium, Valproate, Lamotrigine, Second Generation Antipsychotics and Benzodiazepines) in treating bipolar disorder.
2. Describe the mechanism of action of the two adjunctive mood stabilizers Gabapentin and Oxcarbazepine.
3. Explain at least two genetic predisposing factors for the development of bipolar disorder.
4. Select the most appropriate psychotropic medications for bipolar disorders considering the effect and the side effect profile of each drug for two patients whose cases will be presented.
5. Accurately evaluate one serum level each for Lithium, Carbamazepine and Depakote to determine the safety of patient’s current regimen of medication.
6. List four factors which contribute to poor response to mood stabilizers in the treatment of bipolar disorder.
7. List three pathological syndromes commonly mistaken for bipolar disorder.
8. Explain the three most important psychotherapeutic goals in assisting patients in managing their bipolar disorder.

**Day 2 Objectives:** Students will be able to:

1. Describe at least two neuroanatomical changes that contribute to the development of PTSD.
2. Explain the role of at least four features of the sympathetic nervous system and the three neuroendocrine (hypothalamic-pituitary-adrenal axis; HPA) components in the development and maintenance of the symptoms of PTSD.
3. Distinguish 1 difference between the negative and positive feedback loop of the HPA axis.
4. Explain of the mechanisms of actions of the at least one Alpha and one Beta Antagonist used in treatment of PTSD.
5. Select the most appropriate psychotropic medications for the treatment of PTSD symptoms in two of the presented cases of individuals experiencing PTSD symptoms.
6. Name two classes of drugs that are not recommended in the treatment of PTSD symptoms.
7. List two common co-morbid conditions with PTSD and explain how treatment of the comorbid conditions may complicate the treatment of PTSD symptoms.
8. Develop one sample treatment plan for a patient, presented as a case example that is comprehensive and is based on the evidence that shows components of treatment that are most effective.
9. List two important factors that distinguish PTSD from other anxiety disorders.

**Homework:** The students will be presented with one or more complex case(s) and will be asked to respond to questions about that case. At times, students will also be expected to read journal assignments; and respond in class or discussion threads (in Canvas).

**Evaluation**: Student participation, preparation, and attendance is observed. There will be a test (multiple choice, short answer or true/false) which, depending on the plan of the Instructor, may be given to students before class. If the test is given to the students before class, then students should come to class with the test completed because the content will be reviewed during the lecture(s). The exam will be graded after it is taken as a closed-book, time limited test at the end of the weekend of didactic training. Case studies presenting patients with dual diagnoses of medical and psychological problems will be distributed. Students will be expected to formulate a comprehensive analysis of the case(s) utilizing clinical judgment, course materials, and any necessary references. Instructors may also elect to include reading (e.g. journal) assignments for discussion and/or written assignments that demonstrate clinical documentation which meets the standard of care for patient care documentation. Additional assignments will be factored into a weighted or alternative point value system leading to the determination of a letter grade using the rubric below. Typically, students have two weeks to complete all assignments. All submissions must be made by 11:59 pm on the day of the announced deadline.

**Standard Grading Assignments Points Possible**

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| *Test (30 questions @ 1pt. each)* | *30* | *pts.* |
| *Case Study Analysis/Vignette* | *60* | *pts.* |
| *Participation/Attendance (live or via*  *AdobeConnect)* | *10* | *pts.* |

**Course grades*:***

*90-100 pts total = “A” 80-89 pts total = “B”*

*70-79 pts total = “C”*

***Students with Disabilities:*** *If you have or believe you have a disability, you may wish to self-identify. You can do so by providing documentation to the Office of Student Accessibility Services (SAS), located at the Corbett Center Student Union, Room 208 (Telephone 575-646-6840, Fax 575-646-5222, E-Mail: sas@nmsu.edu). Appropriate accommodations may then be provided for you. If you have a condition which may affect your ability to exit from the premises in an emergency or which may cause an emergency during class, you are encouraged to discuss this in confidence with the instructor and/or the Director of SAS, Trudy Luken. If you have questions about the Americans with Disabilities Act (ADA), call 575-646-3635. Students should contact the Office of Institutional Equity (575-646- 3635) only if they feel they have been discriminated against in any category.*

***Student complaints:*** *If students have a complaint about a course, they are advised to discuss their concerns directly with the instructor whenever possible. If that does not resolve the problem or if they cannot approach the instructor, students should either access NMSU’s online complaint system at https://dos.nmsu.edu/concerns/ or seek out the department head (bgormley@nmsu.edu) for help resolving the problem. Both of these processes provide opportunities for the department head to know about issues that need attention and for instructors to receive information about student concerns so that they can respond.*

**Further Notice:** *Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act Amendments Act (ADAAA) covers issues relating to disability and accommodations. If a student has questions or needs an accommodation in the classroom (all medical information is treated confidentially), contact:*

Trudy Luken, Director

Student Accessibility Services (SAS) - Corbett Center Student Union, Rm. 208 Phone: (575) 646-6840 E-mail: [sas@nmsu.edu](mailto:sas@nmsu.edu)

Website: <http://sas.nmsu.edu/>

NMSU policy prohibits discrimination on the basis of age, ancestry, color, disability, gender identity, genetic information, national origin, race, religion, retaliation, serious medical condition, sex, sexual orientation, spousal affiliation and protected veterans’ status. Furthermore, Title IX prohibits sex discrimination to include sexual misconduct: sexual violence (sexual assault, rape), sexual harassment and retaliation.

For more information on discrimination issues, Title IX, Campus SaVE Act, NMSU Policy Chapter 3.25, NMSU's complaint process, or to file a complaint contact:

Lauri Millot, Director and Title IX Coordinator

Agustin Diaz, Associate Director, Title IX Deputy Coordinator

Office of Institutional Equity (OIE) - O'Loughlin House, 1130 University Avenue Phone: (575) 646-3635 E-mail: [equity@nmsu.edu](mailto:equity@nmsu.edu)

Website: <http://eeo.nmsu.edu/>

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| Other NMSU Resources: |  |
| NMSU Police Department: | (575) 646-3311 [www.nmsupolice.com](http://www.nmsupolice.com/) |
| NMSU Police Victim Services: | (575) 646-3424 |
| NMSU Counseling Center: | (575) 646-2731 |
| NMSU Dean of Students: | (575) 646-1722 |
| For Any On-campus Emergencies: | 911 |

**The Instructor of Record reserved the right to make announced changed in the syllabus; as feasible, changes will be made with student input.**