

RXPP-PRESCRIP PRIV PRAC PSYCH

RXPP 6110. Introduction to Psychopharmacology for Psychologists I 3 Credits (3)

This course is an introduction to physiology and an overview of gross and microanatomy, with a focus on gross, micro, and chemical anatomy of the nervous system. By the end of the course, psychologists will have an up-to-date understanding of human psychology, anatomy, and neuroanatomy. Doctorate of Psychology required. Non-majors may be permitted to enroll in this course under limited circumstances with the permission of the course instructor, department head, and graduate school dean. May be repeated up to 3 credits.

RXPP 6120. Introduction to Psychopharmacology for Psychologists II 3 Credits (3)

Principles of organic chemistry and human biochemistry necessary for the understanding of psychopharmacology are discussed and related to the major transmitter systems and dynamics of transmission. By the end of the course, students will have an up-to-date understanding of biochemistry on which to base further didactic study in psychopharmacology. Doctorate of Psychology required. Non-majors may be permitted to enroll in this course under limited circumstances with the permission of the course instructor, department head, and graduate school dean. May be repeated up to 3 credits.

RXPP 6210. Clinical Psychopharmacology I 3 Credits (3)

This course begins with an introduction to the scope of pharmacology; pharmacoepidemiology, ethical, and legal issues (informed consent, State and Federal regulation of drugs and prescribing, sources of drug information and computer aids) and continues with the principles of pharmacokinetics and pharmacodynamics as they relate to the use of psychotropic medications. It concludes with an introduction to the treatment of anxiety disorders from a biopsychosocial model of care with special emphasis on psychopharmacology for anxiety disorders. Doctorate in Psychology required. Non-majors may be permitted to enroll in this course under limited circumstances with the permission of the course instructor, department head, and graduate school dean. May be repeated up to 3 credits.

RXPP 6220. Clinical Psychopharmacology II 3 Credits (3)

This course is a thorough investigation of the diagnosis and treatment of affective disorders from a biopsychosocial model of care. Particular emphasis is given to psychopharmacological treatment of depressive disorders and bipolar disorders. Doctorate in Psychology required. Non-majors may be permitted to enroll in this course under limited circumstances with the permission of the course instructor, department head, and graduate school dean. May be repeated up to 3 credits.

RXPP 6230. Clinical Psychopharmacology III 3 Credits (3)

This course is an intensive study of the treatment of psychosis from a biopsychosocial model of care. Special consideration is given to: first, second, and third generation antipsychotic drugs and their pharmacology and clinical uses; neurological and metabolic disorders associated with antipsychotic use; and appropriate use of antipsychotics in children and the elderly. Special attention is then given to child and adolescent psychopharmacology, including drugs used in pregnancy and lactation, teratogenicity, embryotoxicity, developmental disorders, conduct disorders, ADHD, and special considerations in use of approved drugs in

children. Doctorate in Psychology required. Non-majors may be permitted to enroll in this course under limited circumstances with the permission of the course instructor, department head, and graduate school dean. Restricted to the Clinical Psychopharmacology program. May be repeated up to 3 credits.

Learning Outcomes

1. Delineate the biochemical mechanisms underlying the pharmacological efficacy of the three generations of antipsychotic drugs.
2. Differentiate the effects and side effects of first, second and third generation of antipsychotic drugs.
3. Describe the effects of various antipsychotic drugs on the positive and negative symptoms of schizophrenia; including the neurological projections within the Central Nervous System.
4. Describe the biochemical and physiological basis of adverse reactions with antipsychotic treatments.
5. Select anti-psychotics using evidence based criteria and manage the medical issues that arise from their use.
6. Identify the various signs of side effects to antipsychotic drugs and use the appropriate techniques for assessing their severity including the administration of appropriate rating scales assessing those side effects (e.g. AIMS, BMI)
7. Examine the cost-benefit ratio of psychotropic use for adult, child, adolescent and elderly patients with psychotic disorders.
8. Become familiar with current treatment algorithms for the management of psychotic disorders and their limitations.
9. Learn which anti-psychotics that have FDA approval, as well as those that are used off-label in the treatment of children, adolescents and the elderly.

RXPP 6310. Pathophysiology for Psychologists I 3 Credits (3)

This course is an introduction to human clinical physical assessment, history taking, charting, and laboratory testing and neuroimaging. 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, akathisia, iatrogenic neurological disorders). Doctorate in Psychology required. Non-majors may be permitted to enroll in this course under limited circumstances with the permission of the course instructor, department head, and graduate school dean. May be repeated up to 3 credits.

RXPP 6320. Pathophysiology for Psychologists II 3 Credits (3)

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. The physical assessment and pathophysiology of eyes, ears, nose, and the immune system are studied in depth; anatomy and physiology of special senses; assessment of cranial nerves and sensory function; immune function and psychoimmunology. The physical examination and pathophysiology of the chest and pulmonary system and its relationship to the cardiac system is also studied. Doctorate in Psychology required. Non-majors may be permitted to enroll in this course under limited circumstances with the permission of the course instructor, department head, and graduate school dean.

Learning Outcomes

1. Receive an overview of the pathophysiological mechanisms, relevant assessment findings, treatment recommendations within the pulmonary system.
2. Describe at least 2 symptoms and treatments of COPD.
3. Name at least 2 the symptoms and treatments for asthma.
4. Identify at least 2 signs and symptoms of Cheyne-Stokes respiration.
5. List at least 2 the signs and symptoms of Atelectasis.
6. Explain at least 2 signs and symptoms of Pleurisy.
7. Label at least 2 the signs and symptoms of Emphysema.
8. Explain the signs and symptoms of Tuberculosis.
9. Name at least 2 diagnostic tests that are indicative of a low oxygen level. 1
10. Diagram 2 pathways of oxygenated and de oxygenated blood throughout the body. 1
11. Synthesize assessment findings of pulmonary system into diagnoses using a deliberate and systematic process of data collection and analysis. 1
12. 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.

**RXPP 6330. Pathophysiology for Psychologists III
3 Credits (3)**

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 assessment of pathophysiology of the gastrointestinal system is discussed in depth: digestion, absorption and excretion of drugs and nutrients from the GI system; disorders of GI function; hepatic function; innervation of GI tract; endocrine and exocrine functions of GI system; physical assessment of GI function. The functions and pathophysiology of the male and female reproductive system, endocrine system, and renal system are discussed as they relate to psychopharmacology. Doctorate of Psychology required. Non-majors may be permitted to enroll in this course under limited circumstances with the permission of the course instructor, department head, and graduate school dean. May be repeated up to 3 credits.

**RXPP 6410. Psychopharmacological Treatment in Special Populations I
3 Credits (3)**

The psychopharmacology of several special populations are 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, the importance of racial, ethnic, and gender differences and culturally sensitive practice is presented with applications. Pain management psychopharmacology is over-viewed, including: pharmacology of opioid and non-opioid analgesics; pain syndromes; acute and chronic pain; headache; pharmacological and non-pharmacological approaches to pain management; pharmacology and actions of abused substances: acute effects, withdrawal, biochemistry of tolerance and dependence, brain central reward pathways. Doctorate in Psychology required. Non-majors may be permitted to enroll in this course under limited circumstances with the permission of the course instructor, department head, and graduate school dean. May be repeated up to 3 credits.

Learning Outcomes

1. Use a GFR calculator to assess the renal function of an elderly patient.
2. Select the most appropriate antidepressant medication for an elderly patient considering the patient's current level of renal function.
3. Analyze a patient's medication list and calculate the Beers score for the patients' medication list.
4. Use knowledge gained from analysis of the patient's Beers score to select an appropriate medication for the following conditions: insomnia; psychosis; depression anxiety.
5. List three psychotropic medications that do not require a dose adjustment based on the patient's GFR.
6. Analyze an elderly patient's current medication list using the STOPP/START guidelines.
7. Select the most appropriate medication for a patient experiencing delirium consistent with the STOPP/START guidelines.
8. Calculate an elderly patient's vulnerability score using the VES – thirteen.
9. List three psychotropic medications that are hepatotoxic and should not be used in patients with cirrhosis. 1
10. List the 10 most common medical illnesses in the elderly. 1
11. Calculate the Child-Turcotte-Pugh Score of hepatic function for a patient. 1
12. Review the current availability of empirically validated Decision Support Tools (DST's) for the treatment of Late Life Depression (LLD) and decide whether the use of DST is supported by the evidence. 1
13. Defend a risk/benefit analysis for the use of the following medication classes in the elderly: SGA's; AZD Rx's; hypnotics; mood stabilizers. 1
14. Explain the relationship between outcome and sponsorship in studies of the comparative efficacy of psychotropic medications and psychotherapy in older adults. 1
15. List expected dosage adjustments for benzodiazepines, SSRI's, anticonvulsants, and hypnotics in older adults. 1
16. Select the appropriate medication for each of 5 patients in cases presented during the class.

**RXPP 6420. Psychopharmacological Treatment in Special Populations II
3 Credits (3)**

The pathophysiology and treatment of substance use disorders from a biopsychosocial model is presented. Issues of medical comorbidity are studied: psychopharmacological treatment in the medically compromised patient, including case studies and review of comprehensive treatment models; mental disorders due to a general medical condition and/or adverse drug reactions; and referral practices to specialists. Diagnostic rating scales and psychiatric instruments of use to the prescribing psychologist are presented. The course ends with an integration of psychotherapy and pharmacotherapy, including ethical issues such as the right to refuse treatment, treatment compliance/adherence, risk management, and the role of the medical psychologist in the modern, integrated healthcare system. Doctorate in Psychology required. Non-majors may be permitted to enroll in this course under limited circumstances with the permission of the course instructor, department head, and graduate school dean. May be repeated up to 3 credits.

**RXPP 6510. Supervised Experience in Psychopharmacology I
1-3 Credits (1-3)**

In this applied course, students employ their knowledge of psychopharmacology in treatment setting. Students will participate in the treatment of 50 patients for a minimum of 200 hours under the supervision of a physician. Number of credits taken to be determined

in consultation with RXPP Training Director. Maximum of 3 credit hours required by degree program. Doctorate in Psychology required. Non-majors may be permitted to enroll in this course under limited circumstances with the permission of the course instructor, department head, and graduate school dean. May be repeated up to 3 credits.

Learning Outcomes

1. Students will complete eighty hours of practicum in a health care setting while supervised by a licensed physician.
2. Students will demonstrate expertise in providing basic vitals, physical assessment, and laboratory interpretation skills they have been taught in class.
3. Students will demonstrate expertise in performing diagnostics (e.g. imagining studies), differential diagnoses, clinical medicine, and instrumentation.

RXPP 6520. Supervised Experience in Psychopharmacology II

1-3 Credits (1-3)

Continuation and completion of supervised experience in RXPP 6510. Students will participate in the treatment of 50 additional patients for a minimum of 200 hours under the supervision of a physician. The RXPP 6510/6520 sequence must be completed no sooner than three months and no later than three years from initiation. Number of credit hours taken to be determined in consultation with RXPP Training Director. Maximum of 3 credit hours required by degree program. Doctorate in Psychology required. Non-majors may be permitted to enroll in this course under limited circumstances with the permission of the course instructor, department head, and graduate school dean. May be repeated up to 3 credits.

Learning Outcomes

1. Students will be monitoring the psycho-biosocial treatment of 100 patients, for a minimum of 400 hours.
2. Students will demonstrate expertise in combining psychotropic medication along with psychotherapy.
3. Students will demonstrate knowledge and expertise is practicing enhanced patient education; and making psychotropic medication recommendations, management, and/or consulting with, as needed, allied health professionals.

RXPP 6996. Selected Topics

1-6 Credits (1-6)

Offered under various subtitles which indicate the subject matter covered. A maximum of 6 credits in any one semester and a total of 18 credits overall. Non-majors may be permitted to enroll in this course under limited circumstances with the permission of the course instructor, department head, and graduate school dean. May be repeated up to 18 credits.