COURSE OUTLINE  LPNC 103 – PN Medical-Surgical Nursing

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SCHOOL OF SCIENCE, HEALTH, AND CRIMINAL JUSTICE
Nursing Department
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A. **TITLE:** PN Medical-Surgical Nursing

B. **COURSE NUMBER:** LPNC 103

C. **CREDIT HOURS:** 8

D. **WRITING INTENSIVE COURSE:** No

E. **COURSE LENGTH:** 15 weeks

F. **SEMESTER(S) OFFERED:** Spring

G. **HOURS OF LECTURE, LABORATORY, RECITATION, TUTORIAL, ACTIVITY:** 3 hours of lecture, 3 hours of lab and 12 hours of clinical per week

   1 credit = 50 minutes of lecture or 3 hours lab or 3 hours of clinical per week

H. **CATALOG DESCRIPTION:** Students will utilize critical thinking and the nursing process in learning about fundamental disease processes and the LPN’s role in prevention of illness, treatment of disease, and the restoration of health in the adult client. Concepts related to safety, emotional support, communication, client teaching, and pharmacology are integrated throughout the course. Students utilize the nursing laboratory to enhance their psychomotor and critical thinking skills in practicing advanced nursing skills. Clinical experiences provide opportunities for students to apply theory/lab in the medical- surgical units and specialty units of acute care hospitals and clinics.

I. **PRE-REQUISITES/CO-REQUISITES:**

   **Pre-requisite:**
   - LPNC 100: Drug Dosage Calculation & Pharmacology
   - LPNC 101 PN Fundamentals
   - BIOL 217 Anatomy and Physiology I
   - ENGL 101 Composition and the Spoken Word

   **Pre/co-requisite:**
   - LPNC 102 Practical Nursing- Special Populations
   - BIOL 218: Anatomy and Physiology II
   - PSYC 101 Introduction to Psychology
J. GOALS (STUDENT LEARNING OUTCOMES):
By the end of this course, the student will be able to:

<table>
<thead>
<tr>
<th>Course Student Learning Outcomes (SLO)</th>
<th>Program SLO</th>
<th>Institutional SLO</th>
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<tbody>
<tr>
<td>Demonstrate client-centered nursing care interventions and provisions of care to clients experiencing altered health status.</td>
<td>Demonstrate appropriate care to clients with stable and predictable conditions.</td>
<td>Professional Competence</td>
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<td>Demonstrate accountability for legal, ethical and regulatory parameters within the scope of practice of the practical nurse.</td>
<td>Inter/intra Personal Skills</td>
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<tr>
<td>Demonstrate evidence-based nursing interventions and skills generated through the knowledge of the nursing process.</td>
<td>Demonstrate, proper technique with nursing skills, use of client care equipment and technology in a cost effective manner.</td>
<td>Critical Thinking</td>
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<td>Collect data and health histories for individuals using standardized tools in an organized pattern, thereby contributing to nursing care plan.</td>
<td>Communication Skills</td>
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<tr>
<td>Discuss patient-centered care, safety and quality improvement needs associated with common diseases related to each body system and how these systems interact with one another.</td>
<td>Understand client disorders and nursing care utilizing current evidence based practice.</td>
<td>Critical Thinking</td>
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<td>Demonstrate developmentally appropriate, respectful and effective therapeutic communication skills.</td>
<td>Communication</td>
</tr>
<tr>
<td>Understand nursing responsibilities related to diagnostic tests, medication administration, diet therapy, quality improvement and nursing informatics.</td>
<td>Identify clinical scenarios and situations that fall outside of the PN scope of practice.</td>
<td>Critical Thinking</td>
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<tr>
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<td>Observe, reflect, and participate in self-performance and peer-to-peer teaching.</td>
<td>Inter/intra Personal Skills</td>
</tr>
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</table>
K. TEXTS:
ATI Package (Required)
Lippincott Course Point: Timby & Smith: Timby’s Introductory Medical-Surgical Nursing, (11th ed.). (Includes eBook and Stedman’s Online Dictionary) (Required)

L. REFERENCES: None

M. EQUIPMENT: Laptop with internet capability, stethoscope, uniforms, Adult size manual sphygmomanometers, penlight, watch capable of counting seconds, Bandage scissors

N. GRADING METHOD: A-F

O. MEASUREMENT CRITERIA/METHODS:
• Exams
• ATI Standardized medical surgical exam and predictor
• Assignments
• Clinical evaluations
• Laboratory skill competency testing

P. DETAILED COURSE OUTLINE:

1. Introduction to medical-surgical nursing
2. Pain management - nursing interventions, multidisciplinary care, quality improvement, safety, medication administration, and nursing informatics.
   a. Define pain and identify factors that influence patient’s response to pain
   b. List data to collect
   c. Discuss interventions used in the management of pain
3. Cancer – nursing interventions, multidisciplinary care, quality improvement, safety, medication administration, and nursing informatics.
   a. Differentiate between benign and malignant tumors
   b. Risk factors for developing cancer
   c. Seven warning signs for cancer
   d. Prevention and detection of cancer
   e. Pathophysiology of cancer
   f. Process of metastasis
   g. Terms used in tumor classification
   h. Nursing responsibilities in the care of a client with cancer- during diagnosing and treatment
   i. Common pharmacological agents used in cancer treatment
4. Inflammation and infection - nursing interventions, multidisciplinary care, quality improvement, safety, medication administration, and nursing informatics.
   a. Signs and symptoms of localized and systemic infection
   b. Types of shock - includes causes
   c. Diagnostic tests used in identifying causative agents of infection
   d. Nursing responsibilities in the care of a client with inflammation and infection
   e. Common pharmacological agents used in treating infection
5. Surgery - nursing interventions, multidisciplinary care, quality improvement, safety, medication administration, and nursing informatics.
   a. Care of a client undergoing surgery
      i. Preoperative
      ii. Intraoperative
      iii. Postoperative
6. Fluid and Electrolytes and Acid-Base Balance - nursing interventions, multidisciplinary care, quality improvement, safety, medication administration, and nursing informatics.
   a. Factors affecting fluid balance
   b. Fluid imbalances - identify, list causes, treatments
   c. Nursing measures to maintain fluid balance
   d. Buffer systems of the body in acid-base balance
   e. Respiratory and metabolic imbalances
   f. Electrolyte imbalances
7. Integumentary System - nursing interventions, multidisciplinary care, quality improvement, safety, medication administration, and nursing informatics.
   a. Pathophysiology overview of skin
   b. Diagnostic tests
   c. Disease processes, medical treatment, and nursing care
   d. Skin infections
      i. Bacterial
      ii. Viral
      iii. Fungal
      iv. Parasitic
   e. Chronic skin conditions
      i. Burns
      ii. Skin cancer
   f. Surgical procedures
      i. Skin grafts
      ii. Liposuction
8. Musculoskeletal System - nursing interventions, multidisciplinary care, quality improvement, safety, medication administration, and nursing informatics.
   a. Pathophysiology of the musculoskeletal system
   b. Diagnostic tests
   c. Disease processes, medical treatment, and nursing care
      i. Bone disorders
ii. Fractures
iii. Osteoporosis
iv. Osteomalacia
d. Bone cancer
e. Inflammatory disorders  
f. Rheumatoid arthritis
g. Degenerative joint disease
h. Gout
i. Ankylosing spondylitis
j. Lyme disease
k. Spinal disorders
l. Kyphosis/lordosis
m. Scoliosis
n. Low back pain
o. Joint and muscle disorders
p. Strains
q. Sprains
r. Osteoarthritis

9. Autoimmune and miscellaneous disorders
   a. Systemic lupus erythematos
   b. Fibromyalgia

10. Respiratory System - nursing interventions, multidisciplinary care, quality improvement, safety, medication administration, and nursing informatics.
    a. Pathophysiology of the respiratory system
    b. Diagnostic tests
    c. Disease processes, medical treatments, and nursing care
    d. Upper respiratory disorders
    e. Infections and inflammations
    f. Trauma and obstruction
    g. Tumors
    h. Lower respiratory disorders
       i. Pulmonary embolism
       j. Pulmonary hypertension
       k. Chest trauma
       l. Inhalation injuries
    m. Near-drowning

11. Cardiovascular System - nursing interventions, multidisciplinary care, quality improvement, safety, medication administration, and nursing informatics.
    a. Improvement, safety, medication administration, and nursing informatics.
    b. Pathophysiology of the heart and circulatory system
    c. Diagnostic tests
    d. Disease process, medical treatments, and nursing care
    e. Heart disorders
       i. Coronary artery disease
       ii. Angina
       iii. Myocardial infarction
    f. Heart/Lung disorders
i. Congestive heart failure
ii. Pulmonary edema
g. Other heart disorders
   i. Valvular heart disease
   ii. Inflammatory heart disorders
   iii. Pericarditis
   iv. Myocarditis
   v. Endocarditis
   vi. Cardiomyopathy
   vii. Conduction disorders
   viii. Central circulatory disorders
   ix. Hypertension
   x. Aneurysms
   xi. Emboli

12. Peripheral vascular disorders
   a. Arterial
      i. Arteriosclerosis obliterans
      ii. Beurger’s disease
      iii. Raynaud’s disease

13. Venous
   i. Thrombophlebitis
   ii. Varicose veins
   iii. Venous stasis ulcers

14. Hematopoietic/Lymphatic System - nursing interventions, multidisciplinary
care, quality improvement, safety, medication administration, and nursing
informatics.
   a. Pathophysiology of the hematopoietic/lymphatic system
   b. Diagnostic tests
   c. Disease processes, medical treatments, and nursing care

15. Red blood cell disorders
   a. Anemia
   b. Polycythemia
   c. Platelet and coagulation disorders
   d. Hemostasis
   e. Thrombocytopenia
   f. Disseminated intravascular coagulation
   g. Hemophilia

16. White blood cell disorders
   a. Agranulocytosis
   b. Leukemia
   c. Multiple myeloma
   d. Lymphatic system
   e. Lymphangitis
   f. Lymphedema
   g. Infectious mononucleosis
   h. Malignant lymphoma
17. Neurosensory System - nursing interventions, multidisciplinary care, quality improvement, safety, medication administration, and nursing informatics.
   a. Pathophysiology of the neurosensory system
   b. Diagnostic tests
   c. Disease processes, medical treatments, and nursing care
   d. Cerebrovascular disorders
   e. Transient ischemic attacks
   f. Cerebrovascular accident
   g. Cerebral aneurysm
   h. Seizure disorders
      i. Infections
         i. Meningitis
         ii. Encephalitis
   j. Brain abscess
   k. West Nile virus
   l. Trauma
      i. Brain injury
      ii. Hematoma
      iii. Increased intracranial pressure
      iv. Spinal cord injury
   m. Tumors
   n. Brain
   o. Spinal cord
   p. Degenerative neurologic disorders
      i. Parkinson’s disease
      ii. Multiple sclerosis
      iii. Amyotrophic lateral sclerosis
      iv. Alzheimer’s disease
      v. Myasthenia gravis
      vi. Guillain-Barre syndrome
      vii. Huntington’s disease
      viii. Neurofibromatosis
   q. Cranial nerve disorders
      i. Bell’s palsy
      ii. Trigeminal neuralgia
      iii. Tourette’s syndrome
      iv. Meniere’s disease
      v. Peripheral neuropathy
   r. Visual and Auditory disorders
      i. Eye and ear infections
      ii. Hearing loss
      iii. Glaucoma
      iv. Cataracts
      v. Macular degeneration
      vi. Eye and ear trauma
18. Gastrointestinal - nursing interventions, multidisciplinary care, quality improvement, safety, medication administration, and nursing informatics.
   a. Pathophysiology of the GI system
   b. Diagnostic tests
   c. Disease processes, medical treatments, and nursing care
   d. Upper GI disorders
      i. Oral cavity
      ii. Dental caries
      iii. Oral infections
      iv. Oral cancer
      v. Esophageal disorders
      vi. Esophagitis
      vii. Gastroesophageal reflux disease
     viii. Hiatal hernia
      ix. Esophageal cancer
     x. Stomach disorders
     xi. Acute gastritis
     xii. Chronic gastritis
    xiii. Peptic ulcer disease
    xiv. Pyloric obstruction
    xv. Gastric cancer
   e. Lower GI disorders
      i. Elimination disorders
      ii. Flatulence
      iii. Constipation
      iv. Impaction
      v. Diarrhea
      vi. Incontinence
   f. GI Disorders
      i. Infectious/Inflammatory disorders
      ii. Enteritis
      iii. Appendicitis
      iv. Crohn’s disease
      v. Ulcerative colitis
      vi. Irritable bowel syndrome
     vii. Abdominal hernias/intestinal obstructions
     viii. Diverticulosis/diverticulitis
     ix. Colorectal cancer
    x. Anorectal disorders
    xi. Hemorrhoids
    xii. Anal fissure
   xiii. Pilonidal cyst
    xiv. Anorectal abscess
   g. Accessory organ disorders
      i. Cholecystitis/cholelithiasis
      ii. Hepatitis
iii. Cirrhosis of the liver
iv. Liver cancer
v. Pancreatitis
vi. Pancreatic cancer
h. Endocrine System - nursing interventions, multidisciplinary care, quality improvement, safety, medication administration, and nursing informatics.
i. Pathophysiology of the endocrine system
ii. Diagnostic tests
iii. Disease processes, medical treatments, and nursing care
i. Pituitary disorders
   i. Anterior
   ii. Posterior
j. Thyroid disorders
   i. Hyperthyroidism
   ii. Hypothyroidism
   iii. Thyroid cancer
k. Parathyroid disorders
   i. Hyperparathyroidism
   ii. Hypoparathyroidism
l. Diabetes mellitus
m. Adrenal gland disorders
n. Addison’s disease
o. Cushing’s disease
p. Pheochromocytoma
19. Genitourinary/Reproductive System - nursing interventions, multidisciplinary care, quality improvement, safety, medication administration, and nursing informatics.
a. Pathophysiology of genitourinary systems and male/female reproductive systems
b. Diagnostic tests
c. Disease processes, medical treatments, and nursing care
d. Kidney disorders
   i. Pyelonephritis
   ii. Polycystic kidney disease
   iii. Glomerulonephritis
   iv. Urinary obstruction
   v. Renal failure
   vi. Renal cancer
e. Bladder disorders
   i. Bladder cancer
   ii. Urinary retention
   iii. Cystitis
f. Ureter and urethral disorders
g. Male reproductive disorders
   i. Prostate disorders
   ii. Prostatitis
iii. Prostate cancer
h. Female reproductive disorders
   i. Disorders related to the menstrual cycle
   ii. Bleeding disorders
   iii. Premenstrual syndrome
   iv. Tumors and abnormal growth
   v. Fibroid tumors
   vi. Malignant disorders
   vii. Endometriosis
   viii. Infections
   ix. Toxic shock syndrome
   x. Pelvic inflammatory disease
i. Disorders of the breast
j. Benign disorders
k. Malignant disorders
l. Menopause
m. Sexually transmitted diseases
   i. Chlamydia
   ii. Gonorrhea
   iii. Syphilis
   iv. Herpes
   v. Human papilloma virus
   vi. Trichomoniasis
   vii. Candidiasis

20. Immune System - nursing interventions, multidisciplinary care, quality improvement, safety, medication administration, and nursing informatics.
   a. Pathophysiology of the immune system
   b. Diagnostic tests
   c. Disease processes, medical treatments, and nursing care
   d. Human immunodeficiency virus
   e. Acquired immune deficiency syndrome
   f. Emergency
   g. Shock
      i. Pathophysiology of various types of shock
      ii. Diagnostic tests
      iii. Disease processes, medical treatments, and nursing care
      iv. Hypovolemic
      v. Cardiogenic
      vi. Anaphylactic
      vii. Septic
      viii. Neurogenic

Q. LABORATORY OUTLINE:
   1. Inserting and removing NG tubes
   2. Administering a tube feeding
   3. IV catheter insertion
   4. Intravenous medication administration
5. Monitoring clients receiving IV therapy
6. Finger-stick glucose testing
7. Insulin administration
8. Wound Care
9. Tracheostomy care
10. Chest tubes
11. Blood Transfusion