## **NEW MEXICO STATE UNIVERSITY**

**Master’s Degree Program in Clinical Psychopharmacology Fall Semester 2014 to Fall Semester 2016**

**COURSE OUTLINE**

**Course # & Title**: C EP 801 Class #1 Introduction to Psychopharmacology for

Psychologists I *(Program Overview, Integrating Psychotherapy*

*and Pharmacotherapy, Introduction to Case History Construction and Analysis and an Introduction to Gross Anatomy and Physiology)*

**Credit Hours**: 3.0

## Location: NMSU; 1220 Stewart Street; Las Cruces, NM O’Donnell Hall Room 027

**Class Meeting Dates**: September 27-28, 2014; CLASS #1

8:00am-5:00pm

## Class #1

Instructor(s): Jo Velasquez, Ph.D., M.S.C.P, BCIA-EEG Marlin Hoover, Ph.D., M.S.C.P., ABPP-Clinical Elaine LeVine, Ph.D., ABMP

Mai Oushy, M.D., M.P.H.

## **Readings:**

Julien, 2011), Ch 20 Integration of Psychotherapy and Psychopharmacology, pp. 673-692.

Muse (2012) Ch 1, 2

Hole’s Human Anatomy and Physiology

Chapter 1 Introduction to Human Anatomy and Physiology, 13th Ed. Chapter 6 Integumentary (6.1, 6.2)

Chapter 15 Cardiovascular System (15.1, 15.2, 15.3)

Chapter 17 Digestive System (17.1, 17.7, 17.8)

Chapter 19 Respiratory System (19.1, 19.2, 19.3)

Chapter 20 Urinary System (20.1, 20.2, 20.3)

Both Dr. LeVine and Dr. Velasquez will provide handouts and or web based materials for reference and additional readings. Dr. Hoover will provide a review of competencies and skills required of the prescribing psychologist referencing both Julien’s and Muse and Moore’s texts. Dr. Oushy will be introducing gross human anatomy and physiology based on the Hole’s text. Please keep in mind that a detailed study of the material is not required at this time. Dr. Oushy will offer a brief review of the systems named above as well as highlight their relevance to the prescribing psychologist.

Course Description: C EP 801-Class #1 The training director will provide an overview of the 25-month clinical psychopharmacology program at NMSU. The program overview will include program expectations, requirements and a look at resources that support the successful completion of the program. The program manuals will be highlighted and their contents reviewed. We will also look at New Mexico Law for Prescriptive Authority and discuss documentation requirements for the program as well as document requirements of the New Board of Psychologist Examiners. Dr. Hoover will provide an introduction of the required competencies for a prescribing psychologist as defined by the APA PEP examination. He will also detail the skill set necessary for a successful and competent prescribing psychologist in New Mexico including a review of point-of-service care, evidenced based practice behaviors as well as introduce various resources to assist Post-Doc’s in the learning process. Dr. Elaine LeVine will present 1-2 clinical cases common for a RxP psychologists in New Mexico. Finally, Dr. Mai Oushy will provide an introduction to gross anatomy and the relevance of overall health of a patient to an RxP psychologist in a primary and/or specialty care medical setting. By the end of the course, psychologists will have completed a detailed review of the clinical psychopharmacology program at NMSU. In addition, they will have received a detailed review of the competencies examined through the APA-PEP Examination as well as learned about the skill set required of a practicing prescribing psychologist in a primary care setting in the State of New Mexico. Finally, psychologists will have received a six-hour introduction to human anatomy and physiology emphasizing the importance and relevance of adding formal medical training to the practice of clinical psychology. Formal medical training is expected to enhance the post-doctoral psychopharmacology student’s ability to competently and safely prescribe or un-prescribe psychotropic medication.

This is the first of many classes and courses included in the 25-month program that will highlight systems, organs and tissues of the body and emphasize anatomical features and physiological processes that must be well understood by a properly trained psychologist licensed to prescribe psychotropic medication. The lecture series focuses on basic medical terminology and homeostatic mechanisms. In addition, prescribing psychologists will present complex cases with both psychological and physical manifestations to introduce the student to the broad knowledge base required of a prescribing psychologist. ***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.***

**Objectives:** Students will:

1. Be introduced to the NMSU system and the psychopharmacology program details, requirements.
2. Be introduced to New Mexico Licensing Law for RxP.
3. Be introduced to competencies and expectations for prescribing psychologists.
4. Be introduced to the complexity of issues involved in determining appropriate psychotropic intervention.
5. Begin to learn how medical status of a patient should be considered in the use of medications.
6. Begin to learn how side effects of certain medications can actually assist in both psychological and medical symptomology.
7. Be able to communicate using appropriate medical terminology in the description of the human body
8. Increase their knowledge base regarding physiology and gross anatomy across various systems.
9. Be able to explicate homeostatic mechanisms involved in each system.

Evaluation: There will be a test (multiple choice, short answer or true/false) which will be given at the end of each weekend. The answers will be reviewed in class. Students’ experiential case studies will be graded on pass/fail with the expectation for a demonstration of a high level competence of the biopsychosocial model of care. The grades on the standardized tests will constitute two-thirds of the grade and the grade on the case studies one-third of the grade for each course.

***Grading***

***Assignments Points Possible***

***Tests (5 @ 12 pts ea, 90% = 12 pts, 80% =11 pts, 70% = 10 pts) 60 pts.***

***Experiential case studies (30 pts) 30 pts.***

***Course grades-***

***70 pts total = “A” course grade 60 pts total = “B” course grade 50 pts total = “C” course grade***

***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 for Services for Students with Disabilities, located at Garcia Annex (telephone:575-646-6840). 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 Disabled Student Programs. If you have questions about the Americans with Disabilities Act (ADA), call 575-646-3635.***

**NEW MEXICO STATE UNIVERSITY**

**Master’s Degree Program in Clinical Psychopharmacology COURSE OUTLINE**

**Course, Class # & Title**: CEP 801 Class #2 Introduction to Psychopharmacology for

Psychologists I (***Introduction to Gross Neuroanatomy and Chemical Anatomy of the Nervous System)***

**Credit Hours**: 3.0

## Location: NMSU; 1220 Stewart Street; Las Cruces, NM O’Donnell Hall Room 027

**Class Meeting Dates**: October 18-19, 2014; CLASS #2

**Instructor(s)**: Tony Kreuch, Psy.D., ABPN

## **Readings:**

* Stahl, (2008), Essential Psychopharmacology, 3rd ed., Chapter 7, Circuits in Psychopharmacology, pgs 195-245.
* Stern & Herman, (2003), Psychiatry Update & Board Preparation, 2nd ed., Thalamic and Limbic Circuitry, pgs 265-267.
* McCance & Huether, (2009). Pathophysiology, Ch. 14 pgs. 416-434
* Shier, Butler & Lewis (2007). Hole’s Human Anatomy & Physiology, Chapter 11, 13th ed., pgs. 390-437.
* Mammalian Brain Dissection Reference Guide (given out in class)
* *Optional Text: Blumenfeld (2010). Neuroanatomy Through Clinical Cases, 2nd ed.*

Course Description: This part of CEP 801 includes a study of gross and microanatomy of the brain. At the end of the course students will have gained an overview of the topography and structural organization of the brain and be able to identify major features of the brain and relate structure to functional and chemical relationships including major neurotransmitter pathways and interactions with psychopharmacological agents. Special focus will be given to the structural aspects of the cerebral cortex and higher order cerebral functions, subcortical structures, vascular supply, basal ganglia, limbic system, thalamus and hypothalamus. Students will also have successfully completed dissection of a sheep brain with identification of major structures and comparison to the same structures in the human brain. *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.*

**Objectives:** Students will:

1. Learn to identify the major structures of the brain.
2. Learn the central functions of the major brain structures.
3. Gain an understanding of how these brain structures interact.
4. Learn the major neurotransmitter pathways in the brain and associated structures.
5. Be able to identify the frontal cortex, hippocampus, amygdala, basal ganglia, thalamus and hypothalamus, brainstem and relevant nuclei (e.g. – raphe, nucleus accumbens, locus coeruleus, nucleus basalis)
6. Be able to compare the various areas of the sheep brain (cerebrum, brain stem, and cerebellum) to the human brain.
7. Be able to trace the blood supply of the brain.
8. Be able to trace the ventricles.

Evaluation: There will be a test (multiple choice, short answer or true/false) which will be given at the end of each weekend. The answers will be reviewed in class. Students’ experiential case studies will be graded on pass/fail with the expectation for a demonstration of a high level competence of the biopsychosocial model of care. The grades on the standardized tests will constitute two-thirds of the grade and the grade on the case studies one-third of the grade for each course.

***Grading***

***Assignments Points Possible***

***Tests (5 @ 12 pts ea, 90% = 12 pts, 80% =11 pts, 70% = 10 pts) 60 pts.***

***Experiential case studies (30 pts) 30 pts.***

***Course grades-***

***70 pts total = “A” course grade 60 pts total = “B” course grade 50 pts total = “C” course grade***

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**NEW MEXICO STATE UNIVERSITY**

**Master’s Degree Program in Clinical Psychopharmacology**

**COURSE OUTLINE**

**Course # & Title**: CEP 801 Class #3 Introduction to Psychopharmacology for

Psychologists I (*Introduction to Neuroanatomy and Chemical Anatomy of the Nervous System)*

**Credit Hours**: 3.0

**Location:** Live and online

**Class Meeting Dates**: November 15-16, 2014; Class #3

**Instructor(s)**: Mitchell Simson, M.D.

## **Readings:**

* Goldberg, (2007), Clinical Neuroanatomy Made Ridiculously Simple, pgs 1 – 97
* Julien (2011) A Primer of Drug Action, pgs. 60-89
* S tahl (2008) S tahl’s Essential P s ychopharm acolo gy: Neu roscientific Basis and Practical Applications, Ch 1-5 pgs. 1-123
* Muse and Moore (2012) Handbook of Clinical Psychopharmacology for Psychologists pp. 45-106.

**Course Description**: Today’s class completes the overview of gross, micro and chemical anatomy of the nervous system. The structural anatomy of the cerebral cortex, sub cortex, brainstem, spinal cord and autonomic nervous system will also be discussed in regards to the ways in which these structures interact with psychopharmacological agents. Special focus will be given to the structural aspects of the frontal cortex, hippocampus, basal ganglia, thalamus and hypothalamus with particular attention to the locus coerulus, dorsal raphe nuclei and the nucleus accumbens. The function of neurotransmitter systems will be categorized according to the pharmacological agents which affect them and according to the ways in which they interact with a variety of anatomical pathways. ***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.***

**Objectives:** Students will:

1. Be able to locate and trace the brain stem and examine the spinal column.
2. Be able to locate the cranial nerves and their attachment location.
3. Be able to identify the anatomical features and trace the neuronal pathways associated with anxiety disorders, depression, cognitive decline, substance abuse and schizophrenia.
4. Develop extensive knowledge of normal neuronal functioning.
5. Learn the localization and functions of different neurotransmitter systems in the central and peripheral nervous systems.
6. Learn neuromorphology on the cellular and central nervous system levels.

Evaluation: There will be a test (multiple choice, short answer or true/false) which will be given at the end of each class. The answers will be reviewed in class. Students’ experiential case studies will be graded on pass/fail with the expectation for a demonstration of a high level competence of the biopsychosocial model of care. The grades on the standardized tests will constitute two-thirds of the grade and the grade on the case studies one-third of the grade for each course.

***Grading***

***Assignments Points Possible***

***Tests (5 @ 12 pts ea, 90% = 12 pts, 80% =11 pts, 70% = 10 pts) 60 pts.***

***Experiential case studies (30 pts) 30 pts.***

***Course grades-***

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**NEW MEXICO STATE UNIVERSITY**

**Master’s Degree Program in Clinical Psychopharmacology COURSE OUTLINE**

Course # & Title: C EP 802 Class #4 Introduction to Chemistry and Biochemistry for the Prescribing Psychologist

**Credit Hours**: 3.0

**Location:** Live and online

**Class Meeting Dates**: December 6-7 2014; CLASS #4

Instructor(s): Kevin McGuinness, Ph.D. M.S.

Required Text(s): Goldberg, S, (2010), Biochemistry, pgs 1 - 50

**Readings:** Chemical Basis of Life p 50-74; review Cells p 75-113;

Course Description: CEP 802 provides students with a review of those aspects of chemistry, organic chemistry and biochemistry which are needed for the study of pharmacology. In general chemistry, the concepts of chemical compounds and bonds, and atomic theory will be reviewed. In organic chemistry, the concepts of organic compounds, bonds and valences will be reviewed. In biochemistry, biomolecules of proteins, carbohydrates, nucleic acids and lipids, as well as chromosomal theory and the genetic code, enzymes and metabolism will be covered. This course will review and update student’s understanding of critical principles in biochemistry, including: chemical compounds and bonds (covalent, ionic, hydrophilic/hydrophobic, hydrogen bonds); atomic theory; organic compounds, bonds and valences; biomolecules (proteins, carbohydrates, nucleic acids and lipids); enzymes and metabolism; transport processes in neurons; and biochemical mechanisms of neuronal signaling.

**Objectives:** Students will become familiar with -

1. Atomic theory
2. Types of chemical bonds (covalent, ionic, hydrophilic/hydrophobic, hydrogen bonds)
3. The nature of organic compounds, bonds and valences
4. The formulation of biomolecules (proteins, carbohydrates, nucleic acids and lipids)
5. The formulation of enzymes and metabolism

Evaluation: There will be a test (multiple choice, short answer or true/false) which will be given at the end of each class. The answers will be reviewed in class. Students’ experiential case studies will be graded on pass/fail with the expectation for a demonstration of a high level competence of the biopsychosocial model of care. The grades on the standardized tests will constitute two-thirds of the grade and the grade on the case studies one-third of the grade for each course.

***Grading***

***Assignments Points Possible***

***Tests (5 @ 12 pts ea, 90% = 12 pts, 80% =11 pts, 70% = 10 pts) 60 pts.***

***Experiential case studies (30 pts) 30 pts.***

***Course grades-***

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**NEW MEXICO STATE UNIVERSITY**

**Master’s Degree Program in Clinical Psychopharmacology COURSE OUTLINE**

**Course # & Title**: CEP 802 Class#5 Overview of Human Physiology and

Neurophysiology and Related Drug Groups for Treatment

**Credit Hours**: 3.0

**Location:** O’Donnell Hall Room 027

**Class Meeting Dates**: January 24-25, 2015; CLASS #5

**Instructor(s)**: Mitch Simson, MD

**Class Meeting Times**: 8:00 AM – 5:00 PM, 8:00AM-4:00PM

Required Text(s): Shier D., Butler J., and Lewis R., Hole’s Human Anatom y &

Physiology, 12th Ed. McGraw Hill (2010).

Arcangelo, V. & Peterson, A. (2011). Pharmacotherapeutics for Advanced Practice: A Practical Approach, 3rd Ed.

J. Olson 2011 Pharmacology Made Ridiculously Simple

## Readings:

Course Description: Today’s class will review the major therapeutic drug groups used to treat human disease. Topics covered will include introduction to pharmacodynamics and pharmacokinetics, major drugs for skin, ear, eye, cardiovascular, respiratory, neurological, immunological, endocrine, OB/GYN, GI and GU disorders. Special issues related to medications in the elderly and in pediatric populations as well as integrative health care and health promotion will also be addressed

***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.***

**Objectives:** Students will learn:

## Overview of the major drug groups used to treat human disease

1. To use case based learning to understand how drugs work in the human body to treat disease

Evaluation: There will be a test (multiple choice, short answer or true/false) which will be given at the end of each weekend. The answers will be reviewed in class. Students’ experiential case studies will be graded on pass/fail with the expectation for a demonstration of a high level competence of the biopsychosocial model of care. The grades on the standardized tests will

constitute two-thirds of the grade and the grade on the case studies one-third of the grade for each course.

***Grading***

***Assignments Points Possible***

***Tests (5 @ 12 pts ea, 90% = 12 pts, 80% =11 pts, 70% = 10 pts) 60 pts.***

***Experiential case studies (30 pts) 30 pts.***

***Course grades-***

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**NEW MEXICO STATE UNIVERSITY**

**Master’s Degree Program in Clinical Psychopharmacology COURSE OUTLINE**

**Course # & Title:** C EP 803 Class #6 Principles of Pharmacology I

**Credit Hours**: 3.0

**Location:** Live and online

**Class Meeting Dates**: February 21-22, 2015; CLASS #6

**Instructor(s)**: Robert Julien, Ph.D.

**Readings:**

* Olsen, (2011), pgs 1-13
* Julien, (2008), pgs 1-59
* McGrath & Moore, (2010), pgs 133-150 on drug research
* Stern & Herman, (2003), pgs 375-395
* Arcangelo, V. & Peterson, A. (2011). Pharmacotherapeutics for Advanced Practice: A Practical Approach, 3rd Ed. Ch. 1-2

**Course Description** CEP 803 covers the principles of drug action that sets the stage for all further discussion of drug action and drug use in the treatment of mental disorders. The mechanisms of pharmacokinetics and pharmacodynamics determine the properties that characterize all drugs, such as route of administration, dosage and dosing interval. Objectives include understanding the central role in drug metabolism of the cytochrome P450 enzyme system; how pH and pKa determine the distribution of drugs across biological membranes; drug: drug interactions at the pharmacokinetic level, and drug excretion. ***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.***

**Objectives:** Students will:

1. Learn the principles of pharmacokinetics: absorption, distribution, metabolism, and excretions as they apply to understanding how psychotropic medications work.
2. Learn the basic principles of pharmacodynamics as they apply to understanding how psychotropic medications work.
3. Know the central role in drug metabolism of the cytochrome P450 enzyme system as they apply to understanding how psychotropic medications work.
4. Understand how pH and pKa determine the distribution of drugs across biological membranes as they apply to understanding how psychotropic medications work.

Evaluation: There will be a test (multiple choice, short answer or true/false) which will be given at the end of each day.

***Grading***

***Assignments Points Possible***

***Tests (5 @ 12 pts ea, 90% = 12 pts, 80% =11 pts, 70% = 10 pts) 60 pts.***

***Experiential case studies (30 pts) 30 pts.***

***Course grades-***

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**SIAP/NEW MEXICO STATE UNIVERSITY**

**Master’s Degree Program in Clinical Psychopharmacology COURSE OUTLINE**

**Course # & Title:** CEP 803 Class #7 Principles of Pharmacology II

**Credit Hours**: 3.0

**Location:** Live and online

**Class Meeting Dates**: March 14-15, 2015; CLASS #7

**Instructor(s)**: Robert Julien, Ph.D.

## **Readings:**

* Olsen, (2011), pgs 1-13
* Julien, (2008), pgs 1-59
* McGrath & Moore, (2010), pgs 133-150 on drug research
* Stern & Herman, (2003), pgs 375-395
* Arcangelo & Peterson (2011) pp. 30-49

**Course Description** This advanced section of CEP 803 focuses upon pharmacodynamics, the study of the underlying mechanisms by which drugs exert their effects on the body, including drug effects on physiological systems as well as the molecular mechanisms of drug action. This study revolves around the mechanisms of drug: receptor interactions. Objectives include understanding the physiological and biochemical mechanisms of drug action; being able to use basic principles, including drug half-lives, to plan and revise dosages and dosing schedules and dose-response relationships. ***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.***

**Objectives:** Students will:

1. Understand the physiological and biochemical mechanisms of drug action.
2. Be able to use basic principles, including drug half-lives, to plan and revise dosages and dosing schedules.

Evaluation: There will be a test (multiple choice, short answer or true/false) which will be given at the end of the class. The answers will be reviewed in class.

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***class, you are encouraged to discuss this in confidence with the instructor and/or the director of Disabled Student Programs. If you have questions about the Americans with Disabilities Act (ADA), call 646-3635.***

Course # & Title: C EP 803 and 806 Class#8 Physical Assessment – Introduction to

the Basic Physical Assessment and Laboratory Assessment

**Credit Hours**: 3.0 Credit Hours

**Location:** Live and online

**Class Meeting Date**: April 18-19 2015; CLASS #8

**Instructor(s)**: Mitchell Simson, M.D

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## Required Text(s):

 Bickley, L.S., (2009), pgs 65-66, 102-281 and video

 [McCance, K.L., &](http://www.amazon.com/s/ref%3Dntt_athr_dp_sr_1?_encoding=UTF8&amp;sort=relevancerank&amp;search-alias=books&amp;field-author=Kathryn%20L.%20McCance%20RN%20%20PhD) Huether, S.E., (2009), pgs 43-93, 1644-1680 Watch: Video demonstration of a physical exam

Program Overview: The program will begin with an orientation and overview of the didactic and practicum components required for graduation. Throughout the ten didactic courses that make up the Master’s Degree Program students will have opportunities to apply principles learned to clinical cases through experiential assignments that increase in complexity as the students’ knowledge of psychopharmacology and the biopsychosocial model becomes more sophisticated. Some of these experiential assignments will be based upon students’ existing patient populations. Others will involve role-playing activities in classes. Still others will involve the observation of actual clinical protocols. Students will be given written exercises based upon these experiences that will be compiled into a clinical notebook of clinical based studies. These assignments will be averaged with the students’ scores on objective tests to determine their grades for each class.

Course Description This class focuses on overall physical assessment. Methods of medical history taking including documentation of pertinent medical history, medications and drug allergies, chief medical complaint, determination of vital signs and basics of the physical exam will be covered. Students will then focus upon a physical examination of the skin.

Equipment:

Stethoscope

Blood Pressure Cuff Reflex Hammer Tuning Fork

Other equipment needed to conduct physical examinations will be provided

## Objectives:

Students will:

1. Learn the basic philosophy and physical techniques of conducting physical examinations.
2. Exhibit proficiency in the following:
   1. establishing appropriate doctor-patient relationships in conducting physical exams and demonstrating the respect for patient privacy
   2. using standard precautions in infection control
   3. taking and recording temperature, height, weight, and blood pressures
   4. taking patient and family history
3. Develop basic familiarity with techniques (such as inspection, palpation, percussion, auscultation) used in conducting physical examinations (proficiency in examining different systems will be developed in later courses)

Evaluation: There will be a test (multiple choice, short answer or true/false) which will be given to students before class. Students should come to class with the test completed and the answers will be reviewed in class. Case studies will be presented that involve dual diagnoses medical and psychological problems. Students will be expected to write up one case in a SOAP format. Students’ experiential case studies will be graded on pass/fail with the expectation for a demonstration of a high level competence of the biopsychosocial model of care. The grades on the standardized tests will constitute two-thirds of the grade and the grade on the case studies one-third of the grade for each course.

***Grading***

***Assignments Points Possible***

***Tests (5 @ 12 pts ea, 90% = 12 pts, 80% =11 pts, 70% = 10 pts) 60 pts.***

***Experiential case studies (30 pts) 30 pts.***

***Course grades-***

***70 pts total = “A” course grade 60 pts total = “B” course grade 50 pts total = “C” course grade***

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**SIAP/NEW MEXICO STATE UNIVERSITY**

**Master’s Degree Program in Clinical Psychopharmacology COURSE OUTLINE**

Course # & Title: CEP 806 Class #9- Pathophysiology and Physical Assessment of

the Immune System

**Credit Hours**: 3.0 Credit Hours

**Location:** Live and online

**Class Meeting Date**: May 9-10, 2015; CLASS #9

**Instructor(s)**: Mai Oushy, MD

Marlin Hoover, Ph.D., M.S.C.P., ABPP-Clinical

## Required Text(s):

* [McCance, K.L., &](http://www.amazon.com/s/ref%3Dntt_athr_dp_sr_1?_encoding=UTF8&amp;sort=relevancerank&amp;search-alias=books&amp;field-author=Kathryn%20L.%20McCance%20RN%20%20PhD) Huether, S.E., (2009) pgs 183-289, basics Pgs 290-430, read for familiarity
* Olsen, (2011), pgs 133-142, anti-inflammatory drugs Pgs 97-121, anti-infection

Pgs 121-133, anti-cancer

Program Overview: The program will begin with an orientation and overview of the didactic and practicum components required for graduation. Throughout the ten didactic courses that make up the Master’s Degree Program students will have opportunities to apply principles learned to clinical cases through experiential assignments that increase in complexity as the students’ knowledge of psychopharmacology and the biopsychosocial model becomes more sophisticated. Some of these experiential assignments will be based upon students’ existing patient populations. Others will involve role-playing activities in classes. Still others will involve the observation of actual clinical protocols. Students will be given written exercises based upon these experiences that will be compiled into a clinical notebook of clinical based studies. These assignments will be averaged with the students’ scores on objective tests to determine their grades for each class.

Course Description: The physical assessment and pathophysiology of the immune system are studied in depth. Immune function and psychoimmunology are reviewed.

Stethoscope

Blood Pressure Cuff

**Objectives:** Students will:

1. Describe the pathophysiological mechanisms and relevant assessment findings in the immune system.
2. Discuss the pathophysiological basis of common abnormal assessment findings in the immune system.
3. Interpret assessment findings for the immune system logically based on an understanding of pathophysiological mechanisms.
4. Learn the most common laboratory tests which indicate normal and abnormal immune functioning.
5. Apply analytic reasoning and problem solving to a variety of selected clinical case situations of the immune system.
6. Interpret normal from abnormal in both anticipated and actual findings in the comprehensive health assessment of the immune system.
7. Synthesize assessment findings of the immune system into diagnoses using a deliberate and systematic process of data collection and analysis.
8. Explain how symptoms of allergies as well as medications to treat allergies can affect a patient’s overall psychological functioning.
9. Describe the etiology of a number of autoimmune illnesses, in particular thyroid disease, pituitary disease, and certain pain states.
10. Describe the pathophysiological mechanisms and relevant assessment findings in the immune system.
11. Discuss the pathophysiological basis of common abnormal assessment findings in infection.
12. Interpret assessment findings indicating infection logically based on an understanding of pathophysiological mechanisms.
13. Learn the most common laboratory tests which indicate infection.
14. Apply analytic reasoning and problem solving to a variety of selected clinical case situations of infection.
15. Interpret normal from abnormal in both anticipated and actual findings in the comprehensive health assessment suggesting infection.
16. Explain how symptoms of allergies as well as medications to treat allergies can affect a patient’s overall psychological functioning.
17. Demonstrate critical thinking and use of research findings in the analysis of a comprehensive health assessment of the immune system and infection status.

Evaluation: There will be a test (multiple choice, short answer or true/false) which will be given to students before class. Students should come to class with the test completed and the answers will be reviewed in class. Case studies will be presented that involve dual diagnoses medical and psychological problems. Students will be expected to write up one case in a 50AP format. Students’ experiential case studies will be graded on pass/fail with the expectation for a demonstration of a high level competence of the biopsychosocial model of care. The grades on

the standardized tests will constitute two-thirds of the grade and the grade on the case studies one-third of the grade for each course.

***Grading***

***Assignments Points Possible***

***Tests (5 @ 12 pts ea, 90% = 12 pts, 80% =11 pts, 70% = 10 pts) 60 pts.***

***Experiential case studies (30 pts) 30 pts.***

***Course grades-***

***70 pts total = “A” course grade 60 pts total = “B” course grade 50 pts total = “C” course grade***

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**NEW MEXICO STATE UNIVERSITY**

**Master’s Degree Program in Clinical Psychopharmacology COURSE OUTLINE**

**Pathophysiology Weekend #3**

Course # & Title: CEP 806 – (cont.) Class #10 Pathophysiology and Physiological

Assessment of the Cardiovascular and Lymphatic Systems

**Credit Hours**: 3.0 Credit Hours

**Location:** Live and online

**Class Meeting Date**: June 13-14, 2015; CLASS #10

**Instructor(s)**: Mai Oushy, MD

Marlin Hoover, Ph.D., M.S.C.P., ABPP-Clinical

**Class Meeting Times**: 8:00 AM – 5:00 PM

## Required Text(s):

 [McCance &](http://www.amazon.com/s/ref%3Dntt_athr_dp_sr_1?_encoding=UTF8&amp;sort=relevancerank&amp;search-alias=books&amp;field-author=Kathryn%20L.%20McCance%20RN%20%20PhD) Huether, (2009), pgs 989-1061; 1142-1202

 Bickley, (2009), pgs 323-387; 471-503

* Stern, T. & Herman, J., (2003), pgs 309-313, strokes
* Olsen, (2011), pgs 57-85, cardiovascular drugs

Program Overview: The program will begin with an orientation and overview of the didactic and practicum components required for graduation. Throughout the ten didactic courses that make up the Master’s Degree Program students will have opportunities to apply principles learned to clinical cases through experiential assignments that increase in complexity as the students’ knowledge of psychopharmacology and the biopsychosocial model becomes more sophisticated. Some of these experiential assignments will be based upon students’ existing patient populations. Others will involve role-playing activities in classes. Still others will involve the observation of actual clinical protocols. Students will be given written exercises based upon these experiences that will be compiled into a clinical notebook of clinical based studies. These assignments will be averaged with the students’ scores on objective tests to determine their grades for each class.

Course Description Many psychopharmacological agents have significant effects on the cardiovascular system. The prescribing psychologist must be very familiar with the normal physiology of the cardiovascular system and how its function is affected by drugs. The student will become familiar with the normal and pathological electrocardiogram.

Physical assessment and pathophysiology of the cardiovascular system is studied in depth: structure and function of the heart and major blood vessels; innervation of the heart and vessels; electrocardiogram; components of blood; lymphatics; and physical assessment of cardiac function.

Equipment:

Stethoscope Otoscope

Blood Pressure Cuff

Other equipment needed to conduct physical examinations

**Objectives:** Students will:

1. Describe the pathophysiological mechanisms and relevant assessment findings associated with congestive heart failure.
2. Will describe the pathophysiological mechanisms and relevant assessment findings of cardiovascular events.
3. Describe the pathophysiological mechanisms and relevant assessment findings indicative of stroke.
4. Describe the pathophysiological mechanisms and relevant assessment findings indicative of atherosclerosis.
5. Describe the pathophysiological mechanisms and relevant assessment findings indicative of thalassemia.
6. Describe the pathophysiological mechanisms and relevant assessment findings indicative of hemophilia.
7. Describe the pathophysiological mechanisms and relevant assessment findings indicative of leukemia.
8. Describe the pathophysiological mechanisms and relevant assessment findings indicative of thrombocytopenia.
9. Describe the pathophysiological mechanisms and relevant assessment findings indicative of hypertension and hypotension.
10. Describe what an EKG measures.
11. Identify the various “P” “QRS” and “T” waves of an EKG.
12. List common psychotropic medications that can interfere with the normal waves of an EKG and can explain the significance of these abnormal waves.

Evaluation: There will be a test (multiple choice, short answer or true/false) which will be given at the end of each class. The answers will be reviewed in class. Students’ experiential case studies will be graded on pass/fail with the expectation for a demonstration of a high level competence of the biopsychosocial model of care. The grades on the standardized tests will constitute two-thirds of the grade and the grade on the case studies one-third of the grade for each course.

***Grading***

***Assignments Points Possible***

***Tests (5 @ 12 pts ea, 90% = 12 pts, 80% =11 pts, 70% = 10 pts) 60 pts.***

***Experiential case studies (30 pts) 30 pts.***

***Course grades-***

***70 pts total = “A” course grade 60 pts total = “B” course grade 50 pts total = “C” course grade***

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**NEW MEXICO STATE UNIVERSITY**

**Master’s Degree Program in Clinical Psychopharmacology COURSE OUTLINE**

**Pathophysiology Weekend #4**

Course # & Title: C EP 807 Class #11 Pathophysiology and Physiological

assessment of the Pulmonary System

**Credit Hours**: 3.0 Credit Hours

**Location:** Live and online

**Class Meeting Date**: July18-19, 2015; Class#11

**Instructor(s):** Mai Oushy, M.D.

Marlin Hoover, Ph.D., M.S.C.P., ABPP-Clinical

## Required Text(s):

 Bickley, (2009), pgs 282-322

 [McCance &](http://www.amazon.com/s/ref%3Dntt_athr_dp_sr_1?_encoding=UTF8&amp;sort=relevancerank&amp;search-alias=books&amp;field-author=Kathryn%20L.%20McCance%20RN%20%20PhD) Huether, (2009), pgs 1260-1308

* Pagana & Pagana: See the lab tests of pulmonary function on pp 1206-1207
* Olsen, (2011), pgs 85-91, drugs for treating respiratory disorders

Program Overview: The program will begin with an orientation and overview of the didactic and practicum components required for graduation. Throughout the ten didactic courses that make up the Master’s Degree Program students will have opportunities to apply principles learned to clinical cases through experiential assignments that increase in complexity as the students’ knowledge of psychopharmacology and the biopsychosocial model becomes more sophisticated. Some of these experiential assignments will be based upon students’ existing patient populations. Others will involve role-playing activities in classes. Still others will involve the observation of actual clinical protocols. Students will be given written exercises based upon these experiences that will be compiled into a clinical notebook of clinical based studies. These assignments will be averaged with the students’ scores on objective tests to determine their grades for each class.

Course Description: This course continues with an in-depth study of the chest and pulmonary system: pulmonary function and assessment; respiratory exchange and respiratory involvement in acid: base regulation, disorders of respiratory function. The physical examination and pathophysiology of the chest and pulmonary system and its relationship to the cardiac system is also studied. Students will learn pulmonary functioning and assessment with particular emphasis

on respiratory exchange and respiratory involvement in acid-based regulation. Disorders and treatment of respiratory functioning will also be studied.

## Objectives:

Students will:

1. Describe the pathophysiological mechanisms and relevant assessment findings in the pulmonary system.
2. Describe the symptoms and treatments of COPD.
3. Describe the symptoms and treatments for asthma.
4. Describe the symptoms and treatments for congenital lung diseases, such as cystic fibrosis, and respiratory illnesses in children, such as Sudden Infant Death Syndrome.
5. Explain the signs and symptoms of Cheyne-Stokes respiration.
6. Explain the signs and symptoms of Atelectasis.
7. Explain the signs and symptoms of Pleurisy.
8. Explain the signs and symptoms of Emphysema.
9. Explain the signs and symptoms of Tuberculosis.
10. Explain the signs and symptoms of Cor pulmonale.
11. Describe the various blood tests that are indicative of a low oxygen level.
12. Describe the pathway of oxygenated and de oxygenated blood throughout the body.
13. Synthesize assessment findings of pulmonary system into diagnoses using a deliberate and systematic process of data collection and analysis.
14. Demonstrate critical thinking and use of research findings in the analysis of a comprehensive health assessment of the pulmonary and circulatory systems as the basis for advanced therapeutic practice interventions.

Evaluation: There will be a test (multiple choice, short answer or true/false) which will be given at the end of each class. The answers will be reviewed in class. Students’ experiential case studies will be graded on pass/fail with the expectation for a demonstration of a high level competence of the biopsychosocial model of care. The grades on the standardized tests will constitute two-thirds of the grade and the grade on the case studies one-third of the grade for each course.

***Grading***

***Assignments Points Possible***

***Tests (5 @ 12 pts ea, 90% = 12 pts, 80% =11 pts, 70% = 10 pts) 60 pts.***

***Experiential case studies (30 pts) 30 pts.***

***Course grades-***

***70 pts total = “A” course grade 60 pts total = “B” course grade 50 pts total = “C” course grade***

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***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 Disabled Student Programs. If you have questions about the Americans with Disabilities Act (ADA), call 646-3635.***

Course # & Title: C EP 807 Class #12 Neurological Assessment and Examination

**Credit Hours**: 3.0 Credit Hours

**Location:** Live and online

**Class Meeting Date**: August 15-16, 2015; CLASS#12

**Instructor(s):** Mitchell Simson MD

Marlin Hoover, Ph.D., M.S.C.P., ABPP-Clinical

## Required Text(s):

 Bickley, (2010), pgs 665-733

* Stern & Herman, (2003), pgs 275-294, Neuropsychiatric dysfunction

Pgs 223-317, Movement disorders

* McCance & Huether, (2009), pgs 525-624, Disease states, neurological

Pgs 1568-1617, Muscular, skeletal

Program Overview: The program will begin with an orientation and overview of the didactic and practicum components required for graduation. Throughout the ten didactic courses that make up the Master’s Degree Program students will have opportunities to apply principles learned to clinical cases through experiential assignments that increase in complexity as the students’ knowledge of psychopharmacology and the biopsychosocial model becomes more sophisticated. Some of these experiential assignments will be based upon students’ existing patient populations. Others will involve role-playing activities in classes. Still others will involve the observation of actual clinical protocols. Students will be given written exercises based upon these experiences that will be compiled into a clinical notebook of clinical based studies. These assignments will be averaged with the students’ scores on objective tests to determine their grades for each class.

Students will:

1. Be able to perform a mental status examination.
2. Be able to conduct a basic physical examination of the neurological system that would give evidence of cerebral versus spinal tract disorders.
3. Based on a physical examination, identify when it is appropriate to refer a patient for a neurological exam versus a neuropsychological exam, or both.
4. Be able to integrate findings from a brief neurological exam with a mental status exam, and more specific neuropsychological testing of adults.

Evaluation: There will be a test (multiple choice, short answer or true/false) which will be given at the end of each class. The answers will be reviewed in class. Students’ experiential case studies will be graded on pass/fail with the expectation for a demonstration of a high level competence of the biopsychosocial model of care. The grades on the standardized tests will constitute two-thirds of the grade and the grade on the case studies one-third of the grade for each course.

***Grading***

***Assignments Points Possible***

***Tests (5 @ 12 pts ea, 90% = 12 pts, 80% =11 pts, 70% = 10 pts) 60 pts.***

***Experiential case studies (30 pts) 30 pts.***

***Course grades-***

***70 pts total = “A” course grade 60 pts total = “B” course grade 50 pts total = “C” course grade***

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Course # & Title: CEP 807 Class #13 Pathophysiology of the Renal System and

Male Reproductive System

**Credit Hours**: 3.0 Credit Hours

**Location:** Live and online

**Class Meeting Date**: September 19-20, 2015; CLASS#13

**Instructor(s)**: Mai Oushy , M.D.

Marlin Hoover, Ph.D., M.S.C.P., ABPP-Clinical

## Required Text(s):

* McCance & Huether, (2009), pgs 102-125, Fluid and electrolyte balance Pgs 1365-1402, diseases of the renal system

Pgs 923-950, sexually transmitted diseases

Program Overview: The program will begin with an orientation and overview of the didactic and practicum components required for graduation. Throughout the ten didactic courses that make up the Master’s Degree Program students will have opportunities to apply principles learned to clinical cases through experiential assignments that increase in complexity as the students’ knowledge of psychopharmacology and the biopsychosocial model becomes more sophisticated. Some of these experiential assignments will be based upon students’ existing patient populations. Others will involve role-playing activities in classes. Still others will involve the observation of actual clinical protocols. Students will be given written exercises based upon these experiences that will be compiled into a clinical notebook of clinical based studies. These assignments will be averaged with the students’ scores on objective tests to determine their grades for each class.

Course Description: Changes in renal function can have a dramatic effect on steady-state levels of many drugs primarily excreted by the kidney. In addition, some psychotropic medications can affect kidney function, or may even be toxic to kidney (e.g. Li+). A very good understanding of renal function is critical to the successful use of many psychotropic drugs. The functions and pathophysiology of the male reproductive system and renal system are discussed as they relate to psychopharmacology. This course includes the study of the renal system and the male genito- urinary/reproductive system.

Students will:

1. Describe the various laboratory tests that measure renal functioning.
2. Be able to differentiate normal lab results regarding normal renal functioning and abnormal lab results.
3. List major psychotropic medications whose by-products are excreted through the renal system versus being metabolized through the liver.
4. Identify major symptoms and etiology of kidney stones.
5. Identify major symptoms and etiology of UTIs.
6. Identify major symptoms and etiology of acute renal failure.
7. Understand the particular vulnerability of geriatric patients with kidney and bladder infections, and how these renal disorders affect their behavior.
8. Describe the major organs involved with male sexual response.
9. Describe the psychotropic medications that can affect male sexual response.
10. Describe the types of male venereal diseases and their symptoms.
11. Describe the etiology, symptoms, and treatment of testicular cancer.
12. Describe the etiology, symptoms, and treatment of prostate cancer.
13. Describe the etiology, symptoms, and treatment of priapism.
14. Describe the etiology, symptoms, and treatment of benign prostrate hyperplasia.
15. Understand how male venereal diseases can be transmitted to partners.
16. In reviewing difficulties of male sexual response, be able to discriminate symptoms indicative of a biological disorder from those that are most likely psychological in origin.
17. Synthesize assessment findings of the renal and male genito-urinary system into diagnoses using a deliberate and systematic process of data collection and analysis.
18. Demonstrate critical thinking and use of research finding in the analysis of a comprehensive health assessment of the renal and male genito-urinary system as the basis for advanced therapeutic practice interventions.
19. Discuss medications used to enhance male sexual performance, their benefits and possible side effects.

Evaluation: There will be a test (multiple choice, short answer or true/false) which will be given at the end of each class. The answers will be reviewed in class. Students’ experiential case studies will be graded on pass/fail with the expectation for a demonstration of a high level competence of the biopsychosocial model of care. The grades on the standardized tests will constitute two-thirds of the grade and the grade on the case studies one-third of the grade for each course.

***Grading***

***Assignments Points Possible***

***Tests (5 @ 12 pts ea, 90% = 12 pts, 80% =11 pts, 70% = 10 pts) 60 pts.***

***Experiential case studies (30 pts) 30 pts.***

***Course grades-***

***70 pts total = “A” course grade 60 pts total = “B” course grade 50 pts total = “C” course grade***

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**NEW MEXICO STATE UNIVERSITY**

**Master’s Degree Program in Clinical Psychopharmacology COURSE OUTLINE**

**Pathophysiology Weekend #7**

Course # & Title: C EP 808 (cont.) Class #14 Pathophysiology and Physical

Assessment of the Gastrointestinal System

**Credit Hours**: 3.0 Credit Hours

**Location:** Live and online

**Class Meeting Date**: October 17-18, 2015-CLASS #14

**Instructor(s):** Mai Oushy, MD

Marlin Hoover, Ph.D., M.S.C.P., ABPP-Clinical

## Required Text(s):

 Bickley, (2009), pgs 415-469

 [McCance &](http://www.amazon.com/s/ref%3Dntt_athr_dp_sr_1?_encoding=UTF8&amp;sort=relevancerank&amp;search-alias=books&amp;field-author=Kathryn%20L.%20McCance%20RN%20%20PhD) Huether, (2009), pgs 1453-1536

 Pagana & Pagana, (2010), pgs 1208-1209

* Olsen, (2011), chapter 26, pgs 91-97, Drugs for Treatment

Program Overview: The program will begin with an orientation and overview of the didactic and practicum components required for graduation. Throughout the ten didactic courses that make up the Master’s Degree Program students will have opportunities to apply principles learned to clinical cases through experiential assignments that increase in complexity as the students’ knowledge of psychopharmacology and the biopsychosocial model becomes more sophisticated. Some of these experiential assignments will be based upon students’ existing patient populations. Others will involve role-playing activities in classes. Still others will involve the observation of actual clinical protocols. Students will be given written exercises based upon these experiences that will be compiled into a clinical notebook of clinical based studies. These assignments will be averaged with the students’ scores on objective tests to determine their grades for each class.

Course Description: Students will learn about digestion, absorption and excretion of drugs and nutrients from the GI system, disorders of GI functioning, hepatic functioning, as well as innervations of the GI tract are also studied.

Students will:

1. Describe the pathophysiological mechanisms and relevant assessment findings in the gastrointestinal with special focus on the hepato-biliary system.
2. Discuss the pathophysiological basis of common abnormal assessment findings in the gastrointestinal system.
3. Interpret assessment findings for the gastrointestinal system logically based on an understanding of pathophysiological mechanisms.
4. Learn the most common laboratory tests which indicate normal and abnormal gastrointestinal system functioning.
5. Apply analytic reasoning and problem solving to a variety of selected clinical case situations of the gastrointestinal system.
6. Interpret normal from abnormal in both anticipated and actual findings in the comprehensive health assessment of the gastrointestinal system.
7. Synthesize assessment findings of the gastrointestinal system into diagnoses using a deliberate and systematic process of data collection and analysis.
8. Learn to evaluate laboratory tests indicative of hepatic and pancreatic function.
9. Describe common the symptoms and etiology of ulcer.
10. Describe common the symptoms and etiology of diverticulitis.
11. Describe common the symptoms and etiology of Crohn’s Disease.
12. Describe common the symptoms and etiology of irritable bowel syndrome.
13. Describe common the symptoms and etiology of GERD.
14. Describe common the symptoms and etiology of hiatal hernia.
15. Describe common the symptoms and etiology of jaundice.
16. Describe common the symptoms and etiology of appendicitis.
17. Describe side effects of various psychotropic medications that may interfere with normal digestive processes.
18. Describe effects of certain psychotropic medications that can aid in the treatment of digestive illnesses.
19. Identify lab tests and explain the purposes of lab tests associated with liver functioning.
20. Describe the lab tests and purposes of lab tests associated with kidney functioning as it relates to excretion.

Evaluation: There will be a test (multiple choice, short answer or true/false) which will be given at the end of each class. The answers will be reviewed in class. Students’ experiential case studies will be graded on pass/fail with the expectation for a demonstration of a high level competence of the biopsychosocial model of care. The grades on the standardized tests will constitute two-thirds of the grade and the grade on the case studies one-third of the grade for each course.

***Grading***

***Assignments Points Possible***

***Tests (5 @ 12 pts ea, 90% = 12 pts, 80% =11 pts, 70% = 10 pts) 60 pts.***

***Experiential case studies (30 pts) 30 pts.***

**NEW MEXICO STATE UNIVERSITY**

**Master’s Degree Program in Clinical Psychopharmacology COURSE OUTLINE**

**Pathophysiology Weekend #8**

Course # & Title: C EP 808 Class #15 Pathophysiology and Physiological

Assessment of Endocrine and Exocrine Functions, Female Reproductive System and Pain

**Credit Hours**: 3.0

**Location:** Live and online

**Class Meeting Date**: November 14-15, 2015-CLASS #15

**Instructor(s):** Mai Oushy M.D.

Marlin Hoover, Ph.D., M.S.

## Required Text(s):

 [McCance, K.L., &](http://www.amazon.com/s/ref%3Dntt_athr_dp_sr_1?_encoding=UTF8&amp;sort=relevancerank&amp;search-alias=books&amp;field-author=Kathryn%20L.%20McCance%20RN%20%20PhD) Huether, S.E., (2009), pgs 727-776

 Olsen, (2011), pgs 143-155

* + Pagana, D, and Pagana, T., (2010)

 Stern & Herman, (2003), pgs 295-308

Program Overview: The program will begin with an orientation and overview of the didactic and practicum components required for graduation. Throughout the ten didactic courses that make up the Master’s Degree Program students will have opportunities to apply principles learned to clinical cases through experiential assignments that increase in complexity as the students’ knowledge of psychopharmacology and the biopsychosocial model becomes more sophisticated. Some of these experiential assignments will be based upon students’ existing patient populations. Others will involve role-playing activities in classes. Still others will involve the observation of actual clinical protocols. Students will be given written exercises based upon these experiences that will be compiled into a clinical notebook of clinical based studies. These assignments will be averaged with the students’ scores on objective tests to determine their grades for each class.

Course Description: The endocrine system is studied as it influences and controls many aspects of the overall physiology of the body and is also a locus for adverse effects of many drugs, including antipsychotic drugs. Endocrine functioning of the female system is emphasized.

Students will:

1. Describe the pathophysiological mechanisms and relevant assessment findings in the endocrine and exocrine system.
2. Discuss the pathophysiological basis of common abnormal assessment findings in the endocrine and exocrine system.
3. Interpret assessment findings for the endocrine and exocrine systems logically based on an understanding of pathophysiological mechanisms.
4. Learn the most common laboratory tests which indicate normal and abnormal endocrine and exocrine functioning.
5. Apply analytic reasoning and problem solving to a variety of selected clinical case situations of the endocrine and exocrine systems.
6. Interpret normal from abnormal in both anticipated and actual findings in the comprehensive health assessment of the endocrine and exocrine systems.
7. Synthesize assessment findings of the endocrine and exocrine systems into diagnoses using a deliberate and systematic process of data collection and analysis.
8. Describe blood tests that are markers for thyroid disease.
9. Describe blood tests that are markers for diabetes.
10. Describe blood tests that are markers for Cushing’s and Addison’s disease.

Evaluation: There will be a test (multiple choice, short answer or true/false) which will be given at the end of each class. The answers will be reviewed in class. Students’ experiential case studies will be graded on pass/fail with the expectation for a demonstration of a high level competence of the biopsychosocial model of care. The grades on the standardized tests will constitute two-thirds of the grade and the grade on the case studies one-third of the grade for each course.

***Grading***

***Assignments Points Possible***

***Tests (5 @ 12 pts ea, 90% = 12 pts, 80% =11 pts, 70% = 10 pts) 60 pts.***

***Experiential case studies (30 pts) 30 pts.***

***Course grades-***

***70 pts total = “A” course grade 60 pts total = “B” course grade 50 pts total = “C” course grade***

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**NEW MEXICO STATE UNIVERSITY**

**Master’s Degree Program in Clinical Psychopharmacology COURSE OUTLINE**

**Pathophysiology Weekend #9**

**Course # & Title**: CEP 808/804 Class #16 Advanced Discussion of Psychopathology

and Laboratory Assessment

**Credit Hours**: 3.0 Credit Hours

**Location:** Live and online

**Class Meeting Date**: December 12-13, 2015; CLASS #16

**Instructor(s)**: Mitchell Simson, M.D.

Marlin Hoover, Ph.D., M.S.C.P., ABPP-Clinical

**Required Text(s)**: Review Bickley’s *Guide to Physical Examination* (2009)

Review Pagana & Pagana (2009) on lab tests*.*

Course Description: This class will be an advanced review of laboratory assessment. Now that you have learned to conduct a physical exam and have studied in depth the normal processes and the pathophysiology involved with each organ system, you are in a strong position to better understand the use of laboratory tests. Today’s class will be conducted in a primarily in a case study format. The instructor will present various cases with psychological and medical symptomology. With the class, you will review the kinds of diagnostic tests that may be most helpful in diagnosis and treatment. In today’s class, students will individually demonstrate their skills at completing a physical exam. The students’ skills will be graded on the rubric on the following page.

## Objectives:

Students will:

1. Gain advanced skills in formulating diagnoses about patients’ medical conditions
2. Have more advanced opportunities in selecting appropriate lab tests to assess physical conditions
3. Acquire practical experience in integrating the learning from the entire pathophysiology physical assessment sequence

Evaluation: These are interactive, evaluation will be based upon students being present and involved in the class discussions on a pass/fail basis.

Students who are not able to participate live in the session will be given a special assignment to turn in via email to be graded on a pass/fail basis.

# EVALUATION FORM

**for Physical Exam**

## VITAL SIGNS

 **Blood pressure in both arms Name of patient**

 **Radial pulse in both wrists**

 **Respiration rate**

**EYES (penlight, cardboard card, ophthalmoscope)**

 **Visual acuity, Snellen Chart, both eyes**

**Optic Nerve (CN-II)**

 **Visual fields, both eyes, confrontation (see description)**

 **Eye alignment, both eyes (Penlight; look straight ahead.)**

 **Extraocular motion (Cardinal H positions.) please follow the light with your eyes**

 **Oculomotor Nerve (CN-III)Trochlear Nerve (CN-IV) Abducent Nerve (CN-VI)**

 **Accommodation, both eyes (Look at far finger, then at finger 5" from nose.) please look at my finger**

 **Pupillary response to light (Swing flashlight presenting twice to each eye – direct and consensual response.)**

 **Olfactory Nerve (CN-I)– (Smelly under nose after eyes closed• Please close your eyes – what do you smell?**

**MOUTH**

 **(Open mouth and use penlight.) Can you open your mouth for me?**

**Say “ahh”**

**Stick out your tongue Hypoglossal Nerve (CN-XII)**

 **Inspect hard palate, soft palate, tongue**

 **Inspect tonsils**

 **Inspect posterior pharyngeal wall**

 **Facial Nerve (CN-VII)**

 **Motor:**

## (Bare teeth.)

**(Puff out cheeks against resistance.) (Wrinkle forehead.)**

 **Palpate all lymph nodes of head and neck, both sides -- checking for lymphadenopathy**

**= occipital**

**= posterior auricular**

**= posterior cervical**

**= superficial cervical**

**= deep cervical**

**= tonsillar**

**= submaxillary**

**= submental**

**= anterior auricular**

**Glossopharyngeal Nerve (CN-IX) Vagus Nerve (CN-X)**

 **Motor:**

## (Have patient drink some water and observe the swallowing reflex.)

 **Sensory:**

**(Put a few drops of sweet or salty water on the back part of the patient’s tongue and see if they can taste it.)**

 **Inspect neck vessels -- jugular venous pulsation, right side**

 **Palpate thyroid gland, posterior approach**

 **Finger-to-Nose Test (both sides) (CEREBELLAR) (Touch nose and examiner’s finger several times.) (Repeat with eyes closed)**

 **POSTERIOR CHEST (stethoscope) (Inspect, Palpate, Percuss, Auscultate)**

 **Inspect back, both sides**

 **Palpate back for tenderness, both sides**

 **Palpate for tactile fremitus, both sides**

**(Patient says “99," six positions, both sides, back and forth.)**

 **Percuss back, both sides**

**(Intercostal spaces, not scapula; six positions, both sides, back and forth.)**

 **Auscultate breath sounds, back, both sides**

**(Six positions, back & forth -- inhale through mouth.)**

 **Palpate for costovertebral angle (CVA) tenderness, both sides (Make fist and tap along spine and then over kidney.)**

**ANTERIOR CHEST -- HEART**

 **Auscultate for heart sounds, all four positions**

**= aortic**

**= pulmonary**

**= tricuspid**

**= mitral**

**ABDOMEN**

 **Auscultate abdomen for bowel sounds, one quadrant**

 **Palpate liver (RUQ)**

**(Left hand behind back, deep breath, right hand in and up while left pushes back.)**

 **• Palpate spleen (LUQ)**

**(Left hand lift ribcage, right hand palpate.)**

**PULSES**

 **Palpate radial pulses, both sides**

 **Palpate posterior tibial pulses, both sides (Medial ankle. Palpate behind ankle bone.)**

 **Inspect hands, wrists, nails**

 **Position sense (proprioception)**

 **Two-point discrimination -- hands and feet**

 **Biceps reflex, both arms**

**(Relax arm, pronate, midway between flexion and extension. With examiner’s thumb on biceps tendon, examiner strikes own thumb. Observe for contraction of bicep and flexion of elbow.)**

 **SHINS**

##  Inspect both

 **Test for edema, both shins**

**(Start at instep and work up the shin.)**

 **Lower extremity strength**

**(Have patient squat and then get up; assist by holding hands.)**

**KNEES (reflex hammer)**

 **Tests for diadochokinesia**

**(Patient rapidly, repeatedly touches index finger to thumb.) (Rapid alternating movements)**

**(Patient rapidly, repeatedly turns hands back and forth.) (Touch thumb to other fingers as quickly as possible.) (Slap thigh and bring hand up in supine position.) (Repeat on other hand.)**

 **• Finger-to-Nose Test (both sides)**

**(Touch nose and examiner’s finger several times.) (Repeat with eyes closed)**

 **• Perform heel-to-knee test**

**(Instruct patient to slide the heel of one lower extremity down the shin of the other, starting at the knee. Movement should be smooth, and heel should stay on shin.)**

 **• Romberg test**

**(Stands with feet together, heels and toes touching and closes eyes.. Observe for swaying.)**

 **• Gait**

## (Stand, walk, turn, walk on tiptoes, walk on heels.)

Course # & Title: C EP 804 Class #17 Psychopharmacology of Mood (Affective)

Disorders

**Credit Hours**: 3.0

**Location:** Live and online

**Class Meeting Dates**: January 16-17, 2016; CLASS #17

## -

**Instructor(s)**: TBA

## Required Text(s):

 Stahl, S. (2008), pgs 445-666

 Julien, (2011), pgs 141-196

 Stern & Herman, (2003), pgs 103-112, 345-353

 Janicak (2011) pgs. 181-313

Course Description: CEP 804 is an in depth study of psychobiosocial intervention with mental disorders. In this course, the diagnosis and treatment of affective disorders, including depression and bipolar disorders, as well as the diagnosis and treatment of attention, cognitive, and impulse control disorders are studied in depth. Today’s class focuses on the various treatments of depressive disorders. Current research about the diagnosis and treatment of major depression, dysthymia, agitated depression, and atypical depression are reviewed in detail. The biochemical mechanisms underlying the pharmacological efficacy of the antidepressants with types of depression are reviewed.

## Objectives:

Students will:

1. Develop a sophisticated understanding of the diagnosis of various forms of depressive disorder.
2. Review earlier pharmacology of serotonin reuptake inhibitors, norepinephrine reuptake inhibitors, and dopamine reuptake inhibitors as they are related to the actions of drugs used in the treatment of mood disorders.
3. Develop an understanding of the psychobiosocial model for the use of psychotropic medications in the treatment of depression.
4. Become familiar with evidence-based research about the relative efficacy of psychotherapy, psychotropic intervention and combined intervention in the treatment of various forms of depressive disorder.
5. Be able to trace the neuronal pathways of associated with depression.
6. Become proficient in selecting antidepressant medications with the appropriate neurochemical effects for particular symptoms and syndromes of depression.
7. Become proficient in selecting the most appropriate psychotropic medications for various types of depression given the side effect profile of each drug.
8. Develop skill in assessing the cost/benefit ratio associated with psychotropic use with individual patients with depression.
9. Become aware of legal and ethical issues involved in the use of psychotropic medications in the treatment of depression.

Evaluation: There will be a test (multiple choice, short answer or true/false) which will be given at the end of each class. The answers will be reviewed in class. Students’ experiential case studies will be graded on pass/fail with the expectation for a demonstration of a high level competence of the biopsychosocial model of care. The grades on the standardized tests will constitute two-thirds of the grade and the grade on the case studies one-third of the grade for each course.

***Grading***

***Assignments Points Possible***

***Tests (5 @ 12 pts ea, 90% = 12 pts, 80% =11 pts, 70% = 10 pts) 60 pts.***

***Experiential case studies (30 pts) 30 pts.***

***Course grades-***

***70 pts total = “A” course grade 60 pts total = “B” course grade 50 pts total = “C” course grade***

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Course # & Title: CEP 804 Class #18 Psychopharmacology of Bipolar Disorders

**Credit Hours**: 3.0 Credit Hours

**Location:** Live and online

**Class Meeting Date**: February 13-14, 2016; CLASS #18

Instructor(s): Marlin C. Hoover, Ph.D., M.S.C.P., ABPP-Clinical

## Required Text(s):

 Stahl, S., (2008), pgs 667 – 720

 Julien, (2011), pgs 196-236

 Stern & Herman, (2003), pgs 193-120 (?), 355-364

 Janicak (2011) pgs. 351-463



## Recommended Text(s):

 Virani, et al., (2009), pgs 186 – 215

Program Overview: The program will begin with an orientation and overview of the didactic and practicum components required for graduation. Throughout the ten didactic courses that make up the Master’s Degree Program students will have opportunities to apply principles learned to clinical cases through experiential assignments that increase in complexity as the students’ knowledge of psychopharmacology and the biopsychosocial model becomes more sophisticated. Some of these experiential assignments will be based upon students’ existing patient populations. Others will involve role-playing activities in classes. Still others will involve the observation of actual clinical protocols. Students will be given written exercises based upon these experiences that will be compiled into a clinical notebook of clinical based studies. These assignments will be averaged with the students’ scores on objective tests to determine their grades for each class.

Course Description: In this course we continue our study of clinical psychopharmacology through the study of the treatment of bipolar disorder. Objectives of this course are to understand the biochemical mechanism(s) underlying the pharmacological efficacy of antimanic treatments; the biochemical, physiological and anatomical bases of adverse effects associated with antimanic treatments; different classes of antimanic drugs and treatments; typical antipsychotic medications, atypical antipsychotics, electroconvulsive therapy (ECT), lithium

(Li+), anticonvulsants, and other treatments for bipolar disorder, and to be able to effectively prescribe these medications and manage the medical issues that arise from their use.

## Objectives:

Students will:

1. Develop an in-depth understanding of the mechanisms of actions of the various drugs used in treatment of bipolar disorders.
2. Be able to select the most appropriate psychotropic medications for bipolar disorders given the effect and the side effect profile of each drug.
3. Develop skill in assessing the cost/benefit ratio associated with psychotropic use with individual patients with bipolar.
4. Develop an understanding of a dynamic biopsychosocial model for the use of psychotropic medications in the treatment of bipolar disorders.
5. Be aware of the legal and ethical issues involved in the use of psychotropic medications in the treatment of bipolar disorders.

Evaluation: There will be a test (multiple choice, short answer or true/false) which will be given at the end of each day. The answers will be reviewed in class. Students’ experiential case studies will be graded on pass/fail with the expectation for a demonstration of a high level competence of the biopsychosocial model of care. The grades on the standardized tests will constitute two-thirds of the grade and the grade on the case studies one-third of the grade for each course.

***Grading***

***Assignments Points Possible***

***Tests (5 @ 12 pts ea, 90% = 12 pts, 80% =11 pts, 70% = 10 pts) 60 pts.***

***Experiential case studies (30 pts) 30 pts.***

***Course grades-***

***70 pts total = “A” course grade 60 pts total = “B” course grade 50 pts total = “C” course grade***

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Course # & Title: CEP 805 Class #19 Psychopharmacology Psychotic Disorders

**Credit Hours**: 3.0

**Location:** Live and online

**Class Meeting Dates**: March 12-13, 2016; CLASS #19

Instructor(s): Elaine Orabona Foster, Ph.D.

## Required Text(s):

 Julien, (2011), pgs 91-141

 Stahl, (2008), pgs 247-451

 Stern & Herman, (2003), pgs 335-341, 429-530, 187-194

 Janicak (2011) pgs. 65-181

Course Description: CEP 805 continues the study of the psychobiosocial intervention of mental disorders with particular emphasis on psychotic disorders, personality disorders, anxiety and sleep disorders. Today’s class is an intensive study of the treatment of psychosis from a psychobiosocial model of care. Special consideration is given to first, second and third generation antipsychotic drugs and their pharmacology and clinical uses; and neurological and metabolic disorders associated with antipsychotic medications. In addition, the student begins to learn about modifications in treatment from a biopsychosocial perspective that must be considered when treating individuals of various ethnic groups, as well as comparing research conducted on men to effects on women and the effects during pregnancy. The ethnic/diversity issue will be approached during all classes of clinical psychopharmacology.

## Objectives:

Students will:

1. Be able to delineate the biochemical mechanisms underlying the pharmacological efficacy of the three generations of antipsychotic drugs.
2. Be able to differentiate the effects and side effects of first, second and third generation of antipsychotic drugs.
3. Be able to describe the effects of various antipsychotic drugs on the positive and negative symptoms of schizophrenia.
4. Be able to describe the biochemical and physiological basis of adverse reactions with antipsychotic treatments.
5. Be able to effectively prescribe antipsychotics and manage the medical issues that arise from their use.
6. Be able to identify the various signs of side effects to antipsychotic drugs and learn to administer paper and pencil tests of those side effects, such as the AIMs.
7. Develop skill and assess the cost-benefit ratio of psychotropic use for adult, child, adolescent and elderly patients with psychotic disorders.
8. Become familiar with current treatment algorithms for the management of psychotic disorders.
9. Become familiar with antipsychotics that have FDA approval, as well as those that are used off-label in the treatment of children, adolescents and the elderly.
10. Become familiar with efficacy research about the use of psychotropics in the treatment of personality disorders.
11. Become familiar with current constructs about the selection of psychotropic medications in the treatment of personality disorders.

Evaluation: There will be a test (multiple choice, short answer or true/false) which will be given at the end of each class. The answers will be reviewed in class. Students’ experiential case studies will be graded on pass/fail with the expectation for a demonstration of a high level competence of the biopsychosocial model of care. The grades on the standardized tests will constitute two-thirds of the grade and the grade on the case studies one-third of the grade for each course.

***Grading***

***Assignments Points Possible***

***Tests (5 @ 12 pts ea, 90% = 12 pts, 80% =11 pts, 70% = 10 pts) 60 pts.***

***Experiential case studies (30 pts) 30 pts.***

***Course grades-***

***70 pts total = “A” course grade 60 pts total = “B” course grade 50 pts total = “C” course grade***

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**SIAP/NEW MEXICO STATE UNIVERSITY**

**Master’s Degree Program in Clinical Psychopharmacology COURSE OUTLINE**

Course # & Title: CEP 805 Class #20 Psychopharmacology of Anxiety Disorders and

Sleep Disorders

**Credit Hours**: 3.0 Credit Hours

**Location:** Live and online

**Class Meeting Date**: April 16-17, 2016; CLASS #20

Instructor(s): Marlin C. Hoover, Ph.D., M.S.C.P., ABPP-Clinical

## Required Text(s):

 Stahl, S., (2008), pgs 721-772, 815-862

 Julien, (2011), pgs 236-271

 Stern & Herman, (2003), pgs 121-178, 327-333, 395-405

* McCance & Huether on sleep, pgs 502-507

 Janicak (2011) pgs. 463-569



## Recommended Text(s):

 Virani, A.S., et al., (2009), pgs 158 - 173

Program Overview: The program will begin with an orientation and overview of the didactic and practicum components required for graduation. Throughout the ten didactic courses that make up the Master’s Degree Program students will have opportunities to apply principles learned to clinical cases through experiential assignments that increase in complexity as the students’ knowledge of psychopharmacology and the biopsychosocial model becomes more sophisticated. Some of these experiential assignments will be based upon students’ existing patient populations. Others will involve role-playing activities in classes. Still others will involve the observation of actual clinical protocols. Students will be given written exercises based upon these experiences that will be compiled into a clinical notebook of clinical based studies. These assignments will be averaged with the students’ scores on objective tests to determine their grades for each class.

Course Description: This course reviews the treatment of anxiety disorders from a biopsychosocial model of care with special emphasis on psychopharmacology for anxiety disorders. Diagnosis and treatment of broad spectrum anxiety disorders (including general anxiety, OCD) will be discussed. Particular anxiety disorders of children will also be discussed.

## Objectives:

Students will:

1. Develop an in depth understanding of the mechanism of actions of various drugs used in the treatment of anxiety disorders.
2. Select the most appropriate psychotropic medication for various anxiety disorders that are part of the broad spectrum of anxiety disorders.
3. Develop skill as demonstrated in case studies to assess the cost benefit associated with use of anti-anxiety medication.
4. Be aware of the legal and ethical issues involved in the use of anti-anxiety medications
5. Be aware of the special issues related to the treatment of anxiety disorders in children.
6. Demonstrate an in depth understanding of the mechanism of actions of hypnotic medication.
7. Be able to select the most appropriate hypnotic for different kinds of sleep disorders (such as early morning awakening versus phase disorders).
8. Be able to discuss issues of dependence, means of avoiding dependence and a means of minimizing dependence with the use of anti-anxiety and hypnotic medications.
9. Be able to discriminate or explicate the differences in metabolism of antidepressants, anti-anxiety agents and hypnotics when used with children, adolescents and adults.
10. Be able to discuss the special legal and ethical issues of employing antidepressant, anti-anxiety, and hypnotics with children and adolescents.
11. Identify the various etiologies of sleep disorders
12. Be able to demonstrate the practice of a biopsychosocial model in the treatment of sleep disorders, from acute care to long term sleep hygiene.

Evaluation: There will be a test (multiple choice, short answer or true/false) which will be given at the end of each class. The answers will be reviewed in class. Students’ experiential case studies will be graded on pass/fail with the expectation for a demonstration of a high level competence of the biopsychosocial model of care. The grades on the standardized tests will constitute two-thirds of the grade and the grade on the case studies one-third of the grade for each course.

***Grading***

***Assignments Points Possible***

***Tests (5 @ 12 pts ea, 90% = 12 pts, 80% =11 pts, 70% = 10 pts) 60 pts.***

***Experiential case studies (30 pts) 30 pts.***

***Course grades-***

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The Integration of Behavioral Treatments with

Psychopharmacology in the Treatment of Children

**Credit Hours**: 3.0

**Location:** Live and online

**Class Meeting Dates**: May 14-15, 2016; CLASS #21

Instructor(s): Mario Marquez, Ph.D., M.A., Prescribing Psychologist

## Required Text(s):

Julien, (2011), pgs 591-647

Stahl, (2008), pgs 863-999

Stern & Herman, pgs 27-42, 365-366, 57-60

Janicak (2011) pgs. 569-633

Taylor (2012) pgs. 315-355

## Recommended Text(s):

* Bezchilibnyk-Butler & Virani, (2004), Clinical Handbook of Psychotropic Drugs

for Children and Adolescents.

* Students may also want to review the practice parameters published by the American Academy of Child and Adolescent Psychiatry in the Journal of the American Academy of Child & Adolescent Psychiatry, “Practice Parameters” 11/96; 12/96; 9/97; 10/97; 10/98; 12/99

Course Description: In this course, students will apply, in depth, their understanding of psychopharmacology to special populations including children, adolescents, elderly and individuals with other health impairments. In today’s class, emphasis is on the biopsychosocial treatment of children and adolescents and ethnically diverse populations. The difference in metabolism of drugs between children and adults is reviewed in detail. Particular emphasis is placed on psychobiosocial intervention of attention deficit disorder, anxiety disorders, depression, PTSD and oppositional disorder in children and adolescents.

## Objectives:

Students will:

1. Increase their depth of understanding of the diagnosis of mental disorders in children in order to be safe medication managers with children.
2. Become skilled in using treatment algorithms for childhood mental disorders.
3. List and describe the mechanism of action of the drugs used in the treatment of ADHD and to discuss the various benefits and limitations.
4. List and describe the mechanism of actions of the drugs that have FDA approval for the treatment of anxiety of children.
5. List and describe the mechanism of actions of the drugs that have FDA approval for the treatment of depression in children.
6. List and describe the mechanism of actions of the drugs that have FDA approval for the treatment of PTSD in children.
7. List and describe the mechanism of actions of the drugs that have mood stabilizing effects with children.
8. Discuss the pros and cons of treating children with off-label medications.
9. Discuss the research concerning increased suicidality among adolescents using anti- depressants.
10. Discuss the research regarding increased cardiovascular events for those treated with stimulants.
11. Discuss the cost/benefit ratio of using antihypertensives with children to control anger and behavior.
12. Give serious consideration to the long-term effects and ethical and legal issues associated with psychopharmacological intervention in the treatment of children and adolescents.

Evaluation: There will be a test (multiple choice, short answer or true/false) which will be given at the end of each class. The answers will be reviewed in class. Students’ experiential case studies will be graded on pass/fail with the expectation for a demonstration of a high level competence of the biopsychosocial model of care. The grades on the standardized tests will constitute two-thirds of the grade and the grade on the case studies one-third of the grade for each course.

***Grading***

***Assignments Points Possible***

***Tests (5 @ 12 pts ea, 90% = 12 pts, 80% =11 pts, 70% = 10 pts) 60 pts.***

***Experiential case studies (30 pts) 30 pts.***

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The Ethical Practice of Integrated Behavioral Care

**Credit Hours**: 3.0 Credit Hours

**Location:** Live and online

**Class Meeting Date**: June 11-12, 2016-CLASS #23

Instructor(s): Lia Billington, Ph.D., M.A., Prescribing Psychologist

## Required Text(s):

 McGrath, R.E. & Moore, B.A.*,* (2010), pgs 71-105

 Janicak (2011) pgs. 43-65

 Taylor (2012) pgs. 419-643

* Stern & Herman (2003), pgs 417-428 on compliance

pgs 491-502, on Epidemiology (very important for the PEP)

* Familiarize yourself with:
* Code of Ethics: American Psychological Association
* Code of Ethics: World Psychiatric Association.
* Rules and Law: New Mexico Board of Psychologist Examiners – Governing the Training and Practice of Psychologists seeking a Prescribing Certificate
* McGrath, R. et. al *Treatment Guidelines for Prescribing Psychologists*.

Division 55 (ASAP) In SIAP/NMSU Student Handbook on [www.siaprxp.com](http://www.siaprxp.com/)

* Online study – go to <http://mediasite-server.nmsu.edu/>

Program Overview: The program will begin with an orientation and overview of the didactic and practicum components required for graduation. Throughout the ten didactic courses that make up the Master’s Degree Program students will have opportunities to apply principles learned to clinical cases through experiential assignments that increase in complexity as the students’ knowledge of psychopharmacology and the biopsychosocial model becomes more sophisticated. Some of these experiential assignments will be based upon students’ existing patient populations. Others will involve role-playing activities in classes. Still others will involve the observation of actual clinical protocols. Students will be given written exercises based upon these experiences that will be compiled into a clinical notebook of clinical based studies. These assignments will be averaged with the students’ scores on objective tests to determine their grades for each class.

Course Description: This course will provide a review of ethics, standards of care, and practice models for prescribing psychologists. This course will also cover professional issues including interprofessional cooperation, continuing education, evidence based practice, and advocacy.

## Objectives:

Students will:

1. Learn the common ethical principles governing prescribing psychologists.
2. Learn the rules and regulations regarding prescribing practice in New Mexico.
3. Practice ethical decision making in cases presenting ethical dilemmas.
4. Learn to locate and gain guidance from treatment algorithms.
5. Become familiar with various practice models for psychologists with training in psychopharmacology.
6. Be knowledgeable about ethical issues related to prescribing, including, but not limited to informed consent, record keeping, and Pharmacoeconomics.
7. Be knowledgeable about legal issues related to prescribing, including but not limited to risk management and liability issues.
8. Refine an individual philosophy of treatment that integrates use of psychotropic medications with other psychological techniques of with the treatment of mental disorders.
9. Learn about FDA rules for maintaining samples.
10. Develop a record keeping strategy regarding prescriptions given.
11. Develop a strategy for informing clients about potential side effects, costs, and benefits of any recommended medication regime.
12. Develop a record keeping strategy for consultation with primary care physicians.
13. Discuss the implications of the APA ethical guidelines as they relate to the prescribing psychotropics.
14. Refine an individual philosophy of treatment that integrates use of psychotropic medications with other psychological techniques of with the treatment of mental disorders.
15. Learn about constitutional factors leading to different reactions across ethnic groups to various classes of medications.
16. Learn extant knowledge regarding the side effects and efficacy of psychotropic medications across ethnic groups.
17. Develop advanced skills for explaining the use of psychotropic medications to patients within a context of Hispanic culture.
18. Develop advanced skills for explaining the use of psychotropic medications to patients within a context of Native American culture.
19. Be aware of particular issues in metabolism of drugs by women.
20. Explain the concepts of rapid and slow metabolizers and discuss how this may vary across cultural groups.
21. Learn about effective use of translators when dealing with individuals of another culture and language.
22. Become very knowledgeable about culturally-specific syndromes among Hispanics.
23. Learn about how these cultural syndromes differ across varied Hispanic groups: those from Spain, current immigrants from Mexico, Puerto Rico, Cuba and South America.
24. Learn about some of the specific health syndromes characteristic of Native Americans as well as some of illness across Native American groups.
25. Become more familiar with the role of the medicine man in all healing in traditional Native American cultures.
26. Be cognizant of issues in primary, secondary, and tertiary prevention of mental illness among the various ethnic groups, the rural and the poor.
27. Learn the basic principles of herbal medicines used for the treatment of mental disorders.
28. Be knowledgeable about the extant literature concerning the efficacy and drug interactions of herbs used for the treatment of mental disorders.

Evaluation: There will be a test (multiple choice, short answer or true/false) which will be given at the end of each class. The answers will be reviewed in class. Students’ experiential case studies will be graded on pass/fail with the expectation for a demonstration of a high level competence of the biopsychosocial model of care. The grades on the standardized tests will constitute two-thirds of the grade and the grade on the case studies one-third of the grade for each course.

***Grading***

***Assignments Points Possible***

***Tests (5 @ 12 pts ea, 90% = 12 pts, 80% =11 pts, 70% = 10 pts) 60 pts.***

***Experiential case studies (30 pts) 30 pts.***

***Course grades-***

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**NEW MEXICO STATE UNIVERSITY**

**Master’s Degree Program in Clinical Psychopharmacology COURSE OUTLINE**

**Course # & Title**: SPED 495 and 501/ C EP 809 and 810 Class #23

Ethnopsychiatry, Treatment of the Elderly, and other special issues

**Credit Hours**: 3.0 Credit Hours

**Location:** Live and online

**Class Meeting Date**: July 16-17, 2016-CLASS #23

Instructor(s): Elaine S. LeVine, Ph.D., MA, Prescribing Psychologist

Jo Velasquez, Ph.D., M.S.C.P., BCIA-EEG

Marlin C. Hoover, Ph.D., M.S.C.P., ABPP-Clinical Psychology

## Required Text(s):

Stern & Herman, (2003), pgs 43-57, 471-477

Julien, (2011), pgs 647-673

Stahl, (2008), pgs 899-942

* Kessler, R., & Stafford, D. (Eds.), (2008), (Cases to be assigned)
* DVD by Elaine Foster – Ethnopsychiatry, Special Considerations in Treating Women
* Power Point Presentation by Mimi Sa – Psychobiosocial Intervention with Native American Groups
* Power Point Presentation by Mimi Sa – Psychobiosocial Intervention with Hispanics
* U.S. Department of Health and Human Services. (2001). Mental Health: Culture, Race, and Ethnicity—A Supplement to Mental Health: A Report of the Surgeon General. Rockville, MD
* Power Point Presentation by Elaine Foster – Special Considerations in Treating Women

Program Overview: The program will begin with an orientation and overview of the didactic and practicum components required for graduation. Throughout the ten didactic courses that make up the Master’s Degree Program students will have opportunities to apply principles learned to clinical cases through experiential assignments that increase in complexity as the students’ knowledge of psychopharmacology and the biopsychosocial model becomes more sophisticated. Some of these experiential assignments will be based upon students’ existing patient populations. Others will involve role-playing activities in classes. Still others will involve the observation of actual clinical protocols. Students will be given written exercises based upon these experiences that will be compiled into a clinical notebook of clinical based studies. These assignments will be averaged with the students’ scores on objective tests to determine their grades for each class.

Course Description: The psychopharmacology of the elderly is discussed in detail in this course. Geriatric psychopharmacology includes: geriatric physiology; cardiac, renal, hepatic changes with aging; pharmacokinetics/dynamics in the elderly; cognition enhancers in Alzheimer’s and other dementias. Special treatment of personality disorders, eating disorders, and other conditions which may co-occur with again will be reviewed. Adjustments in dosing and dosing schedules will be reviewed.

## Objectives:

Students will:

1. Become skilled in using the treatment algorithms recommended for the psychopharmacological treatment of mental disorders in the elderly.
2. Become familiar with the adaptation of treatment for mood disorders, bipolar disorders, psychotic disorders and anxiety disorders in the elderly.
3. Discuss the various types of drugs used for treating Alzheimer’s disease.
4. Discuss the issue of whether the Alzheimer’s drugs are only effective for a short- term intervention or may be useful for long term care.
5. Discuss the particular controversy in the use of atypical antipsychotics with the elderly for issues other than psychosis.
6. Evaluate the sleep needs of the elderly and the special treatment dilemmas age- related changes in sleep patterns can create.
7. Discuss how various disease states of the elderly may affect their psychological functioning.
8. Delineate factors of the elderly that affect their metabolism on drugs.
9. Understand the physical disorders that often co-occur with again and the implications of those disorders for psychotropic treatment of the elderly
10. Specify how drug dosage must be modified when treating the elderly.
11. Discuss the complexities regarding the large number of medications taken by very many elderly patients.
12. Understand the concept of fast and slow metabolizers and identify ethnic groups of concern.
13. List at least four factors that are culturally specific in treating each of the following: Native Americans; Hispanics; Blacks.
14. Be alert to special gender issues and borderline traits that impact pharmacotherapy.

Evaluation: There will be a test (multiple choice, short answer or true/false) which will be given at the end of each class. The answers will be reviewed in class. Students’ experiential case studies will be graded on pass/fail with the expectation for a demonstration of a high level competence of the biopsychosocial model of care. The grades on the standardized tests will constitute two-thirds of the grade and the grade on the case studies one-third of the grade for each course.

***Grading***

***Assignments Points Possible***

***Tests (5 @ 12 pts ea, 90% = 12 pts, 80% =11 pts, 70% = 10 pts) 60 pts.***

***Experiential case studies (30 pts) 30 pts.***

***Course grades-***

***70 pts total = “A” course grade 60 pts total = “B” course grade 50 pts total = “C” course grade***

***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 for Services for Students with Disabilities, located at Garcia Annex (telephone: 646-6840). 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 Disabled Student Programs. If you have questions about the Americans with Disabilities Act (ADA), call 646-3635.***

**NEW MEXICO STATE UNIVERSITY**

**Master’s Degree Program in Clinical Psychopharmacology COURSE OUTLINE**

**Course # & Title**: SPED 501/ C EP 810 (con’t) Class #24

Treatment of Substance Abuse Disorders

**Credit Hours**: 3.0

**Location:** Live and online

**Class Meeting Dates**: August 13-14, 2014-CLASS #24

**Instructor(s)**: Mitchell Simson, M.D.

## Required Text(s):

 Julien, (2011), pgs 9-139, 189-223, 225-251, 555-666

 Stahl, (2008), pgs 943-1012

 Taylor (2012) pgs. 355-419

## Recommended Text(s):

* Hanson, G., Venturelli, P. & Fleckenstein, J., (Eds.) (2012) Drugs and society (7th Ed.) Sudbury, Massachusetts: James and Bartlett.

Course Description: This course gives a broad overview of the principles of addiction medicine. The framework is built around the biopsychosocial model of addiction. Addiction is a primary, chronic, neurobiological disease, with genetic, psychosocial, and environmental factors influencing its development and manifestations. Addiction is characterized by behaviors that include one or more of the following: impaired control over drug use, compulsive use, continued use despite harm, and craving.

Strong emphasis is placed upon understanding the dopaminergic “reward system” in the brain’s limbic area. Basic science and core concepts include brain reward circuitry, epidemiology and the neurobiology and neuro-imaging (PET, SPECT, FMRI) of addictive disorders.

Nine drug groups will be discussed in detail: ethanol, opioids, nicotine, marijuana, sedative/hypnotics, stimulants, hallucinogens/club drugs, inhalants and anabolic steroids. Within each group we will review the drug pharmacology, pharmacokinetics, and toxicities as well as management of intoxication and withdrawal.

## Objectives:

Students will:

1. Understand the biopsychosocial model of addiction.
2. Discriminate abuse, dependence/addiction, withdrawal and pseudo addiction
3. Understand the overall costs of the use of the illicit drugs in the work place.
4. Understand the biopsychosocial elements of alcohol addiction.
5. Understand the biopsychosocial elements of opiate addiction, including opium, heroin, morphine, methadone, Fentanyl, hydrocodone, and codeine.
6. Understand the biopsychosocial elements of stimulant abuse, including amphetamines, cocaine, over the counter sympathominetics and herbal stimulants.
7. Understand the biopsychosocial elements of sedative/hypnotic dependence.
8. Understand the biopsychosocial elements of nicotine dependence.
9. Understand the biopsychosocial elements of hallucinogenic abuse including peyote, marijuana and LSD.
10. Understand the biopsychosocial elements of inhalant abuse including volatile substances, anesthetics and nitrites.
11. Understand the biopsychosocial elements of anabolic steroid abuse.
12. Learn about New Mexico’s Medical Marijuana program
13. Describe the adverse effects of the drug classes that are substances of abuse and be able to link symptoms of intoxication and withdrawal to probable drug of abuse.
14. Learn about the efficacy of alternative therapies used in the treatment of addictions.
15. Learn about specific steps and dangers involved in detoxification with patients addicted to various classes of medications.
16. Be knowledgeable about when detoxification can occur at home and when hospitalization is required.
17. Understand the theory of the use of medications to treat cravings.
18. Learn about the specialized training needed in order to treat addicted patients with methadone or Buphrenophine.
19. Learn about particular substance abuse issues in New Mexico and in particular the very heavy drug trafficking of heroin.
20. Learn about the use and common pitfalls about drug testing.

Evaluation: There will be a test (multiple choice, short answer or true/false) which will be given at the end of each class. The answers will be reviewed in class. Students’ experiential case studies will be graded on pass/fail with the expectation for a demonstration of a high level competence of the biopsychosocial model of care. The grades on the standardized tests will constitute two-thirds of the grade and the grade on the case studies one-third of the grade for each course.

***Grading***

***Assignments Points Possible***

***Tests (5 @ 12 pts ea, 90% = 12 pts, 80% =11 pts, 70% = 10 pts) 60 pts.***

***Experiential case studies (30 pts) 30 pts.***

***Course grades-***

***70 pts total = “A” course grade 60 pts total = “B” course grade 50 pts total = “C” course grade***

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**SIAP/NEW MEXICOSTATE UNIVERSITY**

**Master’s Degree Program in Clinical Psychopharmacology COURSE OUTLINE**

Course # & Title: SPED 501/C EP 810 Class #25 Synthesis and Overview

**Credit Hours**: 3.0 Credit Hours

**Location:** Live in Las Cruces

**Class Meeting Date**: September 16-18, 2016-CLASS #25

Instructor(s): Marlin C. Hoover, Ph.D., M.S.C.P., ABPP-Clinical

## Required Text(s):

* Stahl, (2009), The P resc r iber’s Guide , (familiarize yourself with how to use this)
* Stern & Herman, (2003), (begin working on exam questions)

Program Overview: The program will begin with an orientation and overview of the didactic and practicum components required for graduation. Throughout the ten didactic courses that make up the Master’s Degree Program students will have opportunities to apply principles learned to clinical cases through experiential assignments that increase in complexity as the students’ knowledge of psychopharmacology and the biopsychosocial model becomes more sophisticated. Some of these experiential assignments will be based upon students’ existing patient populations. Others will involve role-playing activities in classes. Still others will involve the observation of actual clinical protocols. Students will be given written exercises based upon these experiences that will be compiled into a clinical notebook of clinical based studies. These assignments will be averaged with the students’ scores on objective tests to determine their grades for each class.

Course Description: This course will provide a summary and overview of the material learned in the course. Review will be organized in a manner that will systematically review all of the information domains prescribed by the Psychopharmacology Exam for Psychologists(PEP) of the American Psychological Association. The knowledge domains will be typified by reviewing cases which demonstrate the importance of each knowledge domain. Additionally, participants will be presented with exam questions which will assist the student in preparation for taking the PEP examination.

## Objectives:

Students will:

1. Review the knowledge areas covered on the PEP examination
2. Review the structure of the PEP examination.
3. Develop a strategy for taking the PEP examination..
4. Review the material learned in the courses completed in the program.
5. Apply knowledge and analytical skill to proposed treatments for cases presented.
6. Prepare to answer PEP like questions in a manner informed by the course material.
7. Complete a PEP practice exam to determine areas of need for further study.
8. Complete a self-evaluation of learning accomplishment.
9. Prepare a study plan in preparation for taking the PEP.
10. Respond to an opportunity to commit to a schedule for the completion of practicum requirements for licensure.
11. Respond to an opportunity to commit to a schedule for attempting to take the PEP.
12. Respond to opportunities to participate in advocacy efforts.

Evaluation: There will be a test (multiple choice, short answer or true/false) which will be given at the end of each class. The answers will be reviewed in class. Students’ experiential case studies will be graded on pass/fail with the expectation for a demonstration of a high level competence of the biopsychosocial model of care. The grades on the standardized tests will constitute two-thirds of the grade and the grade on the case studies one-third of the grade for each course.

***Grading***

***Assignments Points Possible***

***Tests (5 @ 12 pts ea, 90% = 12 pts, 80% =11 pts, 70% = 10 pts) 60 pts.***

***Experiential case studies (30 pts) 30 pts.***

***Course grades-***

***70 pts total = “A” course grade 60 pts total = “B” course grade 50 pts total = “C” course grade***

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**NEW MEXICO STATE UNIVERSITY**

**Psychopharmacology Training**

**Master Syllabus (revised 12.1.2015)**

**COURSE OUTLINE**

**Course # & Title**: Class #17: Diagnosis and Treatment of Affective Disorders

**Location:**  **ON-LINE**

**Class Meeting Dates**: January 23-24, 2016

**Instructor(s)**: John Preston, Psy.D.

**Required Text(s)**:

* Stahl, S. (2013), pgs. 237-369
* Advokat et. al, (2014), pgs. 196-198; 385-433
* Stern et. al, (2012), pgs. 119-131; 367-373
* Janicak (2011) pgs. 181-313

**Course Description**: An in depth study of psychobiosocial intervention with mental disorders. In this course, the diagnosis and treatment of affective disorders, including depression and bipolar disorders, as well as the diagnosis and treatment of attention, cognitive, and impulse control disorders are studied in depth. Today’s class focuses on the various treatments of depressive disorders. Current research about the diagnosis and treatment of major depression, dysthymia, agitated depression, and atypical depression are reviewed in detail. The biochemical mechanisms underlying the pharmacological efficacy of the antidepressants with types of depression are reviewed.

**Objectives:**

Students will:

1. Develop a sophisticated understanding of the diagnosis of various forms of depressive disorder.
2. Review earlier pharmacology of serotonin reuptake inhibitors, norepinephrine reuptake inhibitors, and dopamine reuptake inhibitors as they are related to the actions of drugs used in the treatment of mood disorders.
3. Develop an understanding of the psychobiosocial model for the use of psychotropic medications in the treatment of depression.
4. Become familiar with evidence-based research about the relative efficacy of psychotherapy, psychotropic intervention and combined intervention in the treatment of various forms of depressive disorder.
5. Be able to trace the neuronal pathways of associated with depression.
6. Become proficient in selecting antidepressant medications with the appropriate neurochemical effects for particular symptoms and syndromes of depression.
7. Become proficient in selecting the most appropriate psychotropic medications for various types of depression given the side effect profile of each drug.
8. Develop skill in assessing the cost/benefit ratio associated with psychotropic use with individual patients with depression.
9. Become aware of legal and ethical issues involved in the use of psychotropic medications in the treatment of depression.

**Homework:** A complicated case of depression will be presented. Students will be expected to respond in writing to an analytic question about the case. Students’ case analyses will be graded with the expectation for a demonstration of a high level competence of the biopsychosocial model of care.  Responses are due 7 days following the weekend class on Sunday at 11:59 pm.

**Exam**: There will be a test (multiple choice, short answer or true/false) which will be given at the end of the weekend. Most questions will be taken from the lecture; 5 additional questions will be taken from the readings. Exams will be taken and submitted in CANVAS during class. (Students will need to bring their computers to class on the day of the exam.) The answers will be reviewed in class.

***Grading Assignments Points Possible***

***Test (30 questions @ 2 pts each) 60 pts.***

***Case Analysis 30 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”***

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**NEW MEXICO STATE UNIVERSITY**

**Psychopharmacology Training**

**COURSE OUTLINE**

**Course # & Title**: Class #18 – Day 1: Psychopharmacology of Bipolar Disorders

**Location:**  **NMSU: 1220 Stewart St, Las Cruces, NM**

**O’Donnell Hall, Rm # 027**

**Class Meeting Date**: February 27, 2016 - Saturday

**Instructor(s)**: Marlin C. Hoover, Ph.D., M.S., ABPP

**Required Text(s)**:

* Stahl, S., (2013), pgs. 370-388
* Advokat et. al, (2014), pgs. 467-504
* Stern et. al, (2012), pgs. 131-136; 379-382
* Janicak (2011) pgs. 351-463

**Recommended Text(s)**:

* Become familiar with using reference texts to check on a drug (Stahl, Virani, etc…)

**Program Overview**: The program will begin with an orientation and overview of the didactic and practicum components required for graduation. Throughout the ten didactic courses that make up the Master’s Degree Program students will have opportunities to apply principles learned to clinical cases through experiential assignments that increase in complexity as the students’ knowledge of psychopharmacology and the biopsychosocial model becomes more sophisticated.  Some of these experiential assignments will be based upon students’ existing patient populations.  Others will involve role-playing activities in classes.  Still others will involve the observation of actual clinical protocols.  Students will be given written exercises based upon these experiences that will be compiled into a clinical notebook of clinical based studies.  These assignments will be averaged with the students’ scores on objective tests to determine their grades for each class.

**Course Description**: In this course we continue our study of clinical psychopharmacology through the study of the treatment of bipolar disorder. Objectives of this course are to understand the biochemical mechanism(s) underlying the pharmacological efficacy of antimanic treatments; the biochemical, physiological and anatomical bases of adverse effects associated with antimanic treatments; different classes of antimanic drugs and treatments; typical antipsychotic medications, atypical antipsychotics, electroconvulsive therapy (ECT), lithium (Li+), anticonvulsants, and other treatments for bipolar disorder, and to be able to effectively prescribe these medications and manage the medical issues that arise from their use.

**Objectives:**

Students will:

1. Develop an in-depth understanding of the mechanisms of actions of the various drugs used in treatment of bipolar disorders.
2. Be able to select the most appropriate psychotropic medications for bipolar disorders given the effect and the side effect profile of each drug.
3. Develop skill in assessing the cost/benefit ratio associated with psychotropic use with individual patients with bipolar.
4. Develop an understanding of a dynamic biopsychosocial model for the use of psychotropic medications in the treatment of bipolar disorders.
5. Be aware of the legal and ethical issues involved in the use of psychotropic medications in the treatment of bipolar disorders.

**Homework:** See Class#18 – Day 2

**Evaluation**: See Class #18 – Day 2

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**NEW MEXICO STATE UNIVERSITY**

**Psychopharmacology Training**

**COURSE OUTLINE**

**Course # & Title**: Class #18 – Day 2: Psychopharmacology of Anxiety Disorders

**Location:**  **NMSU: 1220 Stewart St, Las Cruces, NM**

**O’Donnell Hall, Rm # 027**

**Class Meeting Date**: February 28, 2016 - Sunday

**Instructor(s)**: Marlin C. Hoover, Ph.D., M.S., ABPP

**Required Text(s)**:

* Stahl, S., (2013), pgs. 388-419
* Advokat et. al, (2014), pgs. 433-467
* Stern et. al, (2012), pgs. 48-49; 94-95; 137-139; 223; 408-409
* Janicak (2011), pgs. 463-569

**Recommended Text(s)**:

* Virani (2013)

**Program Overview**: The program will begin with an orientation and overview of the didactic and practicum components required for graduation. Throughout the ten didactic courses that make up the Master’s Degree Program students will have opportunities to apply principles learned to clinical cases through experiential assignments that increase in complexity as the students’ knowledge of psychopharmacology and the biopsychosocial model becomes more sophisticated.  Some of these experiential assignments will be based upon students’ existing patient populations.  Others will involve role-playing activities in classes.  Still others will involve the observation of actual clinical protocols.  Students will be given written exercises based upon these experiences that will be compiled into a clinical notebook of clinical based studies.  These assignments will be averaged with the students’ scores on objective tests to determine their grades for each class.

**Course Description**: This course reviews the treatment of anxiety disorders from a biopsychosocial model of care with special emphasis on psychopharmacology for anxiety disorders. Diagnosis and treatment of broad spectrum anxiety disorders (including general anxity, OCD) will be discussed. Particular anxiety disorders of children will also be discussed.

**Objectives:**

Students will:

1. Develop an in-depth understanding of the mechanisms of actions of the various drugs used in treatment of bipolar disorders.
2. Be able to select the most appropriate psychotropic medications for anxiety disorders that are a part of the broad spectrum of anxiety disorders.
3. Develop skill as demonstrated in case studies to assess the cost benefit associated with use of anti-anxiety medication.
4. Be aware of the legal and ethical issues involved in the use of anti-anxiety medications.
5. Be aware of special issues related to the treatment of anxiety disorders in children.
6. Demonstrate an in depth understanding of the mechanism of actions of hypnotic medication.
7. Be able to discuss issues of dependence, means of avoiding dependence and a means of minimizing dependence with the use of anti-anxiety and hypnotic medications.

**Homework:** A complicated case of bipolar disorder with anxiety will be presented. Students will be expected to respond in writing to an analytic question about the case. Students’ case analyses will be graded with the expectation for a demonstration of a high level competence of the biopsychosocial model of care.  Responses are due 7 days following the weekend class on Sunday at 11:59 pm.

**Exam**: There will be a test (multiple choice, short answer or true/false) which will be given at the end of the weekend. Most questions will be taken from the lecture; 5 additional questions will be taken from the readings. Exams will be taken and submitted in CANVAS during class. (Students will need to bring their computers to class on the day of the exam.) The answers will be reviewed in class.

***Grading Assignments Points Possible***

***Test (30 questions @ 2 pts each) 60 pts.***

***Case Analysis 30 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”***

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**NEW MEXICO STATE UNIVERSITY**

**Psychopharmacology Training**

**COURSE OUTLINE**

**Course # & Title**: Class #19- Psychopharmacology of Psychotic Disorders

**Location:**  **NMSU: 1220 Stewart St, Las Cruces, NM**

**O’Donnell Hall, Rm # 027**

**Class Meeting Dates**: April 2-3, 2016

**Instructor(s)**: Carolyn Williams, Ph.D.

**Guest Lecture:**  Patti Hernandez, Ph.D.: Working with Families of the Severely Mentally Ill)

**Required Text(s)**:

* Advokat et. al, (2014), pgs. 337-385
* Stahl, (2013), pgs. 79-237
* Stern et. al, (2012), pgs. 114; 209-217; 273-274
* Janicak (2011) pgs. 65-181

**Program Overview**: The program will begin with an orientation and overview of the didactic and practicum components required for graduation. Throughout the ten didactic courses that make up the Master’s Degree Program students will have opportunities to apply principles learned to clinical cases through experiential assignments that increase in complexity as the students’ knowledge of psychopharmacology and the biopsychosocial model becomes more sophisticated.  Some of these experiential assignments will be based upon students’ existing patient populations.  Others will involve role-playing activities in classes.  Still others will involve the observation of actual clinical protocols.  Students will be given written exercises based upon these experiences that will be compiled into a clinical notebook of clinical based studies.  These assignments will be averaged with the students’ scores on objective tests to determine their grades for each class.

**Course Description**: Continuation of the study of the psychobiosocial intervention of mental disorders with particular emphasis on psychotic disorders, personality disorders, anxiety and sleep disorders. Today’s class is an intensive study of the treatment of psychosis from a psychobiosocial model of care. Special consideration is given to first, second and third generation antipsychotic drugs and their pharmacology and clinical uses; and neurological and metabolic disorders associated with antipsychotic medications. In addition, the student begins to learn about modifications in treatment from a biopsychosocial perspective that must be considered when treating individuals of various ethnic groups, as well as comparing research conducted on men to effects on women and the effects during pregnancy. The ethnic/diversity issue will be approached during all classes of clinical psychopharmacology.

**Objectives:**

Students will:

1. Be able to delineate the biochemical mechanisms underlying the pharmacological efficacy of the three generations of antipsychotic drugs.
2. Be able to differentiate the effects and side effects of first, second and third generation of antipsychotic drugs.
3. Be able to describe the effects of various antipsychotic drugs on the positive and negative symptoms of schizophrenia.
4. Be able to describe the biochemical and physiological basis of adverse reactions with antipsychotic treatments.
5. Be able to effectively prescribe antipsychotics and manage the medical issues that arise from their use.
6. Be able to identify the various signs of side effects to antipsychotic drugs and learn to administer paper and pencil tests of those side effects, such as the AIMs.
7. Develop skill and assess the cost-benefit ratio of psychotropic use for adult, child, adolescent and elderly patients with psychotic disorders.
8. Become familiar with current treatment algorithms for the management of psychotic disorders.
9. Become familiar with antipsychotics that have FDA approval, as well as those that are used off-label in the treatment of children, adolescents and the elderly.
10. Become familiar with efficacy research about the use of psychotropics in the treatment of personality disorders.

**Homework:** A complicated case of psychotic disorders will be presented. Students will be expected to respond in writing to an analytic question about the case. Students’ case analyses will be graded with the expectation for a demonstration of a high level competence of the biopsychosocial model of care.  Responses are due 7 days following the weekend class on Sunday at 11:59 pm.

**Exam**: There will be a test (multiple choice, short answer or true/false) which will be given at the end of the weekend. Most questions will be taken from the lecture; 5 additional questions will be taken from the readings. Exams will be taken and submitted in CANVAS during class. (Students will need to bring their computers to class on the day of the exam.) The answers will be reviewed in class.

***Grading Assignments Points Possible***

***Test (30 questions @ 2 pts each) 60 pts.***

***Case Analysis 30 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”***

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**NEW MEXICO STATE UNIVERSITY**

**Psychopharmacology Training**

**COURSE OUTLINE**

**Course # & Title**: Class #20: Treatment of Children & Adolescents

**Location:**  **NMSU: 1220 Stewart St, Las Cruces, NM**

**O’Donnell Hall, Rm # 027**

**Class Meeting Date**: April 30- May 1, 2016

**Instructor(s)**: John Courtney, Ph.D., M.S.

**Required Text(s)**:

* Advokat, et. al, (2014), pgs. 507-555
* Stahl, S., (2013), pgs. 386; 471-502
* Stern et. al, (2012), pgs. 39-53
* Janicak (2011) pgs. 569-633
* McGrath & Moore, (2010), pgs. 189-203

**Recommended Text(s): Reference**

* Elbe, Bezchilibnyk-Butler, & Virani (2014), Clinical Handbook of Psychotropic Drugs for Children and Adolescents.

**Program Overview**: The program will begin with an orientation and overview of the didactic and practicum components required for graduation. Throughout the ten didactic courses that make up the Master’s Degree Program students will have opportunities to apply principles learned to clinical cases through experiential assignments that increase in complexity as the students’ knowledge of psychopharmacology and the biopsychosocial model becomes more sophisticated.  Some of these experiential assignments will be based upon students’ existing patient populations.  Others will involve role-playing activities in classes.  Still others will involve the observation of actual clinical protocols.  Students will be given written exercises based upon these experiences that will be compiled into a clinical notebook of clinical based studies.  These assignments will be averaged with the students’ scores on objective tests to determine their grades for each class.

**Course Description**: In this course, students will apply, in depth, their understanding of psychopharmacology to special populations including children, adolescents, elderly and individuals with other health impairments. In today’s class, emphasis is on the biopsychosocial treatment of children and adolescents and ethnically diverse populations. The difference in metabolism of drugs between children and adults is reviewed in detail. Particular emphasis is placed on psychobiosocial intervention of attention deficit disorder, anxiety disorders, depression, PTSD and oppositional disorder in children and adolescents.

**Objectives:**

Students will:

1. Increase their depth of understanding of the diagnosis of mental disorders in children in order to be safe medication managers with children.
2. Become skilled in using treatment algorithms for childhood mental disorders.
3. List and describe the mechanism of action of the drugs used in the treatment of ADHD and to discuss the various benefits and limitations.
4. List and describe the mechanisms of actions of the drugs that have FDA approval for the treatment of anxiety of children.
5. List and describe the mechanism of actions of the drugs that have FDA approval for the treatment of depression in children.
6. List and describe the mechanism of actions of the drugs that have FDA approval for the treatment of PTSD in children.
7. List and describe the mechanism of actions of the drugs that have mood stabilizing effects with children.
8. Discuss the pros and cons of treating children with off-label medications.
9. Discuss the research concerning increased suicidality among adolescents using anti-depressants.
10. Discuss the research regarding increased cardiovascular events for those treated with stimulants.
11. Discuss the cost/benefit ratio of using antihypertensives with children to control anger and behavior.
12. Give serious consideration to the long-term effects and ethical and legal issues associated with psychopharmacological intervention in the treatment of children and adolescents.

**Homework:** A complicated case of mental disorders in children will be presented. Students will be expected to respond in writing to an analytic question about the case. Students’ case analyses will be graded with the expectation for a demonstration of a high level competence of the biopsychosocial model of care.  Responses are due 7 days following the weekend class on Sunday at 11:59 pm.

**Exam**: There will be a test (multiple choice, short answer or true/false) which will be given at the end of the weekend. Most questions will be taken from the lecture; 5 additional questions will be taken from the readings. Exams will be taken and submitted in CANVAS during class. (Students will need to bring their computers to class on the day of the exam.) The answers will be reviewed in class.

***Grading Assignments Points Possible***

***Test (30 questions @ 2 pts each) 60 pts.***

***Case Analysis 30 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 for Services for Students with Disabilities, located at Garcia Annex (telephone: 646-6840). 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 Disabled Student Programs. If you have questions about the Americans with Disabilities Act (ADA), call 646-3635.***

**NEW MEXICO STATE UNIVERSITY**

**Psychopharmacology Training**

**COURSE OUTLINE**

**Course # & Title**: Class #21 - Day 1: Treatment of the Elderly

**Location:**  **NMSU: 1220 Stewart St, Las Cruces, NM**

**O’Donnell Hall, Rm # 027**

**Class Meeting Dates**: June 4, 2016 - Saturday

**Instructor(s)**: Marlin C. Hoover, Ph.D., M.S., ABPP

**Required Text(s)**:

* Stern et. al, (2012), pgs. 59-67 ; 487-496
* Advokat et. al, (2014), pgs. 507-555

**Program Overview**: The program will begin with an orientation and overview of the didactic and practicum components required for graduation. Throughout the ten didactic courses that make up the Master’s Degree Program students will have opportunities to apply principles learned to clinical cases through experiential assignments that increase in complexity as the students’ knowledge of psychopharmacology and the biopsychosocial model becomes more sophisticated.  Some of these experiential assignments will be based upon students’ existing patient populations.  Others will involve role-playing activities in classes.  Still others will involve the observation of actual clinical protocols.  Students will be given written exercises based upon these experiences that will be compiled into a clinical notebook of clinical based studies.  These assignments will be averaged with the students’ scores on objective tests to determine their grades for each class.

**Course Description**: In this course, the psychopharmacology of the elderly is discussed in detail in this course. Geriatric psychopharmacology includes: geriatric physiology: cardiac, renal, hepatic changes with aging; pharmacokinetics/dynamics in the elderly; cognition enhancers in Alzheimer’s and other dementias. Special treatment of personality disorders, eating disorders, and other conditions which may co-occur with again will be reviewed. Adjustments in dosing and dosing schedules with be reviewed.

**Objectives:**

Students will:

1. Become skilled in using treatment algorithms recommended for the psychopharmacological treatment of mental disorders in the elderly.
2. Become familiar with the adaptation of treatment for mood disorders, bipolar disorders, psychotic disorders and anxiety disorders in the elderly.
3. Discuss the various types of drugs used for treating Alzheimer’s disease.
4. Discuss the issue of whether the Alzheimer’s drugs are only effective for a short-term intervention or may be useful for long term care.
5. Discuss the particular controversy in the use of atypical antipsychotics with the elderly for issues other than psychosis.
6. Evaluate the sleep needs of the elderly and the special treatment dilemmas age-related changes in sleep patterns can create.
7. Discuss how various disease states of the elderly may affect their psychological functioning.
8. Delineate factors of the elderly that affect their metabolism on drugs.
9. Understand the physical disorders that often co-occur and the implications of those disorders for psychotropic treatment of the elderly.
10. Specify how drug dosage must be modified when treating the elderly.
11. Discuss the complexities regarding the large number of medications taken by many elderly patients.

**Homework:**  See Class #21 – Day 2

**Evaluation**: See Class #21 – Day 2

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**NEW MEXICO STATE UNIVERSITY**

**Psychopharmacology Training**

**COURSE OUTLINE**

**Course # & Title**: Class #21 - Day 2: Treatment of Sleep Disorders

**Location:**  **NMSU: 1220 Stewart St, Las Cruces, NM**

**O’Donnell Hall, Rm # 027**

**Class Meeting Dates**: June 5, 2016 - Sunday

**Instructor(s)**: Marlin C. Hoover, Ph.D., M.S., ABPP

**Required Text(s)**:

* Stern et. al, (2012), pgs. 191-198
* Advokat et. al, (2014), pgs. 555-591
* Stahl, (2013), pgs. 444-470
* McCance

**Program Overview**: The program will begin with an orientation and overview of the didactic and practicum components required for graduation. Throughout the ten didactic courses that make up the Master’s Degree Program students will have opportunities to apply principles learned to clinical cases through experiential assignments that increase in complexity as the students’ knowledge of psychopharmacology and the biopsychosocial model becomes more sophisticated.  Some of these experiential assignments will be based upon students’ existing patient populations.  Others will involve role-playing activities in classes.  Still others will involve the observation of actual clinical protocols.  Students will be given written exercises based upon these experiences that will be compiled into a clinical notebook of clinical based studies.  These assignments will be averaged with the students’ scores on objective tests to determine their grades for each class.

**Course Description**: In this course, the psychopharmacology of the elderly is discussed in detail in this course. Geriatric psychopharmacology includes: geriatric physiology: cardiac, renal, hepatic changes with aging; pharmacokinetics/dynamics in the elderly; cognition enhancers in Alzheimer’s and other dementias. Special treatment of personality disorders, eating disorders, and other conditions which may co-occur with again will be reviewed. Adjustments in dosing and dosing schedules with be reviewed.

**Objectives:**

Students will:

1. Identify the various etiologies of sleep disorders
2. Be able to demonstrate the practice of a biopsychosocial model in the treatment of sleep disorders, from acute care to long term sleep hygiene.
3. Be able to discriminate or explicate the differences in sleep disorders among anti-anxiety agents and hypnotics when used with children, adolescents and adults.
4. Be able to describe sleep architecture and its relationship to varied psychotropics.

**Homework:** A complex case of an elderly patient with sleep concerns will be presented. Students will be expected to respond in writing to an analytic question about the case. Students’ case analyses will be graded with the expectation for a demonstration of a high level competence of the biopsychosocial model of care.  Responses are due 7 days following the weekend class on Sunday at 11:59 pm.

**Exam**: There will be a test (multiple choice, short answer or true/false) which will be given at the end of the weekend. Most questions will be taken from the lecture; 5 additional questions will be taken from the readings. Exams will be taken and submitted in CANVAS during class. (Students will need to bring their computers to class on the day of the exam.) The answers will be reviewed in class.

***Grading Assignments Points Possible***

***Test (30 questions @ 2 pts each) 60 pts.***

***Case Analysis 30 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”***

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**NEW MEXICO STATE UNIVERSITY**

**Psychopharmacology Training**

**COURSE OUTLINE**

**Course # & Title**: Class #22- Day 1: Ethnopsychiatry (½ day –E. Foster)

Using Translators (½ day – L. Vazquez)

Class#22 – Day 2: Gender Issues (½ day – E. Foster)

Treating Hispanics (½ day – L. Vazquez)

Guest Lecture: Promotoras (T. Oliver)

**Location:**  **NMSU: 1220 Stewart St, Las Cruces, NM**

**O’Donnell Hall, Rm # 027**

**Class Meeting Date**: June 25 & 26, 2016

**Instructor(s)**: Elaine Foster, Ph.D.

Luis Vazquez, Ph.D.

**Guest Lecture:**  Tonya Oliver, Ph.D.

**Required Text(s)**:

* Stern & Herman (2012), pgs. 497-501; 553-558
* CD’s by Mimi Sa of psychopharmacology with Native Americans and Hispanics

**Program Overview**: The program will begin with an orientation and overview of the didactic and practicum components required for graduation. Throughout the ten didactic courses that make up the Master’s Degree Program students will have opportunities to apply principles learned to clinical cases through experiential assignments that increase in complexity as the students’ knowledge of psychopharmacology and the biopsychosocial model becomes more sophisticated.  Some of these experiential assignments will be based upon students’ existing patient populations.  Others will involve role-playing activities in classes.  Still others will involve the observation of actual clinical protocols.  Students will be given written exercises based upon these experiences that will be compiled into a clinical notebook of clinical based studies.  These assignments will be averaged with the students’ scores on objective tests to determine their grades for each class.

**Course Description**: This class will present constructs of ethnopsychiatry such as slow and fast metabolizers, and effects of diet on genetic expression. Special considerations when employing psychotropics across gender will also be explored. Then, these concepts will be integrated into a psychobiosexual understanding of specific ethnic groups.

**Objectives:**

Students will:

1. Understand the concept of fast and slow metabolizers and identify ethnic groups of concern.
2. List at least four factors that are culturally specific in treating each of the following: Native Americans, Hispanics, & Blacks.
3. Be alert to special gender issues that impact pharmacotherapy.
4. Gain practice in using translators of the mentally ill and view their concerns with their patient family member.
5. Learn about how to work with facilitators from varied cultures.

**Homework:** The students will be presented with a complex case involving a patient from an ethnically diverse background. Students will be expected to respond in writing to an analytic question about the case. Students’ case analyses will be graded with the expectation for a demonstration of a high level competence of the biopsychosocial model of care.  Responses are due 7 days following the weekend class on Sunday at 11:59 pm.

**Exam**: There will be a test (multiple choice, short answer or true/false) which will be given at the end of the weekend. Most questions will be taken from the lecture; 5 additional questions will be taken from the readings. Exams will be taken and submitted in CANVAS during class. (Students will need to bring their computers to class on the day of the exam.) The answers will be reviewed in class.

***Grading Assignments Points Possible***

***Test (30 questions @ 2 pts each) 60 pts.***

***Case Analysis 30 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”***

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**NEW MEXICO STATE UNIVERSITY**

**Psychopharmacology Training**

**COURSE OUTLINE**

**Course # & Title**: Class #23 – Day 1: Saturday

Drug Groups for Chronic Illnesses (Morning - Simson)

Chronic Medical Illness and Somatoform Disorders

(Afternoon-Billington)

Class #23 – Day 2: Sunday

Chronic Medical Illness and Somatoform Disorders – *continued* (Billington)

**Class Meeting Date**: July 23-24, 2016

**Instructor(s)**: Lia Billington, Ph.D.

Mitchell Simson, M.D.

**Location:**  **NMSU: 1220 Stewart St, Las Cruces, NM**

**O’Donnell Hall, Rm # 027**

**Required Text(s)**:

* Ferrando et. al, (2010) Review pgs. 3-39; Read pgs. 39-78; 502-525

Use rest of text as a reference

**Program Overview**: The program will begin with an orientation and overview of the didactic and practicum components required for graduation. Throughout the ten didactic courses that make up the Master’s Degree Program students will have opportunities to apply principles learned to clinical cases through experiential assignments that increase in complexity as the students’ knowledge of psychopharmacology and the biopsychosocial model becomes more sophisticated.  Some of these experiential assignments will be based upon students’ existing patient populations.  Others will involve role-playing activities in classes.  Still others will involve the observation of actual clinical protocols.  Students will be given written exercises based upon these experiences that will be compiled into a clinical notebook of clinical based studies.  These assignments will be averaged with the students’ scores on objective tests to determine their grades for each class.

**Course Description**: This course will provide an understanding of the prescribing psychologist’s role working with medical practioners in the treatment of the chronically medically ill and/or pain patients. In order to successfully understand this topic, students will review basic principles’ of pharmacology.

**Objectives:**

Students will:

1. Increase their knowledge about common medical illnesses that are comorbid with mental disorders.
2. Will gain an understanding of the basic mechanisms of action of drugs used to treat major illness of the organ systems.
3. Become aware of important, dangerous drug interactions when treating chronically ill patients with psychotropics.
4. Be able to discuss the appropriate balance to reach when treating pain disorders between managing pain and minimizing addiction.
5. Gain a clearer understanding of a prescribing psychologist’s role in assisting the medically ill and pain patients.
6. Increase their understanding of somatoform disorders and how psychotropic intervention can be of assistance or can create iatrogenic effects.

**Homework:**  A complex case involving a patient with a chronic illness and pain. Students will be expected to respond in writing to an analytic question about the case. Students’ case analyses will be graded with the expectation for a demonstration of a high level competence of the biopsychosocial model of care.  Responses are due 7 days following the weekend class on Sunday at 11:59 pm.

**Exam**: There will be a test (multiple choice, short answer or true/false) which will be given at the end of the weekend. Most questions will be taken from the lecture; 5 additional questions will be taken from the readings. Exams will be taken and submitted in CANVAS during class. (Students will need to bring their computers to class on the day of the exam.) The answers will be reviewed in class.

***Grading Assignments Points Possible***

***Test (30 questions @ 2 pts each) 60 pts.***

***Case Analysis 30 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”***

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**NEW MEXICO STATE UNIVERSITY**

**Psychopharmacology Training**

**COURSE OUTLINE**

**Course # & Title**: Class #24: The Ethical Practice of Integrated Behavioral Care

**Location:**  **NMSU: 1220 Stewart St, Las Cruces, NM**

**O’Donnell Hall, Rm # 027**

**Class Meeting Dates**: August 27-28, 2016

**Instructor(s)**: Lia Billington, Ph.D.

**Required Text(s)**:

* McGrath, R.E. & Moore, B.A., (2010), pgs. 71-104
* Janicak (2011), pgs. 43-65
* Muse & Moore (2012), pgs. 457-482
* Listen to online class on research methodology by Robert McGrath, Ph.D.

**Recommended Text(s)**: (**Familiarize yourself with the following texts)**

* Code of Ethics: American Psychological Association
* Code of Ethics: World Psychiatric Association
* Rules and Law: New Mexico Board of Psychologist Examiners – Governing the Training and Practice of Psychologists seeking a Prescribing Certificate.
* McGrath, R. et.al, *Treatment Guidelines for Prescribing Psychologists.*

Division 55 (ASAP). In NMSU Student Handbook

* Online study – go to http://mediasite-server.nmsu.edu/

**Program Overview**: The program will begin with an orientation and overview of the didactic and practicum components required for graduation. Throughout the ten didactic courses that make up the Master’s Degree Program students will have opportunities to apply principles learned to clinical cases through experiential assignments that increase in complexity as the students’ knowledge of psychopharmacology and the biopsychosocial model becomes more sophisticated.  Some of these experiential assignments will be based upon students’ existing patient populations.  Others will involve role-playing activities in classes.  Still others will involve the observation of actual clinical protocols.  Students will be given written exercises based upon these experiences that will be compiled into a clinical notebook of clinical based studies.  These assignments will be averaged with the students’ scores on objective tests to determine their grades for each class.

**Course Description**: This course will provide a review of ethics, standards of care, and practice models for prescribing psychologists. This course will also cover professional issues including inter-professional cooperation, continuing education, evidence based practice, and advocacy.

**Objectives:**

Students will:

1. Learn the common ethical principles governing prescribing psychologists.
2. Learn the rules and regulations regarding prescribing practice in New Mexico.
3. Practice ethical decision making in cases presenting ethical dilemmas.
4. Learn to locate and gain guidance from treatment algorithms.
5. Become familiar with various practice models for psychologists with training in psychopharmacology.
6. Be knowledgeable about ethical issues related to prescribing, including, but not limited to informed consent, record keeping, and Pharmacoeconomics.
7. Be knowledgeable about legal issues related to prescribing, including but not limited to risk management and liability issues.
8. Refine an individual philosophy of treatment that integrates use of psychotropic medications with other psychological techniques of with the treatment of mental disorders.
9. Learn about FDA rules for maintaining samples.
10. Develop a record keeping strategy regarding prescriptions given.
11. Develop a strategy for informing clients about potential side effects, costs, and benefits of any recommended medication regime.
12. Develop a record keeping strategy for consultation with primary care physicians.
13. Discuss the implications of the APA ethical guidelines as they relate to the prescribing psychotropics.
14. Refine an individual philosophy of treatment that integrates use of psychotropic medications with other psychological techniques of with the treatment of mental disorders.
15. Learn about constitutional factors leading to different reactions across ethnic groups to various classes of medications.
16. Learn extant knowledge regarding the side effects and efficacy of psychotropic medications across ethnic groups.
17. Develop advanced skills for explaining the use of psychotropic medications to patients within a context of Hispanic culture.
18. Develop advanced skills for explaining the use of psychotropic medications to patients within a context of Native American culture.
19. Be aware of particular issues in metabolism of drugs by women.
20. Explain the concepts of rapid and slow metabolizers and discuss how this may vary across cultural groups.
21. Learn about effective use of translators when dealing with individuals of another culture and language.
22. Become very knowledgeable about culturally-specific syndromes among Hispanics.
23. Learn about how these cultural syndromes differ across varied Hispanic groups: those from Spain, current immigrants from Mexico, Puerto Rico, Cuba and South America.
24. Learn about some of the specific health syndromes characteristic of Native Americans as well as some of illness across Native American groups.
25. Become more familiar with the role of the medicine man in all healing in traditional Native American cultures.
26. Be cognizant of issues in primary, secondary, and tertiary prevention of mental illness among the various ethnic groups, the rural and the poor.
27. Learn the basic principles of herbal medicines used for the treatment of mental disorders.
28. Be knowledgeable about the extant literature concerning the efficacy and drug interactions of herbs used for the treatment of mental disorders.

**Homework:** A complex case involving the ethical practice of integrated behavioral healthcare will be presented. Students will be expected to respond in writing to an analytic question about the case. Students’ case analyses will be graded with the expectation for a demonstration of a high level competence of the biopsychosocial model of care.  Responses are due 7 days following the weekend class on Sunday at 11:59 pm.

**Exam**: There will be a test (multiple choice, short answer or true/false) which will be given at the end of the weekend. Most questions will be taken from the lecture; 5 additional questions will be taken from the readings. Exams will be taken and submitted in CANVAS during class. (Students will need to bring their computers to class on the day of the exam.) The answers will be reviewed in class.

***Grading Assignments Points Possible***

***Test (30 questions @ 2 pts each) 60 pts.***

***Case Analysis 30 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”***

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**NEW MEXICOSTATE UNIVERSITY**

**Psychopharmacology Training**

**COURSE OUTLINE**

**Course # & Title**: Class #25 Synthesis and PEP Review

**Location:**  **NMSU: 1220 Stewart St, Las Cruces, NM**

**O’Donnell Hall, Rm # 027**

**Class Meeting Date**: September 23, 24, & 25, 2016

**Instructor(s)**: Marlin C. Hoover, Ph.D., M.S., ABPP

**Required Text(s):**

* Muse & Moore (2012) Test Questions on CD

**Program Overview**: The program will begin with an orientation and overview of the didactic and practicum components required for graduation. Throughout the ten didactic courses that make up the Master’s Degree Program students will have opportunities to apply principles learned to clinical cases through experiential assignments that increase in complexity as the students’ knowledge of psychopharmacology and the biopsychosocial model becomes more sophisticated.  Some of these experiential assignments will be based upon students’ existing patient populations.  Others will involve role-playing activities in classes.  Still others will involve the observation of actual clinical protocols.  Students will be given written exercises based upon these experiences that will be compiled into a clinical notebook of clinical based studies.  These assignments will be averaged with the students’ scores on objective tests to determine their grades for each class.

**Course Description**: This course will provide a summary and overview of the material learned in the course. Review will be organized in a manner that will systematically review all of the information domains prescribed by the Psychopharmacology Exam for Psychologists(PEP) of the American Psychological Association. The knowledge domains will be typified by reviewing cases which demonstrate the importance of each knowledge domain. Additionally, participants will be presented with exam questions which will assist the student in preparation for taking the PEP examination.

**Objectives:**

Students will:

1. Review the knowledge areas covered on the PEP examination
2. Review the structure of the PEP examination.
3. Develop a strategy for taking the PEP examination..
4. Review the material learned in the courses completed in the program.
5. Apply knowledge and analytical skill to proposed treatments for cases presented.
6. Prepare to answer PEP like questions in a manner informed by the course material.
7. Complete a PEP practice exam to determine areas of need for further study.
8. Complete a self-evaluation of learning accomplishment.
9. Prepare a study plan in preparation for taking the PEP.
10. Respond to an opportunity to commit to a schedule for the completion of practicum requirements for licensure.
11. Respond to an opportunity to commit to a schedule for attempting to take the PEP.
12. Respond to opportunities to participate in advocacy efforts.

**Evaluation**: Students are expected to attend this interactive class which will be graded on a pass/fail basis. Special arrangements will be made with those that cannot attend.

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