STATE UNIVERSITY OF NEW YORK
COLLEGE OF TECHNOLOGY
CANTON, NEW YORK

COURSE OUTLINE  LPNC 103 – PN Medical-Surgical Nursing

Prepared by: Christine Thompson

SCHOOL OF SCIENCE, HEALTH, AND CRIMINAL JUSTICE
Nursing Department
May 2016
Revised December 2017 by Christine Brassard and Michael Pinkerton
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>
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</thead>
<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>
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<tr>
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<td>Demonstrate accountability for legal, ethical and regulatory parameters within the scope of practice of the practical nurse.</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>
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<tr>
<td></td>
<td>Collect data and health histories for individuals using standardized tools in an organized pattern, thereby contributing to nursing care plan.</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>
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<td></td>
<td>Demonstrate developmentally appropriate, respectful and effective therapeutic communication skills.</td>
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<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>
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<td></td>
<td>Observe, reflect, and participate in self-performance and peer-to-peer teaching.</td>
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</tbody>
</table>
K. **TEXTS:**


ATI Essentials Package


L. **REFERENCES:** None

M. **EQUIPMENT:**

- ! Clear plastic ID holder
- ! SUNY Canton Student Identification
- ! Navy blue scrub pants, white nursing scrub top, and nursing program uniform patch (goes on right shoulder, available at Campus Store)
- ! White, crew neck, short-sleeve T-shirt (to wear under the scrub top if needed), white socks, and clean sneakers/nursing shoes
- ! Pen light, blood pressure cuff, and stethoscope
- ! Folder for clinical papers

N. **GRADING METHOD:**

<table>
<thead>
<tr>
<th>Grade</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>A</td>
<td>90 – 100%</td>
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<tr>
<td>B+</td>
<td>85 - 89%</td>
</tr>
<tr>
<td>B</td>
<td>80 – 84%</td>
</tr>
<tr>
<td>C+</td>
<td>75 – 79%</td>
</tr>
<tr>
<td>C</td>
<td>70 – 74%</td>
</tr>
<tr>
<td>D+</td>
<td>65 – 69%</td>
</tr>
<tr>
<td>D</td>
<td>60 – 64%</td>
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<tr>
<td>F</td>
<td>59% and below</td>
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</table>

A **grade of C+ or better** is required for successful completion of all nursing courses and a grade of C or better is required for all co-requisite courses to continue on in the program.

O. **MEASUREMENT CRITERIA/METHODS:**

<table>
<thead>
<tr>
<th>Activity</th>
<th>Purpose</th>
<th>Percentage of Grade</th>
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<tbody>
<tr>
<td>Formative Exams (6 Exams at 10% each)</td>
<td>To guide the level of knowledge necessary for the student to be able to make the judgments and decisions required by the program’s SLOs.</td>
<td>60%</td>
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</tbody>
</table>
To help students identify their strengths and weaknesses and target areas that need work.
To help faculty recognize where students are struggling and address problems immediately.

<table>
<thead>
<tr>
<th>Homework Assignments/Quizzes</th>
<th>To help students identify their strengths and weaknesses and target areas that need work.</th>
<th>5%</th>
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</thead>
<tbody>
<tr>
<td>Standardized Testing (ATI)</td>
<td>To help students identify their strengths and weaknesses and target areas that need work. To evaluate student learning at the end of the course by comparing the students’ learning to the ATI national benchmark. To mimic the NCLEX-PN exam.</td>
<td>10%</td>
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<tr>
<td>Comprehensive Final Exam</td>
<td>To evaluate students’ accomplishment of the course SLOs at the end of the semester.</td>
<td>25%</td>
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<tr>
<td>Lab Skills Proficiency</td>
<td>To demonstrate skill in client rapport, nursing skills and assessment techniques.</td>
<td>P/F</td>
</tr>
<tr>
<td>Clinical Evaluation</td>
<td>To demonstrate critical thinking abilities, safety, teamwork and collaboration, informatics, evidence-based practice, quality improvement, patient-centered care and professionalism.</td>
<td>P/F</td>
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<tr>
<td><strong>TOTAL</strong></td>
<td></td>
<td>100%</td>
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**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. Pathophysiology of the heart and circulatory system
    b. 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
   b. Venous
      i. Thrombophlebitis
      ii. Varicose veins
      iii. Venous stasis ulcers

13. 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

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

15. White blood cell disorders
   a. Agranulocytosis
b. Leukemia  
c. Multiple myeloma  
d. Lymphatic system  
e. Lymphangitis  
f. Lymphedema  
g. Infectious mononucleosis  
h. Malignant lymphoma

16. 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

17. 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
18. 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
19. 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
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