

Virginia Western Community College

PNE 110

Practical Nursing in Health and Disease II

Prerequisites: Admission to the Practical Nursing Program

Course Description: Studies the pathophysiology, signs and symptoms, prescribed medical and surgical treatments, and appropriate nursing care for the patient with selected disorders.

Semester Credits: 5 Lecture Hours - 0 Lab Hours – 5 Credit Hours

Required Materials

Textbook:

- Ford, Susan M. Roach's Introductory Clinical Pharmacology, (12th ed). Philadelphia: Lippincott, Williams & Wilkins. ISBN: 978-1-9751-8688-3
- Hinkle, Janice L., Cheever, Kerry H., Overbaugh, Kristen J., Brunner & Suddarth's Textbook of Medical-Surgical Nursing, 15th Edition, ISBN: 978-1-975161-03-3 (with CoursePoint +)
- Donally-Moreno, Loretta A. Timby's Fundamental Nursing Skills and Concepts, (12th ed). Philadelphia: Lippincott, Williams & Wilkins. ISBN: 978-1-975155-34-6
- Giddens, Jean Foret, Concepts for Nursing Practice, (3rd ed). Philadelphia: Lippincott, Williams & Wilkins. ISBN: 978-0-323-58193-6

Course Outcomes

After the completion of this course, the student should be able to:

1. **SAFETY** - Demonstrate knowledge of causes of disease and illness, including microorganisms and communicable diseases, biochemical agents, cellular abnormalities, trauma, genetic transmission, and participation in high-risk activities
2. **SAFETY** - Categorize signs and symptoms of selected medical-surgical disorders.
3. **SAFETY** - Relate expected diagnostic studies and pharmacological interventions including nursing implications for each, with an emphasis on patient safety and comfort.
4. **SAFETY** – Apply age-related considerations when planning patient care and medication administration.
5. **PATIENT-CENTERED CARE:** Apply knowledge of concepts to individualized care for the patient to meet identified needs and to prevent complications.
6. **CRITICAL THINKING** - Apply critical thinking to prioritize and plan care for patients with selected medical-surgical disorders utilizing case studies and group activities.
7. **TEAMWORK** - Analyze the role of the practical nurse as a member of the interdisciplinary health care team in care planning, health promotion, disease

prevention, and patient safety while collaborating with healthcare personnel from all disciplines.

8. **INFORMATICS** - Relate the use of technology and information management tools to support safe patient care.
9. **CULTURE** - Recognize and provide care with sensitivity and respect for human diversity, and cultural needs.

Topical Description

Unit 2: Concepts and Principals of Patient Management

Concepts: Fluid and Electrolytes #8 & Acid-Base #9

- A. Ch. 10: Fluid and Electrolytes
 1. Fundamental Concepts
 2. Fluid Volume Disturbances
 3. Electrolyte Imbalances
 4. Acid-Base Disturbances
 5. Parenteral Fluids
- B. Ch. 11: Shock, Sepsis, and Multiple Organ Dysfunction
 1. Overview of shock
 2. Stages of shock

Unit 4: Gas Exchange and Respiratory Function

Concepts: Gas Exchange #19

- A. Ch. 17: Assessment of Respiratory Function
 1. Anatomic and Physiologic Overview
 2. Assessment
 3. Diagnostic Evaluation
- B. Ch. 18: Management of Patients with Upper Respiratory Tract Disorders
 1. Upper Airway Infections
 2. Obstruction and Trauma of the Upper Respiratory Airway
- C. Ch. 19: Management of Patients with Chest and Lower Respiratory Disorders
 1. Inflammatory and Pulmonary Disorders
 2. Plural Disorders
 3. Acute Respiratory Failure
 4. Pulmonary Vascular Disorders
 5. Occupational Lung Disease: Pneumoconioses
 6. Chest Tumors
 7. Chest Trauma
- D. Ch. 20: Management of Patients with Chronic Pulmonary Disease
 1. Chronic Obstructive Pulmonary Disease

Unit 5: Cardiovascular and Circulatory Function

Concepts: Perfusion

- A. Ch. 21: Assessment of Cardiovascular Function
 1. Anatomic and Physiologic Overview
 2. Assessment of Cardiovascular System
 3. Diagnostic Evaluation
- B. Ch. 22: Management of Patients with Arrhythmias and Conduction Problems

1. Arrhythmias
2. Adjunct Modalities and Management
- C. Ch. 23: Management of Patients with Coronary Vascular Disorders
 1. Coronary Artery Disease
 2. Coronary Atherosclerosis
 3. Angina Pectoris
 4. Acute Coronary Syndrome and Myocardial Infarction
 5. Invasive Coronary Artery Procedure
- D. Ch. 24: Management of Patients with Structural, Inflammatory Cardiac Disorders
 1. Valvular Disorders
 2. Surgical Management: Valvular Repair and Replacement Procedures
 3. Infectious Disorders of the Heart
- E. Ch. 25: Management of Patients with Complications from Heart Disease
 1. Heart Failure
 2. Complications from Heart Failure
- F. Ch. 26: Assessment and Management of Patients with Vascular Disorders and

Problems of

- Peripheral Circulation
 1. Anatomic and Physiologic Overview
 2. Assessment of the Vascular System
 3. Arterial Disorders
 4. Venous Disorders
 5. Lymphatic Disorders
 6. Cellulitis
 - G. Ch. 27: Assessment and Management of Patients with Hypertension
 1. Hypertension
 2. Hypertensive Crisis
- Unit 10: Metabolic and Endocrine**
Concepts: Hormonal and Glucose
- A. Ch. 42: Assessment and Management of Patients with Obesity
 1. Obesity
 - B. Ch. 43: Assessment and Management of Patients with Hepatic Disorders
 1. Assessment of the Liver
 2. Manifestation of Hepatic Dysfunction
 3. Viral Hepatitis
 4. Nonviral Hepatitis
 5. Acute Liver Failure
 6. Hepatic Cirrhosis
 7. Cancer of the Liver
 8. Liver Transplantation
 9. Liver Abscess
 - C. Ch. 44: Management of Patients with Biliary Disorders
 1. Anatomic and Physiologic Overview
 2. Disorders of the Gallbladder
 3. Disorders of the Pancreas

- D. 45: Assessment and Management of Patients with Endocrine Disorders
 - 1. Assessment of the Endocrine System
 - 2. The Pituitary Gland
 - 3. The Thyroid Gland
 - 4. The Parathyroid Gland
 - 5. Adrenal Glands
- E. Ch. 46: Management of Patients with Diabetes
 - 1. Diabetes
 - 2. Acute Complications of Diabetes
 - 3. Long Term Complications of Diabetes
 - 4. Special Issues in Diabetes Care

Unit 15: Neurologic Function

Concepts: Clotting

- A. Ch. 60: Assessment of Neurologic Function
 - 1. Anatomic and Physiologic Overview
 - 2. Assessment of the Nervous System
 - 3. Diagnostic Evaluation
- B. Ch. 61: Management of Patients with Neurologic Dysfunction
 - 1. Altered Level of Consciousness
 - 2. Increased Intracranial Pressure
 - 3. Intracranial Surgery
- C. Ch. 62: Management of Patients with Cerebrovascular Disorders
 - 1. Ischemic Stroke
 - 2. Hemorrhagic Stroke
- C. Ch. 63: Management of Patients with Neurologic Trauma
 - 1. Head Injuries
 - 2. Brain Injury
 - 3. Spinal Cord Injury

Notes to Instructor