Course Description
This course is designed to introduce students to the biochemical basis of behavior and a general knowledge of the main effects and side effects of the major classes of psychotropic drugs. Neurobiology will be described in a clear and understandable language in order to help the student with mastery of concepts in the field of psychopharmacology. A historical overview of medicinal approaches, drugs, and prominent healing traditions will initiate the course. A close relationship between the use of a particular class of drugs, the DSM-5 classification, and relevant case studies will be interwoven in this course in order to develop a comprehensive and meaningful image of the client. Essential principles of interpersonal neuroscience will be presented. Integration of prior courses in counseling with new, evolving knowledge in psychopharmacology will be a significant aspect of learning. Classroom instruction will be utilized to determine appropriate referrals for psychiatric evaluation and working with other mental health professionals in providing effective treatment. **Prior exposure and understanding of the DSM-5, case conceptualization and relevant client experience will be expected.** DSM-5 classification will be discussed relative to psychotropic medications.

Course Objectives

1. To introduce the concept of psychotropic medication as relevant, therapeutic and ethical co-partnering with mainstream counseling and psychotherapy.
2. To provide relevant historical background to the understanding of human experience, psychiatric diagnosis, and the development of the psychotropic drug industry.
3. To present basic neurobiology and its relevance to effective psychopharmacological intervention.
4. Exposure to neuroanatomy of the brain through video brain dissection
5. Examine the pharmacological effect of different drug classes on behavioral, cognitive, and central nervous system operations.
6. Examine the use of clinical diagnosis on the DSM-5 in the determination of pharmacological prescriptions.
7. Examine the application of drugs to the prevention and treatment of specific psychopathological dysfunctions.
8. Understand how factors such as ethnicity/culture, gender, age, sexual orientation, disability, religion/spirituality, and socioeconomic status may impact clinical diagnosis and treatment.
9. Understand the use of drugs in psychopharmacological research.
10. Understand the role of herbal treatments, vitamins and hallucinogens on human experience.
11. Become informed about how to collaborate with medical staff regarding psychotropic medication
12. Understand appropriate ethical guidelines to effective management of psychopharmacological care.
Pre-Requisites
Classified standing and successful completion of COUN 522A or 522B. Due to required knowledge base, COUN 522A or 522B cannot be taken concurrently with COUN 525.

Student Learning Outcome Language
As you know, the Counseling department tracks aspects of student learning (known as Student Learning Objectives or SLOs) and Dispositions (Professionalism and Fitness for the Profession) in numerous classes as part of the CACREP accreditation requirements. This helps as a source of feedback on our teaching and lets us know how students are doing on average and individually. In some classes, the SLO’s are assessed in the form of a rubric and in other classes it is simply a score from a paper or exam. There is nothing you need to do, but be aware that the information will be used to track and evaluate your progress in the program and will be part of your student record. Please see detailed information in your Student Handbook, as well as the form for Dispositions (which can be used at any time, but is always assessed in Coun 511, 530, and 584). There are at least three times when a student’s individual progress is formally examined by the faculty: (1) after they have completed their first semester; (2) at advancement to practicum (the semester prior to starting practicum); and (3) at advancement to research project (the semester prior to Final Project). At these points in time, all the assessment information (including any of the SLO assessments conducted, as well as information from advisement, course grades, and professor input) will be examined. The spirit of this is to make sure that you are on track, and if you are not, then our goal is to offer support and guidance so that you can get back on track. If there are serious concerns, this may involve a remediation process or, in rare cases, dismissal from the program. All of this information is outlined in your Student Handbook.

Calendar
Course Orientation: Introduction and Learning Expectations
Week 1
- Overview of syllabus
- Rationale for MFTs to study psychopharmacology
- Introduction to the integration of psychology, counseling, and neuroscience
- Basic Premises for Psychotropic Mediation Use
- Video: Brain Anatomy for Health Professionals- Normal Unfixed Brain (6:19 minutes)

Read:

Articles:


Springer, P. R., & Harris, S.M. (2010). Attitudes and Beliefs of Marriage and Family Therapists Regarding Psychotropic Drugs and Therapy. *Journal of Marital and Family Therapy*, 36, 361-375.

**Basic Neurobiology**

Week 2

- Fundamentals of the neuron
- Electrical & Chemical Transmission
- Arborization, Neurogenesis & Neuroplasticity
- Blood Brain Barrier
- Types of Neurotransmitters

**Note: QUIZ #1 (Surviving Schizophrenia)**

*Read:*


*Youtube Video: History of Psychiatry, 19th Century*

**Articles:**


History on the Discovery of Psychotropic Medication
Week 3

- Values, beliefs and behavior toward mental illness through history
- Influences of physical sciences on the understanding of mental well being
- Coal industry and early formation of pharmaceutical companies
- Emphasis on allopathic medicine
- Contributions of psychiatric advocates and evolving treatments
- Evolution of psychiatric nomenclature and the DSM

Read:


Articles:


Basic Neurophysiology and Brain Anatomy
Week 4

- Organization of the brain
- Brain and spinal cord description
- Brain site location of neurotransmitters
- Exploration of brain structure
- Changes in adolescent brain

Pharmacodynamics and Pharmacokinetics

- Drug administration
- Drug absorption, distribution, and metabolism
- Basic pharmacodynamic and pharmacokinetic principles
- Prescription and pharmacy terms
- Exploration of brain structure
- Change in Adolescent Brain

**Note: Reflection Paper (History of Psychopharmacology)**

*Read:*


**Neuroanatomy Videos:**

- Introduction: Neuroanatomy
- The Cerebellum
- Basil Ganglia
- Hypothalamus
- Central Localization
- Limbic System


Articles:


Basic Neuroscience Examination

Week 5  Social and Cultural Perspectives
- Sex and gender differences
- Cultural and ethnic differences
- Ethno pharmacology
- Brand-name and generic medications
- Treatment considerations

Read:


Articles:


**Psychopharmacology of Anxiety Disorders**  
**Week 6**

- History on the concept of anxiety
- Introduction of benzodiazapines
- Review of pharmacodynamics

*Read:*


*Articles:*


**Psychopharmacology of Unipolar Depression and Bipolar Disorders**

*Week 7*

- What is Depression?
- Discovery of Iproniazid
- Review of pharmacodynamics
- TCAs, MAOIs, SSRIs, and Heterocyclics
- Theories of anti-depressant chemical/biological action

**Read:**


**Articles:**


Psychopharmacology of Psychotic Disorders
Week 8

- History of the concept of psychosis
- Comparison of Neuroleptics with 2nd generation antipsychotics
- Review of pharmacodynamics
- Role of Extra-pyramidal Symptoms
- Benefits of Atypical agents
- Suggested treatment protocol

Read:


Articles:


**Medicating Children: Perspectives, Dilemmas, and Challenges**

Week 09

- Psychotropic medication for children and adolescents
- Review of pharmacodynamics (psychostimulants)
- Stimulant medication—Treatment of ADHD disorders of attention
- Mood stabilizers and Bipolar I with children
- Anti-depressant medication
- Anti-anxiety medication
- School issues and anxiety

*Read:*


*Articles:*


### Midterm Examination

**Week 10**

**Psychopharmacology of Personality Disorders and Other Related Disorders**
- Review of personality disorders
- Tailoring medication to symptom clusters
- Medical and psychiatric co-morbidity
- Chronic pain
- Eating disorders and obesity
- Impulse control disorders
- Red Flags: When to Reevaluate

**Read:**


**Articles:**

Psychopharmacology of Chemical Dependency and Co-Occurring Conditions

- Neurobiology of Addictive Behavior
- Types of Addiction Medication Agents
- Dopamine Hypothesis
- Dual diagnosis
- Co-Occurring conditions
- Drug prescription for dual-diagnosis clients

Read:


Articles:


Review of Case Studies

Week 12

*Integration of client history, DSM diagnosis, and psychotropic medication

NOTE: Interview Paper due

Role of Herbal Treatment, Vitamins, and Marijuana Use

Week 13

- Weeds, seeds, and New Age needs
- Why take Herbaceuticals?
- Problems in studying medicinal plants
- History of Marijuana use
- Overview of Hallucinogens

**Read:**


**Articles:**


Saki, K., Bahmani, M., & Rafieian-Kopaei, M. (2014). The effect of most important medicinal plants on two important psychiatric disorders (anxiety and depression)-a review. *Asian Pacific Journal of Tropical Medicine, 7,* S34-S42.


Ethical Issues in Psychopharmacology Consultation

Week 14

- Expected Standard of Care
- Co-occurring diagnostic conditions
- Current trends
- Professional practice guidelines
- Mental illness and freedom to refuse treatment
- Collaboration with prescribing professionals
- Recommended Ethical guidelines
- Use of Hallucinogens in healing process

Read:


Articles:


Final Examination
Week 15