

**Neurosensory/Psychiatry Integrated Pharmaceutical Care and Science (ICARE)**  
**SHENANDOAH UNIVERSITY**  
**Bernard J. Dunn School of Pharmacy**  
**REMIEDIATION COURSE SYLLABUS**

**720: Neurosensory/Psychiatry Integrated Pharmaceutical Care and Science (ICARE)**

**COURSE DESCRIPTION:**

Neurosensory/Psychiatry ICARE will present the students with the pathophysiology of common diseases in neurological and psychiatric disorders as well as the chemical, pharmacodynamic and pharmacokinetic properties of the drugs used to treat the diseases, and the therapeutic management of neurologic and psychiatric patients. This course is 3 credit hours for Shenandoah University visiting students.

**COURSE FORMAT:**

The course consists of a series of lectures and case discussions to develop the students' skills to assess, evaluate and apply information in order to make better informed, rational, responsible and ethical therapeutic decisions. Four exams will be given during the course, which are equally weighted to determine the course grade for Shenandoah University visiting students. Question types will vary, and include patient cases to assess application of the material. Exam 4 will be cumulative. *Note: The number of exams may vary based on the academic year in which the course is offered.*

**COURSE OBJECTIVES:**

At the completion of this course, the student will be able to:

1. Describe the pathophysiology of each neurologic and psychiatric disease discussed.
2. Explain the pharmacology of different classes of medications used to treat neurologic and psychiatric diseases.
3. Recall the brand and generic names as well as other properties of medications discussed.
4. Evaluate and select treatment options for neurologic and psychiatric diseases.
5. Evaluate clinical outcomes of treatment and management plans for neurologic and psychiatric diseases.
6. Apply an evidence-based approach to presented patient cases.
7. Provide patient counseling pointers and medication education to simulated patient cases.

In addition to the global course objectives noted above, individual lecture objectives and outcomes will be provided prior to each lecture or lecture series.

**REQUIRED TEXTS AND MATERIALS:**

- DiPiro JT, Talbert RL, Yee GC, Matzke GR, Wells BG and Posey LM, editors. *Pharmacotherapy: A Pathophysiologic Approach*. McGraw-Hill. (most recent edition)
- Brunton L, Chabner B, Knollman B, editors. *Goodman & Gilman's The Pharmacological Basis of Therapeutics*. McGraw-Hill. (most recent edition)

**RECOMMENDED TEXT:**

- Katzung BG, Masters SB, Trevor AJ, eds. *Basic & Clinical Pharmacology*. McGraw-Hill. (most recent edition)

Note: Editions may vary depending on availability. Required readings may also be drawn from other references as indicated by the lecturers, but are not required if they are not provided. Exam questions on required readings will primarily come from the DiPiro text above. Course content may be subject to copyright.

**GRADING SCALE** (*for students completing the course as a Shenandoah University visiting student*)

A	90-100%
B	80-89%
C	70-79%
D	60-69%
F	< 60%

**TOPICS:**

- Psychotherapy
- Substance Use Disorders I: Management of Alcohol Withdrawal/Dependence
- Substance Use Disorders II: Management of Addiction to Depressants of Abuse
- Antipsychotics Pharmacology
- Schizophrenia Pathophysiology/Therapeutics
- Schizophrenia Cases
- Antidepressants Pharmacology
- Depression Pathophysiology/Therapeutics
- Anxiety Agents Pharmacology
- Anxiety Disorders Pathophysiology/Therapeutics
- Depression/Anxiety Disorders Cases
- Obsessive Compulsive Disorder and PTSD
- Bipolar Disorder Pathophysiology
- Bipolar Disorder Pharmacotherapeutics/Cases
- Sleep Disorders Pathophysiology/Pharmacology/Therapeutics
- ADHD
- Antiepileptics Pharmacology
- Epilepsy Pathophysiology/Therapeutics
- Status Epilepticus
- Parkinson's Disease
- Neurocognitive Disorders
- Alternative Medications/Therapy in Mental Health

*Note: Topics may vary based on the academic year in which the course is offered.*