

**Covenant School of Nursing**  
**Instructional Module 4 Learning Guide**  
**Topic: Neurological Disorders**

| <b>Learning Goals/Outcomes</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
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| <p>Upon completion of this lesson, you will be able to:</p> <ul style="list-style-type: none"><li>• Compare and contrast the etiology, clinical manifestations, collaborative care, and nursing management of patients with neurological diseases.</li><li>• Implement primary care strategies for the clinical manifestations of seizures, Parkinson's disease, dementia, delirium, Alzheimer's disease, multiple sclerosis, amyotrophic lateral sclerosis, and stroke.</li><li>• Explain mechanisms that affect cerebral blood flow.</li><li>• Compare and contrast the cause and effect of ischemic and hemorrhagic strokes.</li><li>• Specify the etiology and nursing management of patients with degenerative disc disease and nerve root compression.</li><li>• Classify medications and side effects of medications administered for chronic neurologic disorders.</li></ul>                       |
| <b>Pre-Class Preparation</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <p>Required:</p> <ul style="list-style-type: none"><li>• Read Lewis, et.al, (2019). <i>Medical Surgical nursing</i> (11<sup>th</sup> ed.)<br/>Chapter 55: Assessment, pages 1279-1298 &amp; Table 55.9 Radiologic Studies &amp; 55.10 Electrographic Studies<br/>Chapter 57: Stroke<br/>Chapter 58: Seizure Disorders, Multiple Sclerosis, Parkinson's Disease, &amp; Amyotrophic Lateral Sclerosis<br/>Chapter 59: Dementia, Delirium, and Alzheimer's Disease<br/>Chapter 63: Low Back Pain and Degenerative Disc Disease</li><li>• Read Burchum &amp; Rosenthal, (2019). <i>Lehne's Pharmacology for Nursing Care</i> (10<sup>th</sup> ed.)<br/>Selected reading from Chapter 21, 22, 23, 24, and 25</li><li>• Review PowerPoint slides</li></ul> <p>Additional Resources:</p> <ul style="list-style-type: none"><li>• HESI Material: Refer to HESI across the modules</li><li>• Board Vitals</li></ul> |
| <b>Learning Activities</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <p>Classroom Activities:</p> <ul style="list-style-type: none"><li>• Lecture/voiceover PowerPoint</li><li>• Case Studies</li><li>• Video Clips</li><li>• Group Learning Activities</li><li>• Audience Participation Questions</li><li>• Muddy Waters</li></ul> <p>Laboratory/Clinical Activities:</p> <ul style="list-style-type: none"><li>• Integrate concepts of neurological disease processes and care in the clinical setting</li><li>• Integrate concepts of medication administration for chronic neurologic disorders into the clinical setting.</li><li>• Collaborate with other professions in the care of assigned patients.</li></ul> <p>Out of Class/Computer Assisted Activities:</p> <ul style="list-style-type: none"><li>• HESI Adaptive Quiz</li></ul>                                                                                                                                  |
| <b>Evaluation Methods</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <ul style="list-style-type: none"><li>• Unit Exam</li><li>• Classroom participation and discussion</li><li>• HESI Adaptive Quizzing</li><li>• HESI Fundamentals Examination, proctored</li><li>• Evidenced Based Practice Poster Project</li></ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |

| Texas DECs                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | QSEN Competencies                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
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| <p><b>Knowledge-</b> IA2, IIA1a,b, IIA2a,b, IIA3, IIA4, IIB2, IIB4, IIB5, IIB6, IIB7, IIB8, IIB9, IIB11, IIB12, IIC1a, IIC2ab, IIC3, IIC4ab, IIC5, IIC6, IIC7, IIC8, IID1abcd, IID2, IID3a, IID4abc, IID5a, IIE1ab, IIE2, IIE3ab, IIE4ab, IIE5, IIE6ab, IIE11ab, IIE12, IIF1, IIF2, IIF3, IIG1b, IIG2ab, IIG3ab, IIIA1, IIIA4, IIIA1ab</p> <p><b>Clinical Judgments and Behaviors-</b> IA1, IA2, IA3ab, IB2ab, IB3abc, IB4abc, IB5ac, IB6abc, IB7, IB8, IC2, IC3abc, IC4, IC5, IC6ab, IIA1, IIA2ab, IIA3, IIA4, IIB1, IIB2, IIB3ab, IIB4, IIB5, IIB6, IIB7, IIB8, IIB9, IIC1, IIC2, IIC3ab, IIC4, IIC5, IIC6, IIC7, IID2abcd, IID3abc, IID4, IIE1, IIE2abc, IIE3ab, IIE4, IIE5ab, IIE6abcd, IIE7abc, IIE8, IIE9, IIE10, IIE11, IIE12ab, IIF1abc, IIF2ab, IIF3ab, IIF5ab, IIG1, IIG2ab, IIG3, IIG4, IIG5ab, IIG7, IIIA2, IIIA3, IIIA4, IIIA5a, IIIB1, IIIB2, IIIB3abc, IIIB4, IIIB5, IIIB6, IIIB7, IIIB8, IIIB9, IIIC1, IIIC2ab, IIID1, IIID2, IIID3, IIIE1, IIIE3, IIIF1, IVA1, IVA2ab, IVB1ab, IVB2, IVB3abc, IVB5ab, IVC1abc, IVC2abc, IVC3ab, IVD1ab, IVD2, IVD3ab, IVD4, IVD5, IVE1abc, IVE2abc, IVE4</p> | <p>Patient Centered Care<br/>Teamwork and Collaboration<br/>Evidence-based Practice<br/>Quality Improvement<br/>Safety</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| IM Student Learning Outcomes                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | NCLEX Test Plan                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <p>Assessment and Intervention,<br/>Communication, Critical Thinking,<br/>Human Caring and Relationship,<br/>Management, Leadership, Teaching,<br/>Knowledge Integration</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | <p><b>Safe &amp; Effective Care Environment:</b> <i>Management of Care</i><br/> <b>Health Promotion &amp; Maintenance:</b> <i>Safety and Infection Control</i><br/> <b>Psychosocial Integrity:</b> <i>Behavioral Interventions, Coping Mechanisms, Sensory/Perceptual Alterations, Support Systems, Therapeutic Communication</i><br/> <b>Physiological Integrity:</b> <i>Basic Care and Comfort, Pharmacological and Parenteral Therapies, Reduction of Risk Potential, Physiological Adaptation</i><br/> <b>Physiological Integrity:</b> <i>Basic Care &amp; Comfort, Non-Pharmacological Comfort Interventions, Pharmacological &amp; Parenteral Therapies, Reduction of Risk Potential</i></p> |
| Concepts                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Faculty                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <p>Cognition, Comfort, Intracranial Regulation, Functional Ability,</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | <p>Sheryll Mae M. Coulombe, MSN. Medsurg-BC</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <p><b>Date originated:</b><br/>1/19/16</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | <p><b>Revision Dates:</b> 8/17/17, 2/5/18, 8/22/18, 10/3/19, 9/1/20,9/17/21<br/>10/17/22, 8/16/23, 1/17/24</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |