**SIAP/NEW MEXICO STATE UNIVERSITY**  
**Master’s Program in Clinical Psychopharmacology**

**COURSE OUTLINE**

**Course # & Title:** CEP 801 Introduction to Psychopharmacology for Psychologists I  
(Introduction to Gross Anatomy and Introduction to Case History Construction and Analysis)

**Credit Hours:** 3.0

**Location:** Milton Hall, Room 81

**Class Meeting Dates:** September 18, 2010

**Instructor(s):** Elaine S. LeVine, Ph.D.  
Douglas W. Hoffman, Ph.D.  
Marlin Hoover, Ph.D.

**Class Meeting Times:** 8:00 AM – 6:00 PM

**Required Text(s):** Shier D., Butler J., and Lewis R., Hole’s Human Anatomy & Physiology, 12th Ed. McGraw Hill (2010); ISBN 978-0-07-352570-9. This is also published in paperback and you are welcome to use an earlier edition, which should be readily available used as this is a common textbook.

**Readings:** Shier, Introduction to Human Anatomy and Physiology p 1-49; Tissues 143-169

**Course Description:** CEP 801 (Taught over 5 separate days, as 5 separate modules or 2 ½ weekends of classes) is an introduction to gross anatomy and microanatomy. By the end of the course, psychologists will have an up to date understanding of human biology, physiology, anatomy, and neuroanatomy. Systems, organs and tissues of the body and anatomical positions and orientations are reviewed with emphasis upon anatomical features and physiological processes that must be well understood in the prescribing of psychotropics. Today’s lecture focuses on basic medical terminology and homeostatic mechanisms. In addition, Dr. Hoover and Dr. LeVine will present a complex case 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. Understand the complexity of issues involved in determining appropriate psychotropic intervention.
2. Will have a new appreciation for how patient’s underlying medical conditions must be considered in the use of medications.
3. Begin to learn how side effects of certain medications can actually assist in both psychological and medical symptomology.
4. Understand and be able to communicate using appropriate medical terminology for organ parts and positions.

**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.

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70 pts total = “A” course grade  
60 pts total = “B” course grade  
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**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.
SIAP/NEW MEXICO STATE UNIVERSITY
Master’s Program in Clinical Psychopharmacology

COURSE OUTLINE

Course # & Title: CEP 801 Introduction to Psychopharmacology for Psychologists I
(Introduction to Gross Anatomy and Introduction to Case History Construction and Analysis)

Credit Hours: 3.0

Location: Milton Hall, Room 81

Class Meeting Dates: September 19, 2010

Instructor(s): Elaine S. LeVine, Ph.D.
Douglas W. Hoffman, Ph.D.
Marlin Hoover, Ph.D.

Class Meeting Times: 8:00 AM – 3:00 PM

Required Text(s): Shier D., Butler J., and Lewis R., Hole’s Human Anatomy & Physiology, 12th Ed. McGraw Hill (2010); ISBN 978-0-07-352570-9. This is also published in paperback and you are welcome to use an earlier edition, which should be readily available used as this is a common textbook.

Readings: Shier, Unit 2: 170-352

Course Description: CEP 801 is an introduction to gross anatomy and microanatomy. By the end of the course, psychologists will have an up to date understanding of human biology, physiology, anatomy, and neuroanatomy. Systems, organs and tissues of the body and anatomical positions and orientations are reviewed with emphasis upon anatomical features and physiological processes that must be well understood in the prescribing of psychotropics. This second day will provide students with an in depth understanding of morphology at the cellular and structural level, with particular emphasis on interactive processes. 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. Review and increase understanding of morphology on the cellular, tissue and gross levels.
2. Be able to explicate homeostatic mechanisms involved in each system.
3. Develop extensive understanding of feedback mechanisms among systems.
4. Understand and be able to communicate using appropriate medical terminology for organ parts and body positions.

**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.

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COURSE OUTLINE

Course # & Title: CEP 801 Introduction to Psychopharmacology for Psychologists I
(Introduction to Neuroanatomy and Chemical Anatomy of the Nervous System)

Credit Hours: 3.0

Location: Milton Hall, Room 81

Class Meeting Dates: October 16, 2010

Instructor(s): Douglas W. Hoffman, Ph.D.

Class Meeting Times: 8:00 AM – 6:00 PM


Readings: Nervous System 1 & II p 353-436

Course Description: The next 3 days of classes of CEP 801 constitute a thorough study 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 coeruleus, 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. Develop extensive understandings of feedback mechanisms among systems.
2. Learn the basics of the synthesis of neurotransmitters, protein hormones, enzymes, and other organic substances.
3. Learn the chemical and electrical properties involved in neurotransmission.
4. Learn the functions and importance of the peripheral and autonomic nervous systems.
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.

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COURSE OUTLINE

Course # & Title: CEP 801 Introduction to Psychopharmacology for Psychologists I (Introduction to Neuroanatomy and Chemical Anatomy of the Nervous System)

Credit Hours: 3.0

Location: Milton Hall, Room 81

Class Meeting Dates: October 17, 2010

Instructor(s): TBA

Class Meeting Times: 8:00 AM – 3:00 PM

Required Text(s): Dissection Manual – Hanover College (Provided)

Course Description: This class will involve a complete dissection of the brain and spinal cord. Students will develop the dimensional understanding of the placement of different structural aspects of the brain and the ways that the neurons distribute throughout the structures through this hands-on experience.

Objectives:

Students will:

1. Be able to point to the frontal cortex, hippocampus, amygdale, basal ganglia, thalamus and hypothalamus, locus coerulus, dorsal raphe nuclei, other relevant nuclei and nucleus accumbens.
2. Be able to locate and trace the brain stem and examine the spinal column
3. Be able to locate the cranial nerves and their attachment locations.
4. Be able to trace the blood supply of the brain.
5. Be able to trace the ventricles.
6. Be able to identify the anatomical features and trace the neuronal pathways associated with anxiety disorders, depression, cognitive decline, substance abuse and schizophrenia.
7. Be able to compare the various areas of the sheep brain (cerebrum, brain stem, and cerebellum) to the human brain.

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
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COURSE OUTLINE

Course # & Title: CEP 801 Introduction to Psychopharmacology for Psychologists I
(Introduction to Neuroanatomy and Chemical Anatomy of the Nervous System)

Credit Hours: 3.0

Location: Milton Hall, Room 81

Class Meeting Dates: November 13, 2010

Instructor(s): Douglas W. Hoffman, Ph.D.

Class Meeting Times: 8:00 AM – 6:00 PM


Readings: Nervous System III p 437-481; Endocrine System 482-521.

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 coeruleus, 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. Develop extensive knowledge of normal systems functioning.
2. Learn the localization and functions of different neurotransmitter systems in the central and peripheral nervous systems.
3. 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 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
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Master’s Program in Clinical Psychopharmacology

COURSE OUTLINE

Course # & Title: CEP 802 Introduction to Chemistry and Biochemistry for the Prescribing Psychologist

Credit Hours: 3.0

Location: Milton Hall, Room 81

Class Meeting Dates: November 14, 2010

Instructor(s): Douglas W. Hoffman, Ph.D.

Class Meeting Times: 8:00 AM – 3:00 PM


Readings: Chemical Basis of Life p 50-74; Cells p75-113; Water p 810-829

Course Description: CEP 802 (taught as 5 modules over 5 days, for 2 ½ weekends) 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.

Today’s class will cover the following topics in the order below:

- atomic theory
- chemical compounds and bonds (covalent, ionic, hydrophilic/hydrophobic, hydrogen bonds)
- organic compounds, bonds and valences
- biomolecules (proteins, carbohydrates, nucleic acids and lipids)
- 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 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.

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Master’s Program in Clinical Psychopharmacology

COURSE OUTLINE

Course # & Title: CEP 802 Introduction to Chemistry and Biochemistry for the Prescribing Psychologist

Credit Hours: 3.0

Location: Milton Hall, Room 81

Class Meeting Dates: December 18, 2010

Instructor(s): Douglas W. Hoffman, Ph.D.

Class Meeting Times: 8:00 AM – 6:00 PM


Readings: Cellular Metabolism p 114-142; Genetics and Genomics 916-938

Course Description: This second day of CEP 802 continues the review of chemistry, organic chemistry and biochemistry, as 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.

On this second day, we will cover the following topics in the order below:

- biomolecules (proteins, carbohydrates, nucleic acids and lipids)
- enzymes and metabolism
- nucleic acids and protein synthesis
- transport processes in neurons
- biochemical mechanisms of neuronal signaling

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:

1. The basics of how the body utilizes chemical processes to extract energy from food (intermediary metabolism and oxidative phosphorylation).
2. The relationships and similarities between oxidative phosphorylation and drug metabolism (cytochrome P<sub>450</sub> system).
3. The biochemical principles underlying the actions of neurotransmitters and second messengers.
4. The biochemical bases of transport mechanisms in the body.

**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.

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Master’s Program in Clinical Psychopharmacology

COURSE OUTLINE

Course # & Title: CEP 802 Survey of Human Physiology and Neurophysiology

Credit Hours: 3.0

Location: Milton Hall, Room 81

Class Meeting Dates: December 19, 2010

Instructor(s): Douglas W. Hoffman, Ph.D.

Class Meeting Times: 8:00 AM – 3:00 PM


Readings: Review Nervous System 1 p 353-381 and Water 810-829

Course Description: This section of CEP 802 covers anatomical and physiological concepts underlying central and peripheral nervous system function. Cellular neurophysiology concepts such as the resting potential, action potential and basic ion channel kinetics will be reviewed, as will neurotransmitter receptor function. Second messengers and neural plasticity are also studied in depth. An integrated view of the electrical functioning of the brain, with a brief introduction to electroencephalographic concepts, will be introduced. A thorough review of electrical activity and contractility of the heart will be presented and understanding of the electrocardiogram (ECG or EKG) will be introduced. 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 cellular and molecular nervous system biology and regulatory processes, as well as the second messenger systems and the endocrine system along with the interface of various hormones and other neurotransmitters, and sensory system physiology.
2. Know the functions of ion channels and the cell membrane in the propagation of electrical activity in the nervous system.
3. Understand the basic neurodiagnostic markers of neurobehavioral disorders (e.g., as found on EEG and diagnostic imaging, and in neuropsychological assessment).
4. Understand electrical activity and contractility in the heart and how normal and pathological states are represented in the electrocardiogram.
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.

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COURSE OUTLINE

Course # & Title: CEP 802 Human Physiology and Neurophysiology and Related Drug Groups for Treatment

Credit Hours: 3.0

Location: Milton Hall, Room 81

Class Meeting Dates: January 22, 2011

Instructor(s): Douglas W. Hoffman, Ph.D.

Class Meeting Times: 8:00 AM – 6:00 PM


Readings: Blood, p 522-551; Cardiovascular 552-615; Respiratory 735-773

Course Description: Today’s class will review normal and pathological functioning of major organ systems critical to pharmacology, especially the lungs, and include the interface of various hormones and other neurotransmitters. The discussion is organized around drug classes that affect the function of different organ systems. We will review basic cardiovascular system physiology and pathophysiology across the life span (e.g., rhythm and rate disorders such as prolonged QT interval) and include knowledge of interrelationships between cardiovascular functioning and (a) psychopharmacology (e.g., EKG changes secondary to TCAs, blood pressure changes secondary to psychotropics, beta blockers, and depression), and (b) psychopathology (e.g., mitral valve prolapse related to panic disorder, tachycardia related to generalized anxiety disorder). We will review basic pulmonary system physiology and pathophysiology and interrelationships between pulmonary functioning and a) psychopharmacology (e.g., theophylline and anxiety, beta blockers and asthma), and b) psychopathology (e.g., hypoxia versus dementia) 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:

1. Normal and pathological functioning of major organ systems critical to pharmacology with particular detail about lung functioning.

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
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Course Outline

Course # & Title: CEP 802 Human Physiology and Neurophysiology and Related Drug Groups for Treatment

Credit Hours: 3.0

Location: Milton Hall, Room 81

Class Meeting Dates: January 23, 2011

Instructor(s): Douglas W. Hoffman, Ph.D.

Class Meeting Times: 8:00 AM – 3:00 PM


Readings: Absorption and Excretion Unit 651-809

Course Description: Today’s class will review normal and pathological functioning of major organ systems critical to pharmacology, especially the liver and kidneys and include the interface of various hormones and other neurotransmitters. We will cover basic renal/genitourinary system physiology and pathophysiology and interrelationships between renal/genitourinary functioning and (a) psychopharmacology (e.g., effect of psychotropic substances on urinary/sexual functioning), and (b) psychopathology (e.g., urinary tract infection and mental status change in the elderly) as well as basic hepatic system physiology and pathophysiology. 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:

1. Normal and pathological functioning of major organ systems critical to pharmacology; e.g. liver, kidney.

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

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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 Program in Clinical Psychopharmacology

COURSE OUTLINE

Course # & Title: CEP 803 Principles of Pharmacology I
Credit Hours: 3.0
Location: Milton Hall, Room 81
Class Meeting Dates: February 19, 2011
Instructor(s): Douglas W. Hoffman, Ph.D.
Class Meeting Times: 8:00 AM – 6:00 PM
Readings: Julien Intro and Pharmacokinetics p 1-37; Review Shier Water 810-829 and Respiratory and Urinary Systems 735-809

Here are some useful web sites that will help you review pharmacokinetics:

The Merck Manuals Online Medical Library Clinical Pharmacology Section: provides a general review of pharmacokinetic parameters: absorption, bioavailability, distribution, excretion and metabolism, and associated calculations.

The Merck Manuals Online Medical Library Pediatrics Section: provides the same information as above for the pediatric population.

PJ Online, the official Web site of The Pharmaceutical Journal (the journal of the Royal Pharmaceutical Society of Great Britain), provides a series of 4 articles reviewing the pharmacokinetic principles of drug therapy:

Back to Basics: Pharmacokinetics
Variability in Drug Dosage Requirements
Why Do Therapeutic Drug Monitoring
Examples of Dosage Regimen Design
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 P\textsubscript{450} enzyme system; how pH and pK\textsubscript{a} 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, excretion.
2. Learn the basic principles of pharmacodynamics.
3. Know the central role in drug metabolism of the cytochrome P\textsubscript{450} enzyme system.
4. Understand how pH and pK\textsubscript{a} determine the distribution of drugs across biological membranes.

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% = 12pts, 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 Program in Clinical Psychopharmacology

COURSE OUTLINE

Course # & Title: CEP 803 Principles of Pharmacology I
Credit Hours: 3.0
Location: Milton Hall, Room 81
Class Meeting Dates: February 20, 2011
Instructor(s): Douglas W. Hoffman, Ph.D.
Class Meeting Times: 8:00 AM – 3:00 PM

Readings: Julien Intro and Pharmacokinetics p 1-37; Review Shier Water 810-829 and Respiratory and Urinary Systems 735-809

Here are some useful web sites that will help you review pharmacokinetics:

The Merck Manuals Online Medical Library Clinical Pharmacology Section: provides a general review of pharmacokinetic parameters: absorption, bioavailability, distribution, excretion and metabolism, and associated calculations.

The Merck Manuals Online Medical Library Pediatrics Section: provides the same information as above for the pediatric population.

PJ Online, the official Web site of The Pharmaceutical Journal (the journal of the Royal Pharmaceutical Society of Great Britain), provides a series of 4 articles reviewing the pharmacokinetic principles of drug therapy:

Back to Basics: Pharmacokinetics[^2]
Variability in Drug Dosage Requirements[^3]
Why Do Therapeutic Drug Monitoring[^4]
Examples of Dosage Regimen Design[^5]
Course Description These lectures will cover the most basic principles of drug action, and set
the stage for all further discussion of drug action and drug use. The mechanisms of
pharmacokinetics and pharmacodynamics determine the properties that characterize all drugs,
such as route of administration, dosage and dosing interval. Pharmacokinetics, the manner in
which the body affects administered drugs, determines onset and duration of drug action as well
as what tissues, organs and organ systems are affected by any drug. In today’s class we will
further our understanding of the critical role of pharmacokinetics underlying the majority of
drug: drug interactions. Objectives include understanding the central role in drug metabolism
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. Understand the pharmacokinetic bases for drug: drug interactions.
2. Understand routes of drug excretion.

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
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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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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: CEP 803 Principles of Pharmacology II

Credit Hours: 3.0

Location: Milton Hall, Room 81

Class Meeting Dates: March 19, 2011

Instructor(s): Douglas W. Hoffman, Ph.D.

Class Meeting Times: 8:00 AM – 6:00 PM


Readings: Julien Pharmacodynamics and Neurotransmitters p 38-92

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 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.
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Course grades-
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- 60 pts total = “B” course grade
- 50 pts total = “C” course grade

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Course Outline

Course # & Title: CEP 803 Principles of Pharmacology II
Credit Hours: 3.0
Location: Milton Hall, Room 81
Class Meeting Dates: March 20, 2011
Instructor(s): Douglas W. Hoffman, Ph.D.
Class Meeting Times: 8:00 AM – 3:00 PM
Readings: Julien Pharmacodynamics and Neurotransmitters p 38-92

Course Description: Today’s class continues the exploration of 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. We will continue to study the implication of drug half lives in order to plan and devise appropriate dosage schedules. In addition, special attention will be given to receptor mechanisms of drugs tolerance and withdrawal. 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 dose-response relationships
2. Be able to manipulate dosing schedules to maximize clinical success
3. Understand receptor mechanisms of drug tolerance, dependence and withdrawal

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.
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SIAP/NEW MEXICO STATE UNIVERSITY  
Master’s Program in Clinical Psychopharmacology  

COURSE OUTLINE

Course # & Title: CEP 803 Laboratory Assessments

Credit Hours: 3.0

Location: Milton Hall, Room 81

Class Meeting Dates: April 16, 2011

Instructor(s): Douglas W. Hoffman, Ph.D.

Class Meeting Times: 8:00 AM – 6:00 PM


Readings: Shier, Laboratory Tests of Clinical Importance p 940-943. For those of you who would like to get a start on this topic, consider spending some time on www.labtestsonline.org. You will find it very informative and accessible. While you are not obligated to use one specific text, if you would like to have a lab test reference book, consider Fischbach, Frances, A Manual of Laboratory and Diagnostic Tests published by Lippincott, Williams & Wilkins or Corbett, Jane V, Laboratory Tests and Diagnostic Procedures with Nursing Diagnoses, (Appleton & Lange). The latter is oriented more to nurses rather than physicians and may be easier to interpret.

Course Description: The search for laboratory tests that can sensitively and reliably diagnose psychiatric disorders has been the Holy Grail of psychiatry for many years. To date, such quests have proved futile, although the remains of these efforts are still seen among psychiatrists.

Laboratory testing is an increasingly important part of clinical practice, and the proper use of the laboratory will contribute to better clinical outcomes in a number of ways. Laboratory tests can improve diagnosis of many disorders, help optimize psychopharmacological treatments, and identify and aid in the management of medical complications and adverse drug reactions. We will give an overview of the indications for different lab tests. For each area of testing, we will review the underlying biology, the advantages and disadvantages of different testing types and modalities, and the interpretation of test results with discussion of interventions that may follow critical lab test values. Our objectives are to gain a significant understanding of laboratory testing, to be able to read and interpret laboratory test reports and use these data in clinical care. 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: We will seek to cover the following material:

1. How and why to order laboratory tests and test panels.
2. Sampling techniques, including bodily components useful for different testing needs.
3. Techniques of blood collection, types of blood collection tubes, and laboratory testing procedures.
4. The components of blood, including laboratory tests to determine the cellular composition of blood and their interpretation.
6. Urine testing and collection of specimens.
7. Tests for function/dysfunction of specific organ systems; cardiac, hepatic, renal.
8. Concomitant general laboratory tests for psychotropic medications.
10. Tests for drugs of abuse, including on-site testing.
11. Information resources in laboratory medicine.
12. Laboratory tests in psychiatry.
13. Genetic testing relevant to psychopharmacology.
14. Other testing modalities, such as ECG, CAT scans, MRIs.

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.

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Course # & Title: CEP 806  Physical Assessment – Review of Systems and the Evaluation of Systems with Demonstrations of Normal and Abnormal Findings

Credit Hours: One of Five Class Sessions Earning 3.0 Credit Hours Comprising CEP 806

Location: Milton Hall, Room 81

Class Meeting Date: April 17, 2011

Instructor(s): TBA

Class Meeting Times: 8:00 AM – 2:00 PM

Pages: 3 – 124,

Watch: Video demonstration of a physical exam accompanying the text prior to April 17, 2011.

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 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. Students will learn 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 learn the process of identifying skin disorders, including drug rashes and Stevens-Johnson Syndrome, which can be a side effect of various psychotropic medications.
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:
   a. establishing appropriate doctor-patient relationships in conducting physical exams and demonstrating the respect for patient privacy
   b. using standard precautions in infection control
   c. taking and recording temperature, height, weight, and blood pressures
   d. taking patient and family history
3. Develop basic familiarity techniques (such as inspection, palpation, percussion, auscultation) as 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 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% = 12pts, 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 Program in Clinical Psychopharmacology

COURSE OUTLINE

Course # & Title: CEP 806 - Physical Assessment – Practical Skills Demonstration and Practice
Credit Hours: One of Five Class Sessions Earning 3.0 Credit Hours Comprising CEP 806
Location: Family Medicine Center
Class Meeting Date: May 14, 2011
Instructor(s): TBA
Class Meeting Times: 8:00 AM – 6:00 PM

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 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 continues the introduction to the practical skills physical assessment. Students will practice 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. Students will practice using the tools required in the administration of a basic physical. Students will receive extensive teaching of basic methods of physical assessment, extensive practice conducting basic physical assessment such as taking blood pressure and other vital signs, otoscopic and stethoscope examinations and basic interpretation of laboratory results.

Equipment:
Stethoscope
Blood Pressure Cuff
Reflex Hammer
Tuning Fork
Pen light
Snellen Chart
Other equipment needed to conduct physical examinations will be provided

**Course Objectives:**
Students will:

1. Develop and demonstrate basic familiarity with physical assessment techniques including:
   a. Asepsis during physical assessment (PA)
   b. Proper use of PA equipment
   c. Inspection, palpation, auscultation, percussion
2. Correctly obtain and interpret baseline vital sign data
3. Perform a basic physical examination

**Evaluation:** There will be a formal evaluation at the end of this class. Students must demonstrate competency in the following skills by the end of this second of two classes providing an overview of physical assessment:
   1. Obtain a comprehensive and focused history
   2. Perform a comprehensive physical examination, including vital signs

Any student receiving a grade of “B” or better on each of the two skills will have demonstrated competence in the skills.

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SIAP/NEW MEXICO STATE UNIVERSITY
Master’s Program in Clinical Psychopharmacology

COURSE OUTLINE

Course # & Title: CEP 806 - Pathophysiology and Physical Assessment of the Immune System

Credit Hours: One of Five Class Sessions Earning 3.0 Credit Hours Comprising CEP 806

Location: Milton Hall, Room 81

Class Meeting Date: May 15, 2011

Instructor(s): TBA

Class Meeting Times: 8:00 AM – 6:00 PM


Pages: See the lists of lab tests of immune function on pp 1206-1207 and review the individual tests indicated in the lists.

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 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.

Equipment:
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.

Grading

Assignments Points Possible
Tests (5 @ 12 pts ea, 90% = 12pts, 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 Program in Clinical Psychopharmacology

COURSE OUTLINE

Course # & Title: CEP 806 – Pathophysiology and Physiological Assessment of the Cardiovascular and Lymphatic Systems

Credit Hours: One of Five Class Sessions Earning 3.0 Credit Hours Comprising CEP 806

Location: Milton Hall Room 81

Class Meeting Date: June 11, 2011

Instructor(s): TBA

Class Meeting Times: 8:00 AM – 6:00 PM


Pages: See the lists of lab tests of cardiovascular function on pp 1206-1207 and review the individual tests indicated in the lists

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 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 it's 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 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**

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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 OUTLINE

Course # & Title: CEP 806 – Physical Assessment of the Cardiovascular System

Credit Hours: One of Five Class Sessions Earning 3.0 Credit Hours Comprising CEP 806

Location: Family Medicine Center

Class Meeting Date: June 12, 2011

Instructor(s): TBA

Class Meeting Times: 8:00 AM – 3:00 PM


Watch: Video demonstration of cardiovascular evaluation accompanying the text prior to June 11, 2011.


Pages: See the lists of lab tests of immune function on pp 1206-1207 and review the individual tests indicated in the lists

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 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 practice assessment of the cardiovascular system. Students will identify laboratory tests appropriate for assessing the cardiovascular system.
Equipment:
- Stethoscope
- Otoscope
- Blood Pressure Cuff
- Other equipment needed to conduct physical examinations

Objectives:
Students will:

1. Listen to heartbeats and identify normal heart sounds from abnormal heart sounds.
2. List signs of when they should refer a patient for cardiovascular evaluation.
3. Be able to apply analytical reasoning and problem solving to a variety of selected clinical case situations of the cardiovascular system.
4. Be able to interpret normal from abnormal in both anticipated and actual findings in a comprehensive health assessment of the cardiovascular system.
5. List appropriate assessment techniques that are used in data collection and analysis of cardiovascular systems.
6. List markers in blood tests that are indicative of blood dyscrasias or heart disorders.
7. Demonstrate critical thinking and use of research findings in the analysis of a comprehensive health assessment of the cardiovascular system.
8. Discuss research about the etiology and treatment from a biopsychosocial perspective of Type A personality.

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.

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Tests (5 @ 12 pts ea, 90% = 12pts, 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 Program in Clinical Psychopharmacology

COURSE OUTLINE

Course # & Title: CEP 807 – Pathophysiology and Physiological assessment of the Pulmonary System

Credit Hours: One of Five Class Sessions Earning 3.0 Credit Hours Comprising CEP 806

Location: Milton Hall  Room 81

Class Meeting Date: July 16, 2010

Instructor(s): TBA

Class Meeting Times: 8:00 AM – 6:00 PM


Pages: See the lists of lab tests of pulmonary function on pp 1206-1207 and review the individual tests indicated in the lists

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 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 deoxygenated 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 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.

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SIAP/NEW MEXICO STATE UNIVERSITY  
Master’s Program in Clinical Psychopharmacology  

COURSE OUTLINE

Course # & Title: CEP 807 Physical Assessment of the Pulmonary System

Credit Hours: One of Five Class Sessions Earning 3.0 Credit Hours Comprising CEP 807

Location: Family Medicine Center = Memorial Medical Center

Class Meeting Date: July 17, 2011

Instructor(s): TBA

Class Meeting Times: 8:00 AM – 3:00 PM


Watch: Video demonstration of pulmonary evaluation accompanying the text prior to July 17, 2011.


Pages: See the lists of lab tests of immune function on pp 1206-1207 and review the individual tests indicated in the lists

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 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. Be able to complete a physical examination of the pulmonary system.
2. Be able to demonstrate basic life support techniques, such as the Heimlich maneuver, for removal of obstructive pulmonary difficulties.
3. Be able to demonstrate proficiency in recognizing normal breath sounds from abnormal breath sounds, such as rales.
4. List criteria for discriminating shortness of breath associated with panic disorder from that associated with disease states.
5. List five conditions under which he or she would refer a patient to a pulmonary specialist.
6. Discuss the pathophysiological basis of common abnormal assessment findings in the pulmonary and circulatory systems.
7. Interpret assessment findings for the pulmonary system logically based on an understanding of pathophysiological mechanisms.
8. Apply analytic reasoning and problem solving to a variety of selected clinical case situations of the pulmonary system.
9. Interpret normal from abnormal in both anticipated and actual findings in the comprehensive health assessment of pulmonary and circulatory systems.
10. Synthesize assessment findings of pulmonary system into diagnoses using a deliberate and systematic process of data collection and analysis.
11. 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 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.

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Course # & Title: CEP 807 – Neurological Disorders

Credit Hours: One of Five Class Sessions Earning 3.0 Credit Hours Comprising CEP 807

Location: Milton Hall Room 81

Class Meeting Date: August 13, 2011

Instructor(s): TBA

Class Meeting Times: 8:00 AM – 6:00 PM


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 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 basic neurological disorders. Special emphasis is given to the cranial nerves and function.

Objectives:

Students will:

1. Describe the kind of cognitive deficits associated with brain injury in the frontal lobe, temporal lobe, occipital lobe, midbrain, and brain stem.
2. Explain the difference between upper motor neuron and lower motor neuron dysfunction.
3. Be able to outline the various cortical and spinal thalamic tracts.
4. Be able to discriminate which of these tracts is ipsilateral and which are
contralateral, and the significance of each.
5. Describe various seizure disorders, their symptoms and treatment.
7. List symptoms of a closed-head injury and appropriate psychological intervention.
8. Describe the symptoms of Alzheimer’s disease, and discriminate that from other kinds of dementia in geriatric and other patients.
10. Describe the differences in a false seizure disorder from actual seizure disorders.
11. Be familiar with EEGs and the types of waves displayed in them.
12. Describe the difference in function and results of X-rays, CAT scans, and MRIs.
13. Identify major loss of white matter and gray matter on an MRI.
14. Be familiar with EEG patterns of various seizure disorders.
15. Describe the symptoms and etiology of cluster, tension, and migraine headaches.
16. Describe a holistic biopsychosocial mode of intervention in treating each of these headache disorders.
17. Describe the neuron pathways for vision from the eyes to the brain.
18. Describe the neuron pathways for hearing from the ears to the brain.
19. Explain the differences between Broca and Weirnicke’s brain location involvement in language.
20. Describe the pathophysiological mechanisms and relevant assessment findings in the neuropathology of children and the elderly.
21. Interpret assessment findings for the neuropathology of children and the elderly.
22. Apply analytic reasoning and problem solving to a variety of selected clinical case situations of the children and elderly neuropathology.
23. Synthesize assessment findings of neurological exam and neuropsychological exam for the children and elderly.

**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.

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# Course Outline

**Course # & Title:** CEP 805 – Neurological Assessment and Examination

**Credit Hours:** One of Five Class Sessions Earning 3.0 Credit Hours Comprising CEP 807

**Location:** Family Medicine Center

**Class Meeting Date:** August 14, 2011

**Instructor(s):** TBA

**Class Meeting Times:** 8:00 AM – 3:00 PM


Watch: Video demonstration of neurological evaluation accompanying the text prior to August 13, 2011.

Neurological Examination Video to be reviewed prior August 13 in its entirety – Provided to students with permission with the following acknowledgement: Movies drawn from the Neurologic Exam and PediNeurologic Exam websites are used by permission of Paul D. Larsen, M.D., University of Nebraska Medical Center and Suzanne S. Stensaas, Ph.D., University of Utah School of Medicine. Additional materials for Neurologic Exam are drawn from resources provided by Alejandro Stern, Stern Foundation, Buenos Aires, Argentina; Kathleen Digre, M.D., University of Utah; and Daniel Jacobson, M.D., Marshfield Clinic, Wisconsin. Subsequent re-use of any materials outside of this program, presentation, or website requires permission from the original producers.

**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 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:** An important emphasis is in functional neuroanatomy and diagnosis and assessment of neurological disorders; role of different components of human nervous system in health and disease; stroke, seizures, and movement disorders (chorea, athetosis, dystonias, dyskinesias, Parkinsonism, akathesia, iatrogenic neurological disorders). Neurological assessment and examination will be practiced.

**Objectives:**
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 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.

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

**Course # & Title:** CEP 807 – Pathophysiology of the Renal System and Male Reproductive System

**Credit Hours:** One of Five Class Sessions Earning 3.0 Credit Hours Comprising CEP 807

**Location:** Milton Hall, Room 81

**Class Meeting Date:** September 17, 2011

**Instructor(s):** TBA

**Class Meeting Times:** 8:00 AM – 6:00 PM

**Required Text(s):**

**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 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 the 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.

Objectives:
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 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.

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SIAP/NEW MEXICO STATE UNIVERSITY
Master’s Program in Clinical Psychopharmacology

COURSE OUTLINE

Course # & Title: CEP 807 – Physical Assessment of the Renal System

Credit Hours: One of Five Class Sessions Earning 3.0 Credit Hours Comprising CEP 807

Location: Family Medicine Center

Class Meeting Date: September 18, 2011

Instructor(s): TBA

Class Meeting Times: 8:00 AM – 3:00 PM

Required Text(s):
  Pages (415 – 450, 501 - 512)
  Pages: See the lists of lab tests of urologic studies on pp 1212 and review the individual tests indicated in the lists

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 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 identify laboratory tests appropriate for assessing the renal system and male reproductive system. Students will complete case studies regarding pathophysiology of the renal system and male reproductive system in which they integrate their understanding of the diagnosis and treatment.
Objectives:
Students will:

1. Practice examination of the abdomen. The students will not perform examinations of the male or female genitalia.
2. Discuss the pathophysiological basis of common abnormal assessment findings in the renal and male genito-urinary system.
3. Interpret assessment findings for the renal and male genito-urinary system logically based on an understanding of pathophysiological mechanisms.
4. Apply analytic reasoning and problem solving to a variety of selected clinical case situations of the renal and male genito-urinary system.
5. Interpret normal from abnormal in both anticipated and actual findings in the comprehensive health assessment of the renal and male genito-urinary system.

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.

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Course grades-
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Course outline for the Master’s Program in Clinical Psychopharmacology at SIAP/NEW MEXICO STATE UNIVERSITY.

Course # & Title: CEP 808 - Pathophysiology and Physical Assessment of the Gastrointestinal System

Credit Hours: One of Five Class Sessions Earning 3.0 Credit Hours Comprising CEP 808

Location: Milton Hall  Room 81

Class Meeting Date: October 15, 2011

Instructor(s): TBA

Class Meeting Times: 8:00 AM – 6:00 PM


Pagana, D, and Pagana, T. Mosby's Manual of Diagnostic and Laboratory Tests. Mosby, 2010 (Pages TBA) Pages: See the lists of lab tests of gastrointestinal and hepato-biliary functioning on pp 1208-1209 and review the individual tests indicated in the lists

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 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.
Objectives:

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.

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.

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Course Outline

Course #: CEP 808 - Physical Assessment of the Gastrointestinal System

Credit Hours: One of Five Class Sessions Earning 3.0 Credit Hours Comprising CEP 808

Location: Family Medicine Center

Class Meeting Date: October 16, 2011

Instructor(s): TBA

Class Meeting Times: 8:00 AM – 3:00 PM

Required Text(s):
  Pages (415 – 450, 501 - 512)
  Watch: Video demonstration of abdomen evaluation accompanying the text prior to October 16, 2011.

  Pages: See the lists of lab tests of gastrointestinal and hepatobiliary studies on pp 1208 & 1209 and review the individual tests indicated in the lists

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 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 identify laboratory tests appropriate for assessing the gastrointestinal including the hepatobiliary system. Students will complete case studies
regarding pathophysiology of the gastrointestinal system in which they integrate their understanding of the diagnosis and treatment.

**Objectives:**

Students will:

1. Describe common the symptoms and etiology of ulcer.
2. Describe common the symptoms and etiology of diverticulitis.
3. Describe common the symptoms and etiology of Crohn’s Disease.
4. Describe common the symptoms and etiology of irritable bowel syndrome.
5. Describe common the symptoms and etiology of GERD.
6. Describe common the symptoms and etiology of hiatal hernia.
7. Describe common the symptoms and etiology of jaundice.
8. Describe common the symptoms and etiology of appendicitis.
9. Describe side effects of various psychotropic medications that may interfere with normal digestive processes.
10. Describe effects of certain psychotropic medications that can aid in the treatment of digestive illnesses.
11. Identify lab tests and explain the purposes of lab tests associated with liver functioning.
12. 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 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.

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SIAP/NEW MEXICO STATE UNIVERSITY  
Master’s Program in Clinical Psychopharmacology

COURSE OUTLINE

Course # & Title: CEP 808 Pathophysiology and Physiological Assessment of Endocrine and Exocrine Functions, Female Reproductive System

Credit Hours: One of Five Class Sessions Earning 3.0 Credit Hours Comprising CEP 808

Location: Milton Hall, Room 81

Class Meeting Date: November 12, 2011

Instructor(s): TBA

Class Meeting Times: 8:00 AM – 6:00 PM

Pages: See the lists of lab tests of endocrine studies on pp 1207 & 1208 and review the individual tests indicated in the lists

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 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.
Objectives:
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 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% = 12pts, 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 Outline

Course # & Title: CEP 808 – Pathophysiology and Physiological assessment of Pain Disorders and the Female Reproductive System

Credit Hours: One of Five Class Sessions Earning 3.0 Credit Hours Comprising CEP 808

Location: Family Medicine Center

Class Meeting Date: November 13, 2011

Instructor(s): TBA

Class Meeting Times: 8:00 AM – 6:00 PM

Required Text(s):
- Pagana, D, and Pagana, T. Mosby's Manual of Diagnostic and Laboratory Tests. Mosby, 2010 Pages: See the lists of lab tests of reproductive system functioning on pp 1211 & 1212 and review the individual tests indicated in the lists

Watch: Video demonstration of examination of female genitalia as well as pain assessment accompanying the text prior to November 13, 2011.

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 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.

Objectives:
Students will:
1. Be familiar with the elements of the examination of the female reproductive system.
2. Learn the most common diseases of the female reproductive system.
3. Understand breast examination and breast pathologies.
4. Understand the assessment of pain disorders.
5. List psychotropic medications that may also help in the treatment of pain.
6. List psychotropic medications that may also help in the treatment of parathesis.
7. Describe ways of differentiating psychogenic and pathophysiological sources of pain.
8. Explain phantom limb pain.
9. Describe various types of sleep disorders including insomnia, sleep apnea, parasomnias.

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% = 12pts, 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 808 – Demonstration of Competence in Comprehensive Physical Assessment

Credit Hours: One of Five Class Sessions Earning 3.0 Credit Hours Comprising CEP 808

Location: Family Medicine Center

Class Meeting Date: December 10, 2011

Instructor(s): TBA

Class Meeting Times: 8:00 AM – 6:00 PM


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 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 complete the demonstration of their competence at comprehensive physical examination and assessment. The student will, in addition to demonstrating competence in performing basic physical and neurological examinations, also demonstrate competence in the interpretation of common laboratory tests assessing the functioning of the physical systems. Finally the student will demonstrate the ability to integrate reports of radiological and nuclear imaging as well as electrophysiological assessments of brain and cardiovascular functioning in a comprehensive view of a patient’s health status.
Objectives:
Students will:

1. Learn to evaluate and interpret findings from elements of physical assessment
2. Learn to integrate the findings from the various components of physical assessment into an overall determination of a patient’s health status
3. Evaluate a patient’s physical capacity to absorb, distribute, metabolize and eliminate medications based on the assessment of the patient’s physical status
4. Assess a patient’s physical capacity to withstand the physical impact of psychoactive medications

Evaluation: There will be a formal evaluation of student skill at the end of this class. Students must demonstrate competency in performing:

1. a “head to toe” physical examination including a neurological examination
2. evaluation and interpretation of laboratory test findings
3. evaluation and interpretation of electrocardiographic reports
4. evaluation and interpretation of radiological and nuclear imaging reports

Any student receiving a grade of “B” or better will have demonstrated competence in that skill.

Grading

Assignments Points Possible
Tests (5 @ 12 pts ea, 90% = 12pts, 80% =11 pts, 70% = 10 pts) 60 pts.
Experiential case studies (30 pts) 30 pts.

Course grades-
70 pts total = “A” course grade
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SIAP/NEW MEXICO STATE UNIVERSITY
Master’s Program in Clinical Psychopharmacology

COURSE OUTLINE

Course # & Title: CEP 804 A Systemic View of Drug Groups for Treating Psychological Disorders

Credit Hours: 3.0

Location: Milton Hall, Room 81

Class Meeting Dates: December 11, 2011

Instructor(s): Douglas W. Hoffman, Ph.D.

Class Meeting Times: 8:00 AM – 3:00 PM


Readings: In Julien, read Benzodiazepines p 169-194; Part 3 Drugs that are used to Treat Psychological Disorders p 195-340 and Opioid Analgesics p 529-571. We will introduce you to the Clinical Handbook as well.

Course Description: Our goal in this class meeting is very straightforward; prior to your immersion in the very not-straightforward world of clinical psychopharmacology, we will examine in a methodical way many of the drug classes with which you will be dealing as a student and then as a prescribing psychologist. You will be shown how structure affects activity and how many classes of psychopharmacological agents are related. This knowledge can serve to help provide a deeper understanding of drug action. We will cover as many drug classes as we can in the time allotted.

Objectives: The students will:

1. Understand the principles underlying structure: function relationships in psychopharmacology
2. Understand how common structures can cause shared adverse drug reactions
3. Understand how common structures can lead to drug: drug interactions that complicate clinical outcomes
4. Understand differences in drug agonists and antagonists as they relate to chemical structure

**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.

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SIAP/NEW MEXICO STATE UNIVERSITY
Master’s Program in Clinical Psychopharmacology

COURSE OUTLINE

Course # & Title: CEP 804 Psychopharmacology II
Credit Hours: 3.0
Location: Milton Hall, Room 81
Class Meeting Dates: January 21, 2012
Instructor(s): John Preston, Psy.D.
Class Meeting Times: 8:00 AM – 6:00 PM
Required Text(s): Bezchlibnyk-Butler & Jeffries, Clinical Handbook of Psychotropic Drugs, 17th Ed, Hogrefe & Huber, 2007 (This handbook is revised annually, and the new edition is published every July. You may use an earlier edition if you have it, and we will work around the relatively small year-to-year differences)


Readings: For this class please read Stahl’s introductory chapters and the chapter on Depression.

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.

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.

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Assignments                                          Points Possible
Tests (5 @ 12 pts ea, 90% = 12pts, 80% =11 pts, 70% = 10 pts)       60 pts.
Experiential case studies (30 pts)                    30 pts.

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SIAP/NEW MEXICO STATE UNIVERSITY
Master’s Program in Clinical Psychopharmacology

COURSE OUTLINE

Course # & Title: CEP 804 Psychopharmacology II
Credit Hours: 3.0
Location: Milton Hall, Room 81
Class Meeting Dates: January 22, 2012
Instructor(s): John Preston, Psy.D.
Class Meeting Times: 8:00 AM – 3:00 PM

Required Text(s):
Bezchlibnyk-Butler & Jeffries, Clinical Handbook of Psychotropic Drugs, 17th Ed, Hogrefe & Huber, 2007 (This handbook is revised annually, and the new edition is published every July. You may use an earlier edition if you have it, and we will work around the relatively small year-to-year differences)

Stahl, S. (2008) Essential Psychopharmacology Online: Print and Online. Cambridge: University Press, (This is an upgraded and online version of Essential Pharmacology first published in 1998, please get the latest copy available.)

Readings: Please complete readings in Stahl on Depression.

Course Description: Students will continue the study of psychopharmacology for depressive disorders. The biochemical and physiological basis of adverse effects associated with antidepressant medication treatments are reviewed in detail. Students become proficient in understanding the mechanisms of action, effects, and side effects of the tricyclics, selective serotonin reuptake inhibitors, monoamine oxidase inhibitors, electroconvulsive therapy, as well as medications used off-label in the treatment of depressive disorders.

Objectives:

Students will:

1. Become proficient in selecting antidepressant medications with the appropriate neurochemical effects for particular symptoms and syndromes of depression.
2. Become proficient in selecting the most appropriate psychotropic medications for various types of depression given the side effect profile of each drug.
3. Develop skill in assessing the cost/benefit ratio associated with psychotropic use with individual patients with depression.

**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.

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SIAP/NEW MEXICO STATE UNIVERSITY
Master’s Program in Clinical Psychopharmacology

COURSE OUTLINE

Course # & Title: CEP 804 – Psychopharmacology of Bipolar Disorders

Credit Hours: One of Five Class Sessions Earning 3.0 Credit Hours Comprising CEP 804

Location: Milton Hall Room 81

Class Meeting Date: February 18, 2012

Instructor(s): Marlin C. Hoover, Ph.D., MS.

Class Meeting Times: 8:00 AM – 6:00 PM

Required Text(s):
Pages: 317 - 454

Pages: 667 - 720


Pages 115 – 132


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 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 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 mechanisms(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**

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**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.
Course # & Title: CEP 804 – Psychopharmacology of Disorders of Attention, Cognition, and Impulse Control

Credit Hours: One of Five Class Sessions Earning 3.0 Credit Hours Comprising CEP 804

Location: Milton Hall Room 81

Class Meeting Date: February 19, 2010

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

Class Meeting Times: 8:00 AM – 3:00 PM

Required Text(s):

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 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 become familiar with the use of medications for aiding cognitive functioning including stimulants and memory enhancers. Additionally, students will be introduced to the complex effects of many classes of medications including psychotropic medications on cognitive functioning. Students will learn appropriate psychotherapeutic intervention, means of monitoring and managing the medical issues that arise from psychotropic use. Current treatment algorithms of the management of attention deficit disorders and dementias will also be reviewed. Some time will also be spent on the use of psychotropic medication in the management of personality disorders.

Objectives:

Students will:

1. List and describe the drugs used in the treatment of ADHD and to discuss their various benefits and limitations.
2. Discuss the pros and cons of treating children off label with medications.
3. Discuss the research regarding increased cardiovascular events among children on ADHD medication.
4. Discuss the various types of drugs used for treating Alzheimer’s disease.
5. 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.
6. Learn and evaluate options for enhancing impulse control.
7. Understand the special circumstances of obtaining informed consent when the patient is a child or a cognitively impaired adult.

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% = 12pts, 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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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 OUTLINE**

**Course # & Title:** CEP 805 Clinical Psychopharmacology III

**Credit Hours:** 3.0

**Location:** Milton Hall, Room 81

**Class Meeting Dates:** March 17, 2012

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

**Class Meeting Times:** 8:00 AM – 6:00 PM

**Required Text(s):**
- Bezchlibnyk-Butler & Jeffries, Clinical Handbook of Psychotropic Drugs, 17th Ed, Hogrefe & Huber, 2007 (This handbook is revised annually, and the new edition is published every July. You may use an earlier edition if you have it, and we will work around the relatively small year-to-year differences)
- Stahl, S. (2008) Essential Psychopharmacology Online: Print and Online. Cambridge: University Press, (This is an upgraded and online version of Essential Pharmacology first published in 1998, please get the latest copy available.)

**Readings:**
- Please read Stahl’s chapter on Psychosis
- Complete DVD on Ethnopsychiatry

**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.

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.

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Course grades-
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60 pts total = “B” course grade
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SIAP/NEW MEXICO STATE UNIVERSITY
Master’s Program in Clinical Psychopharmacology

COURSE OUTLINE

Course # & Title: CEP 805 Clinical Psychopharmacology III
Credit Hours: 3.0
Location: Milton Hall, Room 81
Class Meeting Dates: March 18, 2012
Instructor(s): Elaine Foster, Ph.D.
Class Meeting Times: 8:00 AM – 3:00 PM
Required Text(s):
Bezchlibnyk-Butler & Jeffries, Clinical Handbook of Psychotropic Drugs, 17th Ed, Hogrefe & Huber, 2007 (This handbook is revised annually, and the new edition is published every July. You may use an earlier edition if you have it, and we will work around the relatively small year-to-year differences)
Stahl, S. (2008) Essential Psychopharmacology Online: Print and Online. Cambridge: University Press, (This is an upgraded and online version of Essential Pharmacology first published in 1998, please get the latest copy available.)

Readings: Please complete Stahl’s Chapter on Psychosis

Course Description: CEP 805, Day 2 continues the intensive study of the psychobiosocial model of care in the treatment of psychotic disorders. Current research regarding the efficacy of the medications is reviewed. Means for assessing side effects, such as AIMS testing, are presented. Special attention is given to the use of antipsychotics with children, adolescents, elderly and during pregnancy (teratogenicity).

This class also covers the treatment of personality disorders with psychotropic medication. The construct of viewing personalities disorders as separate entities or on a continuum with Axis I disorders is discussed as this concept relates to the selection of psychotropic medications. The research about use of psychotropics with personality disorders is also presented.

Objectives:
Students will:
1. 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.
2. Develop skill and assess the cost-benefit ratio of psychotropic use for adult, child, adolescent and elderly patients with psychotic disorders.
3. Become familiar with current treatment algorithms for the management of psychotic disorders.
4. 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.
5. Become familiar with efficacy research about the use of psychotropics 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 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.

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**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 Program in Clinical Psychopharmacology

COURSE OUTLINE

Course # & Title: CEP 805 – Psychopharmacology of Anxiety Disorders

Credit Hours: One of Five Class Sessions Earning 3.0 Credit Hours Comprising CEP 805

Location: Milton Hall  Room 81

Class Meeting Date: April 14, 2010

Instructor(s): Marlin C. Hoover, Ph.D., MS.

Class Meeting Times: 8:00 AM – 6:00 PM

Required Text(s):

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 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.

**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.

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**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 OUTLINE

Course # & Title: CEP 805 – Psychopharmacology of Anxiety Disorders (continued); Psychopharmacology of Sleep Disorders

Credit Hours: One of Five Class Sessions Earning 3.0 Credit Hours Comprising CEP 805

Location: Milton Hall Room 81

Class Meeting Date: April 15, 2012

Instructor(s): Marlin C. Hoover, Ph.D., MS.

Class Meeting Times: 8:00 AM – 3:00 PM

Required Text(s):

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 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 concludes the review of 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.

The course continues with a review of the assessment and treatment of sleep disorders. Special emphasis is placed on the psychopharmacological treatment of sleep disorders although the treatment of choice is often non-pharmacological. Criteria will be presented for evaluating the costs and benefits of various forms of treatment and combinations of treatments.

**Objectives:**

Students will:

1. Demonstrate an in depth understanding of the mechanism of actions of hypnotic medication.
2. Be able to select the most appropriate hypnotic for different kinds of sleep disorders (such as early morning awakening versus phase disorders).
3. 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.
4. Be able to discriminate or explicate the differences in metabolism of antidepressants, anti-anxiety agents and hypnotics when used with children, adolescents and adults.
5. Be able to discuss the special legal and ethical issues of employing antidepressant, anti-anxiety, and hypnotics with children and adolescents.
6. Identify the various etiologies of sleep disorders
7. 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 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.

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60 pts total = “B” course grade
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Course # & Title: CEP 809 Psychopharmacological Treatment in Special Populations
Credit Hours: 3.0
Location: Milton Hall, Room 81
Class Meeting Dates: May 19, 2012
Instructor(s): Leslie Kurtz, M.D.
Elaine S. LeVine, Ph.D.
Class Meeting Times: 8:00 AM – 6:00 PM
Required Text(s): Bezchlibnyk-Butler & Virani, A. Clinical Handbook of Psychotropic Drugs for Children and Adolescents, Hogrefe & Huber, 2004


Assignment: Foster DVD on Women
Sa DVD on Psychobiosocial Intervention with Hispanics and Native Americans

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.

**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.

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**Course grades-**

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- 60 pts total = “B” course grade
- 50 pts total = “C” course grade

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Course # & Title: CEP 809 Psychopharmacological Treatments in Special Populations

Credit Hours: 3.0

Location: Milton Hall, Room 81

Class Meeting Dates: May 20, 2012

Instructor(s): Leslie Kurtz, M.D.
Elaine S. LeVine, Ph.D.

Class Meeting Times: 8:00 AM – 3:00 PM

Required Text(s): Bezchlibnyk-Butler & Virani, A. Clinical Handbook of Psychotropic Drugs for Children and Adolescents, Hogrefe & Huber, 2004


Course Description: In this course, students will apply in depth study of psychobiosocial intervention in children and adolescents. The treatment of personality disorders, eating disorders and the importance of racial, ethnic, and gender differences is discussed in detail. The broad use of psychotropics off label with children is given serious consideration. Given complex cases (in which there are various medical conditions and non-responsiveness to early interventions) the student will be able to postulate appropriate next steps in the treatment of children and adolescents.

Objectives:

Students will:

1. Discuss the pros and cons of treating children with off-label medications.
2. Discuss the research concerning increased suicidality among adolescents using anti-depressants.
3. Discuss the research regarding increased cardiovascular events for those treated with stimulants.
4. Discuss the cost/benefit ratio of using antihypertensives with children to control anger and behavior.

5. 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 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.

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## Course Outline

**Course # & Title:** CEP 809 - The Ethical Practice of Integrated Behavioral Care

**Credit Hours:** One of Five Class Sessions Earning 3.0 Credit Hours Comprising CEP 809

**Location:** Milton Hall  Room 81

**Class Meeting Date:** June 16, 2012

**Instructor(s):** Marlin C. Hoover, Ph.D., MS.

**Class Meeting Times:** 8:00 AM – 6:00 PM

**Required Text(s):**


- Code of Ethics: American Psychological Association


- Treatment Guidelines for Specific Conditions: Promulgated by the American 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.

**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 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.

**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% = 12pts, 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 Program in Clinical Psychopharmacology  

COURSE OUTLINE  

Course # & Title:  CEP 809 - The Ethical Practice of Integrated Behavioral Care – Continued  

Credit Hours:  One of Five Class Sessions Earning 3.0 Credit Hours Comprising CEP 809  

Location:  Milton Hall  Room 81  

Class Meeting Date:  June 17, 2012  

Instructor(s):  Marlin C. Hoover, Ph.D., MS.  

Class Meeting Times:  8:00 AM – 3:00 PM  

Required Text(s):  
- DVD by Elaine Foster - Special Considerations in Treating Women  
- DVD by Mimi Sa – Psychobiosocial Intervention with Native American Groups  

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 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 continue review of ethics, standards of care, and practice models for prescribing psychologists. Additionally, issues related to the treatment of ethnically diverse populations and special will be addressed. The course will review differences among populations in drug metabolism and response as well as cultural expectations, practices, and alternative approaches to treatment. This course also reviews ethnopsychiatry and reviews
the epidemiology, pharmacokinetics and pharmacodynamics of drugs prescribed for women and across ethnic groups.

**Objectives:**
Students will:

1. Learn about constitutional factors leading to different reactions across ethnic groups to various classes of medications.
2. Learn extant knowledge regarding the side effects and efficacy of psychotropic medications across ethnic groups.
3. Develop advanced skills for explaining the use of psychotropic medications to patients within a context of Hispanic culture.
4. Develop advanced skills for explaining the use of psychotropic medications to patients within a context of Native American culture.
5. Be aware of particular issues in metabolism of drugs by women.
6. Explain the concepts of rapid and slow metabolizers and discuss how this may vary across cultural groups.
7. Learn about effective use of translators when dealing with individuals of another culture and language.
8. Become very knowledgeable about culturally-specific syndromes among Hispanics.
9. Learn about how these cultural syndromes differ across varied Hispanic groups: those from Spain, current immigrants from Mexico, Puerto Rico, Cuba and South America.
10. Learn about some of the specific health syndromes characteristic of Native Americans as well as some of illnesses across Native American groups.
11. Become more familiar with the role of the medicine man in all healing in traditional Native American cultures.
12. Be cognizant of issues in primary, secondary, and tertiary prevention of mental illness among the various ethnic groups, the rural and the poor.
13. Learn the basic principles of herbal medicines used for the treatment of mental disorders.
14. 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 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.

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**Assignments**

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**SIAP/NEW MEXICO STATE UNIVERSITY**  
Master’s Program in Clinical Psychopharmacology

**COURSE OUTLINE**

<table>
<thead>
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<th>Course # &amp; Title</th>
<th>CEP 809/SPED 495 – Assessment and Treatment of the Elderly: Psychopharmacology and Integrated Care</th>
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<tbody>
<tr>
<td>Credit Hours</td>
<td>One of Five Class Sessions Earning 3.0 Credit Hours Comprising</td>
</tr>
<tr>
<td>Location</td>
<td>Milton Hall Room 81</td>
</tr>
<tr>
<td>Class Meeting Date</td>
<td>July 14, 2012</td>
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<tr>
<td>Instructor(s)</td>
<td>Marlin C. Hoover, Ph.D., MS.</td>
</tr>
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<td>Class Meeting Times</td>
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<td>Virani, A.S., Bezchlibnyk-Butler, K., &amp; Jeffries, J. Clinical Handbook of Psychotropic Drugs. Hogrefe, 2009. (See references to age related adjustments with each medication)</td>
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<td>Pavuluri, M.N., and Janicak, P.G. Handbook of Psychopharmacotherapy: A Life-Span Approach (2nd Ed). Lippincott, Williams &amp; Wilkins, 2009 (See references to age related adjustments with each medication)</td>
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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.

**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
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SIAP/NEW MEXICO STATE UNIVERSITY
Master’s Program in Clinical Psychopharmacology

COURSE OUTLINE

Course # & Title: CEP 810/SPED 501 – Assessment and Treatment of the Elderly: Psychopharmacology and Integrated Care

Credit Hours: One of Five Class Sessions Earning 3.0 Credit Hours Comprising

Location: Milton Hall  Room 81

Class Meeting Date: July 15, 2012

Instructor(s): Marlin C. Hoover, Ph.D., MS.

Class Meeting Times: 8:00 AM – 3:00 PM


(Cases to be assigned)

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 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 continue a review of the treatment of the elderly. Psychopharmacology of the elderly is discussed in detail. The treatment of elderly patients with co-morbid conditions will be reviewed. Adjustments in dosing and dosing schedules will be reviewed.

**Objectives:**
Students will:

1. Discuss how various disease states of the elderly may affect their psychological functioning.
2. Delineate factors of the elderly that affect their metabolism on drugs.
3. Understand the physical disorders that often co-occur with again and the implications of those disorders for psychotropic treatment of the elderly.
4. Specify how drug dosage must be modified when treating the elderly.
5. Discuss the complexities regarding the large number of medications taken by very many elderly patients.

**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.

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Course Outline:

Course # & Title: CEP 810/SPED 501 Treatment of Substance Abuse and Dependence Disorders

Credit Hours: 3.0

Location: Milton Hall, Room 81

Class Meeting Dates: August 18, 2012

Instructor(s): Mitch Simson, M.D.

Class Meeting Times: 8:00 AM – 6:00PM


Articles: Simson, M. Drugs and Drugs class Material for New Mexico State University (May, 2004) and other reference material to be emailed to students.

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 pseudoaddiction
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 sympathomimetics 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.

**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.

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Course grades-
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60 pts total = “B” course grade
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SIAP/NEW MEXICO STATE UNIVERSITY  
Master’s Program in Clinical Psychopharmacology  

COURSE OUTLINE

Course # & Title: CEP 810/SPED 501 Treatment of Substance Abuse and Dependence Disorders

Credit Hours: 3.0

Location: Milton Hall, Room 81

Class Meeting Dates: August 19, 2012

Instructor(s): Mitch Simson, M.D.

Class Meeting Times: 8:00 AM – 3:00PM


Articles: Simson, M. Drugs and Drugs class Material for New Mexico State University (May, 2004) and other reference material to be emailed to students.

Course Description: This course will continue the broad overview of the principles of addiction medicine for the nine drug groups - 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.

Today’s class focuses on adjunctive pharmacotherapy for medication assisted treatment of addiction including drugs to reduce cravings and the use of methadone and buprenorphine for opiate replacement. We will also review complimentary and alternative medicine treatments for addiction and the use of drug testing, screening and monitoring patients with substance use disorders.

Objectives: Students will:
1. Learn about New Mexico’s Medical Marijuana program
2. 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.
3. Learn about the efficacy of alternative therapies used in the treatment of addictions.
4. Learn about specific steps and dangers involved in detoxification with patients addicted to various classes of medications.
5. Be knowledgeable about when detoxification can occur at home and when
hospitalization is required.
6. Understand the theory of the use of medications to treat cravings.
7. Learn about the specialized training needed in order to treat addicted patients with methadone or buprenorphine.
8. Learn about particular substance abuse issues in New Mexico and in particular the very heavy drug trafficking of heroin.
9. 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 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.

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Experiential case studies (30 pts) 30 pts.

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## COURSE OUTLINE

**Course # & Title:** CEP 810 – Synthesis and Overview

**Credit Hours:** One of Five Class Sessions Earning 3.0 Credit Hours Comprising CEP 810

**Location:** Milton Hall  Room 81

**Class Meeting Date:** September 15, 2012

**Instructor(s):** Marlin C. Hoover, Ph.D., MS.

**Class Meeting Times:** 8:00 AM – 6:00 PM


**Recommended:** Stern, T.A., and Hewrman, J.B. *Massachusetts General Hospital Psychiatry Update & Board Preparation, Second Edition.*

### 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 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.

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.

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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 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 continue the review and synthesis of material learned in the entire course series. Students will take a PEP like examination to assist in determining the student’s areas of knowledge strength and weakness to assist in further preparation. The student will be expected to successfully complete a sample PEP examination.

Objectives:
Students will:
1. Complete a PEP practice exam to determine areas of need for further study.
2. Complete a self-evaluation of learning accomplishment.
3. Prepare a study plan in preparation for taking the PEP.
4. Respond to an opportunity to commit to a schedule for the completion of practicum requirements for licensure.
5. Respond to an opportunity to commit to a schedule for attempting to take the PEP.
6. 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 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.

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Course # & Title: CEP 811 400 Hour Practicum  
Credit Hours: 3.0  
Location: Clinical Setting  
Class Meeting Dates: N/A  
Instructor(s): Elaine S. LeVine, Ph.D.  
Class Meeting Times: N/A  
Required Text(s):  
Assignment:  

Course Description: The first part of CEP 811 is credit for the 80 hour practicum with a primary care physician. This course is also credit for partial completion of the second practicum, treating 100 patients for a minimum of 400 hours under the supervision of a physician. The complete details about setting up this practicum are in the Practicum Manual given to each student and on the website, www.siaprxp.com.

Objectives:  
Students will:  

1. Refine skills in physical assessment.  
2. Observe and begin the practice of pharmacotherapy.
SIAP/NEW MEXICO STATE UNIVERSITY
Master’s Program in Clinical Psychopharmacology

COURSE OUTLINE

Course # & Title: CEP 812 400 Hour Practicum –continued-
Credit Hours: 3.0
Location: Clinical Setting
Class Meeting Dates: N/A
Instructor(s): Elaine S. LeVine, Ph.D.
Class Meeting Times: N/A
Required Text(s):

Assignment:

Course Description: Continuation and completion of supervised experience in psychopharmacology.

Objectives:
Students will:

3. Refine skills in the practice of pharmacotherapy.