

**Ralph R Willis Career and Technical Center
School of Practical Nursing
Fundamental Concepts and Skills For Nursing**

Placement : Semester 1
Course Hours :
Theory Hours: 69
Skills Lab : 38
Clinical Hours:
WVEIS:

TEXTBOOKS:

1. deWitt, Susan C. / O’Neal, Patricia; FUNDAMENTAL CONCEPTS AND SKILLS FOR NURSING Saunders/Elsevier; 4th. edition; 2014.
2. deWitt, Susan C. / O’Neal, Patricia; STUDY GUIDE FOR FUNDAMENTAL CONCEPTS & SKILLS FOR NURSING, Philadelphia, Elsevier/Saunders; 4th. edition; 2014
3. HESI

Course Description

This course introduces the student to the role of the practical nurse in the provision of basic nursing care to diverse populations across the life span. The course is designed to progress from simple to complex and to enable the student to understand the rationale for various procedures and treatments. Professional communication, critical thinking, theory concepts, the nursing process and evidenced based practice are taught. Clinical experiences allow the learner to apply knowledge and skills introduced in the lab and classroom. The concepts introduced and incorporated into the care of individuals are: basic needs; biological, nutrition, psychological, social and spiritual, hygiene, physiological functioning, safety, cultural diversity, societal influences, developmental stages and principles of teaching/learning. The student will perform nursing skills and function within the scope of practice of the practical nurse in the long term care and acute care setting.

Course Objectives

Classroom:

1. Define and demonstrate basic skills in nursing care.
2. Demonstrate the knowledge to provide safety, security and comfort measures for the client.
3. Identify physiological, psychological, and spiritual needs of client.
4. Implement the nursing process in the daily care of clients.
5. Explain the basic principles behind each nursing measure basic to nursing care.

Clinical:

1. Maintain protection, comfort and safety for the client.
2. Provide basic psychological needs including psychosocial and spiritual needs.
3. Utilize appropriate communication skills when recording and reporting pertinent information.
4. Utilize the nursing process in the daily care of patients.

Clinical Practicum:

Completed in Acute and Long-Term Care.

Methods Of Teaching:

1. Lecture, discussion, role playing emphasizing critical thinking
2. Videos
3. PowerPoint
4. Computer-assisted instruction- VCE – Case Studies
5. Demonstration
6. Individual and Group Conference
7. Written Exams
9. Clinical Lab Practice/ Clinical Setting
10. Evaluations

Student Responsibilities:

1. Read assigned chapter.
2. Refer to and follow student monthly calendar for exam dates.
3. Attend lectures and demonstrations.
3. Complete activities as assigned.
5. Participate in class/lab activities.
6. Discuss critical thinking activities associated with the lesson.
7. Refer and follow the policies as outlined and discussed in the Student Handbook.
8. Pass exams with a grade of 80% or higher.

Methods Of Evaluation

1. The following letter grade system is utilized for theory:
A 93 - 100
B 86 - 92
C 80 - 85
F 79 - 0
2. The following grading calculation is utilized for theory:
Exams 60% Quizzes 10% Final 30%
Evaluation Tools:
 - a. Oral Presentations
 - b. Written Exams
 - c. Laboratory Skills
 - d. Homework Assignments
 - e. Computer Exams
 - f. Clinical Skills
3. Make-up Exam:
A student who misses an exam must be prepared to take the exam upon return or as designated by instructor for make-up day. Students will automatically have 5% deducted.
4. Quizzes:
Students who are absent during a quiz will receive a Zero. Quizzes are NOT made up.
5. See student monthly calendar for schedule of exam dates.
6. See Student Handbook for clinical grading guidelines.

Chapter 16 Infection Prevention and Control: Protective Mechanisms and Asepsis
3 hr
Testing 1 hr

Lesson Content:

- I. Keys Terms

- II. Infectious Agents
 - A. Bacteria
 - B. Prions
 - C. Viruses
 - D. Protozoa
 - E. Rickettsia
 - F. Fungi
 - G. Helminths
 - H. Other Infectious Agents

- III. Process Of Infection
 - A. Causative Agent (Link One)
 - B. Reservoir (Link Two)
 - C. Portal Of Exit (Link Three)
 - D. Mode Of Transfer (Link Four)
 - E. Portal Of Entry (Link Five)
 - F. Susceptible Host (Link Six)
 - 1. Susceptibility of the Elderly

- IV. Body Defenses Against Infection
 - A. Inflammatory Response
 - B. Immune Response

- V. Asepsis And Control Of Microorganisms
 - A. Medical Asepsis And Surgical Asepsis
 - B. Hand Hygiene
 - C. Standard Precautions
 - 1. Gown
 - 2. Mask
 - 3. Protective Eyewear
 - 4. Head Cover
 - 5. Shoe Covers
 - 6. Gloves
 - 7. Disposal of Sharps
 - 8. Contaminated Waste
 - D. Cleaning And Disinfection
 - 1. Sterilization

- VI. Sepsis In The Home Environment

VII. Infection Control Surveillance

Lesson Objectives:

After completion of this chapter the student will:

1. List the types of microorganisms that can cause infection in humans.
2. Discuss the links in the infection process and give an example of each.
3. Discuss factors that make the elderly more susceptible to infection.
4. Explain how the body's protective mechanisms work to prevent infection.
5. Explain how the inflammatory and immune responses protect the body.
6. Identify means for removal or destruction of microorganisms on animate and inanimate objects.
7. Compare and contrast medical asepsis and surgical asepsis.
8. Describe accepted methods of disinfection and sterilization.

Clinical Practice:

1. Discuss the surveillance, prevention, and control of infections in hospitalized patients.
2. Demonstrate proper hand hygiene technique.
3. Consistently demonstrate application of Standard and Transmission-Based Precautions while caring for patients.
4. Prepare to teach a home care patient with a wound infection how to prevent the spread of infection to family members.

Skills and Steps:

Clinical Lab 2 hr

1. Skill 16-1 Hand Hygiene
2. Skill 16-2 Using Personal Protective Equipment (PPE): Gown, Mask, Gloves,
 Eyewear
3. Steps 16-1 Removing Gloves

Chapter 17 Infection Prevention and Control in the Hospital and Home
3 hr
Testing 1 hr

Lesson Content:

- I. Key Terms

- II. Infection
 - A. Stages Of Infection
 - B. Health Care- Associated Infections (HAIs)

- III. Infection Prevention And Control
 - A. Application of the Nursing Process
 - 1. Assessment (Data Collection)
 - 2. Nursing Diagnosis
 - 3. Planning
 - 4. Implementation
 - a. Hand Hygiene
 - b. Personal Protective Equipment
 - c. General Guidelines for Isolation Precautions
 - 1. Specimen Preparation and Transportation
 - 2. Lines
 - 3. Trash
 - 4. Sharps
 - 5. Other Equipment
 - 6. Natural Defenses
 - 7. Patient Placement
 - 8. Transporting the Patient
 - d. Infection Prevention and Control in the Home
 - e. Protective Isolation
 - f. Psychological Aspects of Isolation
 - g. Infection Prevention and Control for the Nurse
 - h. Surgical Asepsis
 - 1. Surgical Scrub
 - 2. Opening Sterile Packs and Packages and Setting Up a Sterile Field
 - 5. Evaluation

Lesson Objectives:

After completion of this chapter the student will:

1. List the stages of an infectious process.
2. Identify five ways to decrease the occurrence of health care-associated infections (HAIs).
3. Explain how Transmission-Based Precautions are used with Standard Precautions.
4. Describe how procedures for Airborne Precautions differ from those for Droplet Precautions.
5. Discuss the special requirements for Airborne Precautions when the patient has pulmonary tuberculosis.
6. Compare infection prevention and control procedures appropriate for the hospital with those used in the home.
7. List techniques for handling of specimens, disposal of dirty linen, trash, and sharps; and the cleaning of equipment in the isolation setting.
8. Give three examples of nursing measures used to provide for the psychosocial care of a patient in isolation.
9. State the four rules of surgical asepsis.

Clinical Practice:

1. Use Standard Precautions when caring for patients.
2. Use Transmission-Based Precautions when caring for patients.
3. Properly bag and remove soiled linens and trash from an isolation room.
4. Teach a patient or family member how to properly dispose of soiled items at home.
5. Demonstrate performance of a surgical scrub.

Skills and Steps:

Clinical Lab **2 hr**

1. Skill 17-1 Performing Surgical Hand Antisepsis: The Surgical Scrub
2. Skill 17-2 Performing Surgical Hand Antisepsis: The Surgical Hand Rub
3. Skill 17-3 Opening Sterile Packs and Preparing a Sterile Field
4. Skill 17-4 Sterile Gloving and Ungloving
5. Steps 17-1 Pouring Sterile Liquids

Chapter 18

Lifting, Moving, and Positioning Patients

3 hr

Testing 1 hr

Lesson Content:

- I. Key Terms

- II. Overview of Structure and Function of The Musculoskeletal System

- III. Principles Of Body Movement for Nurses
 - A. Obtain Help Whenever Possible
 - B. Use Your Leg Muscles
 - C. Provide Stability For Movement
 - D. Use Smooth, Coordinated Movements
 - E. Keep Loads Close To The Body
 - F. Keep Loads Near Your Center Of Gravity
 - G. Pull And Pivot

- III. Principles Of Body Movement For Patients
 - A. Hazards Of Improper Alignment And Positioning
 1. Pressure Ulcers

- IV. Application of the Nursing Process
 - A. Assessment (Data Collection)
 - B. Nursing Diagnosis
 - C. Planning
 - D. Implementation
 1. Positioning
 - a. Common Positions and Their Variations
 - b. Moving Patients Up in Bed
 2. Therapeutic Exercise
 - a. Range-of-Motion Exercises
 3. Lifting and Transferring
 - a. Transferring devices
 - E. Evaluation

Lesson Objectives:

After completion of this chapter the student will:

1. Describe the anatomy and function of the musculoskeletal system.
2. Explain the importance of proper body mechanics, alignment, and position change for both patient and nurse.
3. Discuss the principles of body movement and positioning, giving an appropriate example for each principle.
4. Identify ways to maintain correct body alignment of the patient in bed or in a chair.
5. Describe the proper method for transferring a patient between wheelchair and bed.

Clinical Practice:

1. Correctly position a patient in the following positions: supine, prone, Fowler's and Sim's.
2. Assist patients to sit up in bed.
3. Demonstrate complete passive range-of-motion (ROM) exercises for a patient.
4. Correctly transfer a patient from a wheelchair to a bed.
5. Transfer a patient from bed to a stretcher.
6. Demonstrate the correct techniques for ambulating a patient and for breaking a fall while ambulating.

Skills:**Clinical Lab****4 hr**

1. Skill 18-1 Positioning Patient
2. Skill 18-2 Moving the Patient Up in Bed
3. Skill 18-3 Passive Range-of Motion (ROM) Exercises
4. Skill 18-4 Transferring the Patient to a Wheelchair
5. Skill 18-5 Transferring the Patient to Stretcher
6. Skill 18-6 Ambulating the Patient and Breaking a Fall

Chapter 19
6 hr

Assisting with Hygiene, Personal Care, Skin Care, and the Prevention of Pressure Ulcers

Lesson Content:

- I. Keys Terms
- II. Overview of Structure and Function of The Integumentary System
- III. Application of the Nursing Process
 - A. Assessment (Data Collection)
 1. Factors Affecting Hygiene
 2. Self-Care Abilities
 3. Skin and Pressure Ulcers
 - a. Risk Factors for Pressure Ulcers
 - b. Skin Assessment for Pressure Ulcers
 - c. Prevention of Pressure Ulcers
 - d. Treatment and Care for Pressure Ulcers
 - B. Nursing Diagnosis
 - C. Planning
 - D. Implementation
 1. Bathing
 - a. Types of Baths
 - i. Cleansing Baths
 - ii. Therapeutic Baths
 - b. Variations of the Bed Bath
 2. Back Massage
 3. Perineal Care
 4. Mouth Care
 - a. Mouth Care for the Conscious Patient
 - b. Mouth Care for the Unconscious Patient
 - c. Denture Care
 5. Hair Care
 - a. Brushing and Combing
 - b. Shampooing
 6. Shaving
 - a. Mustache and Beard Care
 7. Nail Care
 8. Eye Care
 - a. Glasses and Contacts
 - i. Removal of Contact Lenses
 - ii. Cleaning Contact Lenses
 - b. Artificial Eye
 9. Ear Care

- a. Hearing Aids
- E. Evaluation

Lesson Objective:

After completion of this chapter the student will:

1. Describe the structure and function of the integumentary system.
2. Describe factors that influence personal hygiene practices.
3. List skin areas most susceptible to pressure ulcer formation.
4. Discuss risk factors for impaired skin integrity.
5. Discuss the purpose of bathing.
6. Describe how hygienic care differs for the younger and older patient.

Clinical Practice:

1. Describe how to prevent and stage a pressure ulcer.
2. Perform a complete bed bath and back rub.
3. Provide oral care for an unconscious patient.
4. Prepare to provide personal care for a patient, including nail care, mouth care, perineal care, and shaving.
5. Assist a patient with the care of contact lenses.
6. Instruct a patient in ways to prevent building of cerumen in the ears.

Skills and Steps:

Clinical Lab 4 hr

1. Skills 19-1 Administering a Bed Bath and Perineal Care
2. Skills 19-2 Administering Oral Care to the Unconscious Patient
3. Skills 19-3 Denture Care
4. Skills 19-4 Shampooing Hair
5. Step 19-1 Providing a Tub Bath or Shower
6. Step 19-2 Shaving a Male Patient

Chapter 20

Patient Environment and Safety

3 hr

Testing 1 hr

Lesson Content:

- I. Key Terms

- II. Factors Affecting The Environment
 - A. Temperature
 - B. Ventilation
 - C. Humidity
 - D. Lighting
 - E. Odor Control
 - F. Noise Control
 - G. Interior Design
 - H. Neatness
 - I. Privacy
 - J. Beds
 - K. Bed Positions
 - L. Bed Making
 - 1. Occupied Bed
 - 2. Unoccupied Bed

- III. Safety
 - A. Hazards
 - 1. Falls
 - 2. Burns
 - 3. Smoking
 - 4. Fire
 - B. Hazardous Materials
 - 1. Biohazards
 - 2. Bioterrorism and Other Terrorism Agents
 - 3. Poison
 - C. Protective Devices
 - 1. Legal Implications Of Using Protective Devices
 - a. Applying a Protective Device
 - 2. Alternatives To Protective Devices
 - 3. Principles Related To The Use Of Protective Devices
 - 4. Documentation Of The Use Of Protective Devices

Lesson Objectives:

After completion of this chapter the student will:

1. Discuss nursing responsibilities for environmental management.
2. Identify common noises in health care facilities and ways to minimize their effects on patients.
3. Explain the importance of neatness and order in the patient's environment.
4. Describe methods to prevent mechanical and thermal accidents and injury in health care facilities and the home.
5. Discuss the various forms of bioterrorism, safety measures to be taken, signs and symptoms of agents used, and measures to treat or contain the threat.
6. Discuss the principles for using protective devices.
7. Demonstrate knowledge of the legal implications of using protective devices.

Clinical Practice:

1. Discuss how the health care facility's environment affects your patient.
2. Using correct technique, make an unoccupied and an occupied bed.
3. Explain, according to your facility's procedures, how to clean up a biohazard spill.
4. Discuss your clinical facility's response plan to a bioterrorism threat.
5. Given an emergency scenario, practice triaging the victims.
6. Correctly apply an extremity immobilizer.

Skills:

Clinical Lab	2 hr
1. Skill 20-1	Making an Unoccupied Bed
2. Skill 20-2	Making an Occupied Bed
3. Skill 20-3	Applying a Protective Device

Chapter 21
3 hr
Testing 1 hr

Measuring Vital Signs

Lesson Content:

- I. Key Terms

- II. Overview Of Structure And Function Related To The Regulation Of Vital Signs
 - A. How is Body Heat Produced?
 - B. What Factors Affect Body Heat Production?
 - C. How Is Body Temperature Regulated?
 - D. How Does Fever Occur, and What Are Its Physiologic Effects?
 - E. What Physiologic Mechanisms Control The Pulse?
 - F. What Is Respirations?
 - G. What Are The Organs Of Respiration?
 - H. How Is Respiration Controlled?
 - I. What Is Blood Pressure?
 - J. What Physiologic Factors Directly Affect The Blood Pressure?
 - K. What Changes Occur In Vital Signs With Aging?

- III. Measuring Body Temperature
 - A. Factors Influencing Temperature Reading
 - B. Problems Of Temperature Regulation
 1. Hyperthermia
 2. Hypothermia
 - C. Measuring Body Temperature
 1. Taking an Oral Temperature
 2. Taking an Rectal Temperature
 3. Taking an Axillary Temperature
 - D. Glass Thermometers
 1. Reading the Glass Thermometer
 - E. Electronic Thermometers
 1. Tympanic Thermometers
 2. Temporal Artery Skin Thermometer
 - F. Disposable Thermometers
 - G. Application of the Nursing Process
 1. Assessment (Data Collection)
 2. Nursing Diagnosis
 3. Planning
 4. Implementation
 5. Evaluation

- IV. Measuring The Pulse
 - A. Common Pulse Points
 - B. Pulse Rate
 - C. Pulse Characteristics

- V. Measuring Respirations
 - A. Respiratory Patterns
 - B. Measuring Oxygen Saturation Of The Blood

- VI. Measuring The Blood Pressure
 - A. Equipment Used For Measuring Blood Pressure
 - B. Korotkoff Sounds
 - C. Hypertension
 - D. Hypotension
 - E. Application of the Nursing Process

- VII. Pain, The Fifth Vital Sign

- VIII. Automated Vital Sign Monitoring

- IX. Charting Vital Signs
 - A. Recording Temperature Measurements
 - B. Recording Pulse Measurements
 - C. Recording Respiration Measurements
 - D. Recording Blood Pressure Measurements
 - E. Evaluating Vital Sign Trends

Lesson Objectives:

After completion of this chapter the student will:

1. Review the anatomic structures involved in the regulation of the vital signs and describe their functions.
2. Identify the physiologic mechanisms that regulate temperature, heart rate, blood pressure, and respirations.
3. List the factors that affect body temperature.
4. Discuss normal and abnormal characteristics of the pulse.
5. Describe the respiratory patterns considered to be normal and abnormal.
6. Explain the relationship of Korotkoff sounds to systolic and diastolic blood pressure.
7. State why pain is considered the fifth vital sign.

Clinical Practice:

1. Measure and record the body temperature of an adult and a child at the oral, rectal, axillary, and tympanic (eardrum) sites using a glass, electronic, or tympanic thermometer.
2. Measure and record an apical pulse and a radial pulse.
3. Count and record respirations.
4. Measure and record blood pressure
5. Use an automatic vital sign machine to monitor pulse and blood pressure.
6. Recognize deviations from normal vital sign patterns.
7. Determine factors that might be adversely affecting the patient's temperature, pulse, respiration, or blood pressure.

Skills:**Clinical Lab****4 hr**

1. Skill 21-1 Measuring the Temperature with an Electronic Thermometer
2. Skill 21- 2 Measuring the Temperature with a Tympanic or Temporal Artery Thermometer
3. Skill 21-3 Measuring the Radial Pulse
4. Skill 21-4 Measuring the Apical Pulse
5. Skill 21-5 Measuring Respirations
6. Skill 21-6 Measuring the Blood Pressure

Chapter 22
3 hr
Testing 1 hr

Assessing Health Status

Lesson Content:

- I. Keys Terms
- II. Data Collection and Assessment
- III. Application of the Nursing Process
 - A. Assessment (Data Collection)
 - B. Data Collection
 - C. Psychosocial and Cultural Assessment
 - D. Physical Assessment
 - E. Physical Examination Techniques
 - 1. Inspection and Observation
 - 2. Palpation
 - 3. Percussion
 - 4. Auscultation
 - 5. Olfaction
 - F. Basic Physical Examination
 - 1. Height and Weight
 - 2. Vital Signs Measurement
 - G. Review of Body Systems
 - 1. Head and Neck
 - 2. Chest, Heart, and Lungs
 - 3. Skin and Extremities
 - 4. The Abdomen
 - 5. Genitalia, Anus, and Rectum
 - H. Nursing Diagnosis
 - I. Planning
 - J. Implementation
 - K. Patient and Family Teaching
 - L. Assisting with a Physical Examination
 - 1. Positioning and Draping
 - 2. Elements of the Physical Examination
 - M. Special Focused Examinations
 - N. Evaluation

Lesson Objectives:

1. Discuss the types of assessment used in various situations.
2. Demonstrate the techniques used during physical examination.
3. Describe how to gather information for a comprehensive database for a patient.

Clinical Practice:

After completion of this chapter the student will:

1. Assess the psychosocial and physical functioning of the patient by gathering information in an organized way.
2. Perform a basic physical examination on a patient.
3. Perform a visual acuity test on a patient.
4. Carry out focused physical assessment of the cardiovascular, respiratory, gastrointestinal, and neurologic systems.
5. Teach patients the assessment techniques for the early detection of cancer.
6. Educate patients about the recommendations for periodic diagnostic testing.
7. Assist with a medical examination by positioning and draping the patient, and organizing the equipment.

Skills & Steps:**Clinical Lab****2 hr**

1. Skill 22-1 Performing a Physical Examination
2. Skill 22-2 Performing a Neurologic Check
3. Steps 22-1 Weighing the Adult with a Standing Balance Scale
4. Steps 22-2 Testing Visual Acuity
5. Steps 22-3 Basic Assessment of Heart Sounds
6. Steps 22-4 Auscultating the Lungs

Admitting, Transferring, and Discharging Patients

Chapter 23

2 hr

Testing 1 hr

Lesson Content:

- I. Key Terms
- II. Types of Admissions
 - A. Routine
 - B. Emergency
- III. The Admission Process
 - A. Pre- Admission Procedures and Requirements
 - B. Authorization for Admission
 - C. Admitting Department Function
 - D. Laboratory Work and X-Ray Examinations
- IV. Day of Admission
 - A. Patient Orientation to Nursing Unit
 - B. Care of Patient Belongings
 - C. Initial Nursing Assessment (Data Collection)
 - D. Preparing the Chart
 - E. Reactions to Admission
 - F. Plan of Care
- V. Transfer to another Hospital Unity
- VI. Discharging the Patient
- VII. A. Discharge to Extended –Care or Rehab Facility
- VIII. Discharge Home
 - A. Home Health Care
 - B. Discharge Against Medical Advice
- IX. Providing Support for Significant Others
- X. Pronouncement of Death
- XI. Autopsies
- XII. Organ Donation

Lesson Objectives:

After completion of this chapter, the student will:

1. Differentiate between routine and emergency admissions.
2. Describe the role of the admitting department.
3. Identify the elements included in a patient's orientation to the nursing unit.
4. Discuss five types of information that must be included in the discharge form sent with a patient going to another facility.
5. Delineate the necessary information to include on a patient's discharge instructions when the patient is going directly home.
6. Explain the procedure for pronouncing and recording a patient's death.

Clinical Practice

1. Orient a patient to the patient unit and the hospital.
2. Assist with the performance of an admission assessment.
3. Use correct communication techniques to ensure safe handoff to another nurse, department, or facility.
4. Interact with the social worker regarding the discharge needs of an assigned patient.
5. Demonstrate appropriate interaction with the family of a patient who has died.

Diagnostic Tests and Specimen Collection

Chapter 24

3 hr.

Testing 1 hr

Lesson Content:

- I. Key Terms
- II. Diagnostic Tests and Procedures
 - A. Application of the Nursing Process
 - B. Nursing Diagnosis
 - C. Planning
 - D. Implementation
 1. Laboratory Tests
 2. Hematology Tests
 3. Blood Chemistry Tests
 4. Serology Tests
 5. Urinalysis
 6. Ultrasonography
 7. Radiology Procedures
 8. Radionuclide Scans
 9. Computed Tomography
 10. Magnetic Resonance Imaging
 11. Cardio Studies and Procedures
 12. Positron Emission Tomography (PET)
 13. Cardiac Catheterization
 14. Angiography and Arteriography
 15. Treadmill Stress Test
 16. Pulmonary Function Tests
 17. Capnography
 18. Endoscopic Examinations
 19. Endoscope
 20. Bronchoscopy
 21. Gastroscopy
 22. Proctosigmoidoscopy
 23. Colonoscopy
 24. Cystoscopy
 25. Endoscopic Retrograde Cholangiopancreatography (ERCP)
 26. Aspirations
 27. Electroencephalography

Learning Objectives:

Upon completion of this chapter, the student will....

1. Discuss appropriate psychosocial care and teaching for patients undergoing diagnostic tests or procedures.
2. Prepare to perform a capillary glucose test, a venipuncture, a throat culture, an electrocardiogram, a urine dipstick test, and a stool for occult blood.
3. Describe each of the categories of tests that are commonly performed.
4. Explain factors to be considered when an older adult is to undergo diagnostic testing.

Clinical Practice

1. Provide pretest and post-test nursing care, including appropriate teaching, for patients undergoing diagnostic tests and procedures.
2. Attend to psychosocial concerns of patients undergoing various diagnostic tests.
3. Perform a random blood glucose test using capillary blood and a glucometer.
4. Perform patient teaching for magnetic resonance imaging (MRI).
5. Describe how to prepare a patient for and assist with aspiration procedures such as lumbar puncture, thoracentesis, paracentesis, bone marrow aspiration, and liver biopsy.
6. Correctly use Standard Precautions whenever obtaining or handling specimens for diagnostic tests.
7. List the steps for assisting with a pelvic examination and Pap test.
8. Correctly fill out laboratory and test requisition forms.

Lab Practice: 4 hr.

Skills and Steps

Skill 24-1 Phlebotomy and Obtaining Blood Samples with a Vacutainer System

Skill 24-2 Performing a Capillary Blood Test: Blood Glucose

Skill 24-3 Performing a Urine Dipstick Test

Skill 24-4 Obtaining a Stool Specimen for Occult Blood, Culture, or Ova and Parasites

Skill 24-5 Obtaining Culture Specimens: Throat and Wound

Skill 24-6 Assisting with a Pelvic Examination and Pap Test (Smear)

Skill 24-1 Obtaining an Electrocardiogram (ECG)

Skill 24-2 Assisting with a Flexible Sigmoidoscopy

Chapter 25
3 hr
Testing 1 hr

Fluid, Electrolyte, and Acid-Base Balance

Lesson Content:

- I. Key Terms

- II. Composition Of Body Fluids
 - A. Water
 - B. Electrolytes
 - C. Nonelectrolytes
 - D. Blood

- III. Distribution Of Body Fluids
 - A. Movement Of Fluid And Electrolytes
 - 1. Passive Transport
 - a. Diffusion
 - b. Osmosis
 - 2. Active Transport

- IV. Fluid And Electrolyte Imbalances
 - A. Deficient Fluid Volume
 - 1. Dehydration
 - B. Excess Fluid Volume
 - 1. Edema
 - C. Electrolyte Imbalances
 - 1. Sodium Imbalances
 - a. Hyponatremia
 - b. Hypernatremia
 - 2. Potassium Imbalances
 - a. Hypokalemia
 - b. Hyperkalemia
 - 3. Calcium Imbalances
 - a. Hypocalcemia
 - b. Hypercalcemia
 - 4. Magnesium Imbalances
 - a. Hypomagnesemia
 - b. Hypermagnesemia
 - 5. Anion Imbalances

- VI. Acid-Base Balance
 - A. pH
 - B. Bicarbonate
 - C. Control Mechanisms

- VII. Acid-Base Imbalances
 - A. Respiratory Acidosis
 - B. Metabolic Acidosis
 - 1. Effects of Acidosis
 - C. Respiratory Alkalosis
 - D. Metabolic Alkalosis
 - 1. Effects of Alkalosis

- VIII. Application of the Nursing Process
 - A. Assessment (Data Collection)
 - B. Nursing Diagnosis
 - C. Planning
 - D. Implementation
 - 1. Recording Intake and Output
 - E. Evaluation

Lesson Objectives:

After completion of this chapter the student will:

1. Discuss the various functions water performs in the body.
2. List the major electrolytes and the function of each.
3. Describe three ways in which body fluids are continually being distributed among the fluid compartments.
4. Identify the signs and symptoms of the common fluid and electrolyte imbalances.
5. State the main signs and symptoms of acid-base imbalances.

Clinical Practice:

1. Assess an assigned patient for signs of fluid and electrolyte imbalance.
2. From patient laboratory results, identify electrolyte values that are abnormal.
3. Implement teaching for the patient with hypokalemia.
4. Develop a plan of care for a patient who has a fluid and electrolyte imbalance.
5. Identify patients who might be at risk for an acid-base imbalance.

Skills:

Clinical Lab

2 hr

1. Skill 25-1 Measuring Intake and Output

Chapter 28

Assisting with Respiration and Oxygen Delivery

3 hr

Testing 1 hr

- I. Key Terms
- II. Overview of Structure and Function of The Respiratory System
 - A. Which Structures Are Involved In Respiration?
 - B. What Are The Functions Of The Respiratory Structures?
 - C. What Changes Occur With Aging That Affect Respiration?
- III. Hypoxemia
 - A. Symptoms Of Hypoxia
 - B. Pulse Oximetry
- IV. Airway Obstruction And Respiratory Arrest
- V. Clearing Respiratory Secretions
 - A. The Effective Cough
 - B. Postural Drainage
- VI. Oxygen Administration
 - A. Cannula
 - B. Masks
- VII. Artificial Airways
 - A. Nasopharyngeal Suction
 - B. Tracheobronchial Suctioning
 - C. Tracheostomy
- VIII. Chest Drainage Tubes
- IX. Application of the Nursing Process
 - A. Assessment (Data Collection)
 - B. Nursing Diagnosis
 - C. Planning
 - D. Implementation
 - 1. Tracheostomy Care
 - 2. Chest Tube Care
 - 3. Nebulizer Treatments
 - 4. Patient Teaching
 - E. Evaluation
 - F. Documentation

Lesson Objectives:

After completion of this chapter the student will:

1. Explain how the respiratory system functions.
2. Name three causes of hypoxia.
3. Identify procedures to be followed in the event of respiratory or cardiac arrest.
4. Describe the various methods used for oxygen delivery.
5. List safety precautions to be observed when patients are receiving oxygen therapy.

Clinical Practice:

1. Prepare to assist patients to clear the airway via coughing, postural drainage, suctioning, abdominal thrusts (Heimlich maneuver), and inhalation therapy.
2. Regulate oxygen flow and correctly apply an oxygen delivery device..
3. Prepare to provide care for the tracheostomy patient.
4. Prepare to care for the patient who has a chest tube and drainage system.

Skills & Steps:**Clinical Lab****4 hr**

1. Skill 28-1 Using a Pulse Oximeter..
2. Skill 28-2 Administer Abdominal Thrusts (Heimlich Maneuver)
3. Skill 28-3 Cardiopulmonary Resuscitation
4. Skill 28-4 Administering Oxygen
5. Skill 28-5 Nasopharyngeal Suctioning
6. Skill 28-6 Endotracheal and Tracheostomy Suctioning
7. Skill 28-7 Providing Tracheostomy Care
8. Steps 28-1 Maintaining a Disposable Water-Seal Chest Drainage System.

Chapter 29
3 hr
Testing 1 hr

Promoting Urinary Elimination

Lesson Content:

- I. Keys Terms
- II. Overview Of Structure and Function Of The Urinary System
- III. Normal Urinary Elimination
 - A. Factors Affecting Normal Urination
 - B. Characteristics Of Normal Urine
 - 1. Color
 - 2. Clarity
 - 3. Odor
 - 4. Specific Gravity
 - 5. pH
- IV. Alteration In Urinary Elimination
- V. Application of the Nursing Process
 - A. Assessment (Data Collection)
 - 1. Urine Specimen for Urinalysis
 - a. Voided Specimen for Urinalysis
 - b. Midstream (Clean-Catch) Urine Specimen
 - c. Specimen for an Indwelling Catheter
 - d. Sterile Catheterized Specimen
 - e. 24-Hour Urine Specimen
 - f. Urinary Collection Bag
 - g. Strained Specimen
 - B. Nursing Diagnosis
 - C. Planning
 - D. Implementation
 - 1. Assisting with Use of a Urinal
 - 2. Assisting a Patient to Urinate
 - a. Types of Urinary Catheters
 - b. Performing Catheterization
 - c. Removal of an Indwelling (Foley) Catheter
 - d. The Suprapubic Catheter
 - e. Intermittent Self-Catherization
 - f. Bladder Irrigation or Instillation
 - 3. Assisting the Patient Who Is Incontinent
 - a. Urinary Diversion Care
 - E. Evaluation
 - D. Documentation

Lesson Objectives:

After completion of this chapter the student will:

1. Describe the structure and function of the urinary system.
2. Identify abnormal appearance of a urine specimen.
3. Describe three nursing measures to assist patients to urinate normally.
4. List the purposes and principles of indwelling and intermittent catheterization.
5. Explain the rationale for using a continuous bladder irrigation system.

Clinical Practice:

1. Assess a patient's urinary status
2. Teach a patient how to obtain a "clean-catch" (midstream) specimen.
3. Perform a urine dipstick test accurately.
4. Assist patients with toileting.
5. Insert an indwelling catheter using sterile technique.
6. Perform catheter care.
7. Teach a patient how to perform Kegel exercises.

Skills & Steps**Clinical Lab****2 hr**

1. Skill 29-1 Placing and Removing a Bedpan
2. Skill 29-2 Applying a Condom Catheter
3. Skill 29-3 Catheterizing the Female Patient
4. Skill 29-4 Catheterizing the Male Patient
5. Skill 29-5 Performing Intermittent Bladder Irrigation and Instillation
6. Steps 29-1 Obtaining a Urine Specimen from an Indwelling Catheter
7. Steps 29-2 Removing an Indwelling Catheter
8. Steps 29-3 Continence Training

Chapter 30
3 hr
Testing 1 hr

Promoting Bowel Elimination

Lesson Content:

- I. Key Terms
- II. Overview Of Structure And Function Of The Intestinal System
 - A. Which Structures of The Intestinal System Are Involved In Waste Elimination?
 - B. What Are The Functions Of The Intestines?
 - C. What Effect Does Aging Have On The Intestinal Tract?
- III. Characteristics Of Stool
 - A. Normal Characteristics Of Stool
 - B. Abnormal Characteristics Of Stool
- IV. Hypoactive Bowel And Constipation
- V. Hyperactive Bowel And Diarrhea
- VI. Fecal Incontinence
 - A. Application of the Nursing Process
 1. Assessment (Data Collection)
 2. Nursing Diagnosis
 3. Planning
 4. Implementation
 5. Evaluation
 6. Documentation
- VII. Rectal Suppositories
- VIII. Enemas
 - A. Types Of Enemas
 1. Retention Enema
 - B. Amount And Temperature Of Solution
 - C. Recommended Position
- IX. Rectal Tube
- X. Fecal Impaction
- XI. Bowel Training For Incontinence
- XII. Bowel Ostomy
 - A. Ostomy Care
 - B. Skin Care
 - C. Applying an Ostomy Appliance

D. Irrigating a Colostomy

Lesson Objectives:

After completion of this chapter the student will:

1. Describe the process of normal bowel elimination.
2. Identify abnormal characteristics of stool.
3. Discuss the physiologic effects of hypoactive bowel and nursing interventions to assist patients with constipation.
4. List safety considerations related to giving a patient an enema.
5. Describe three types of intestinal diversions.
6. Discuss the stoma and peristomal assessment and skin care.
7. Discuss the psychosocial implications for a patient who has an ostomy.

Clinical Practice:

1. Use nursing measures to promote regular bowel elimination in patients.
2. Collect a stool specimen.
3. Perform a focused assessment of the bowel.
4. Assist RN in identifying appropriate nursing diagnoses for a patient with bowel problems.
5. Prepare to administer an enema.
6. Assist and teach the patient who is incontinent with a bowel retraining program.
7. Provide ostomy care, including irrigation and changing the ostomy appliance.
8. Assist a patient to catheterize a continent diversion.

Skills & Steps:

Clinical Lab	2 hr
1. Skill 30-1	Administering an Enema
2. Skill 30-2	Changing an Ostomy Appliance
3. Steps 30-1	Removal of a Fecal Impaction
4. Steps 30-2	Catheterizing a Continent Ileostomy
5. Steps 30-3	Irrigating a Colostomy

Pain, Comfort, and Sleep

Chapter 31

3 hr

Testing 1 hr

Lesson Content:

- I. Pain and Discomfort
- II. Theories of Pain
 - A. Gate Control Theory
 - B. Endorphins
 - C. Types of Pain
 1. Acute Pain
 2. Chronic Pain
 3. Nociceptive Pain
 4. Neuropathic Pain
 5. Phantom Pain
- III. Application of the Nursing Process
 - A. Perception of Pain
 - B. Pain Scales
- IV. Nonmedicinal Methods of Pain Control
 - A. Transcutaneous Electrical Nerve Stimulation
 - B. Percutaneous Electrical Nerve Stimulation
 - C. Binders and Braces
 - D. Application of Heat and Cold
 - E. Relaxation
 - F. Biofeedback
 - G. Distraction
 - H. Guided Imagery
 - I. Meditation
 - J. Music
 - K. Hypnosis
 - L. Massage
- V. Medicinal Methods of Pain Control
 - A. Analgesic Methods of Pain Control
 1. Nonsteroidal anti-inflammatory drugs (NSAIDS)
 2. Analgesic
 - B. Oral Medications
 - C. Topical Medications
 - D. Injected Medications

- E. Intravenous medications
- F. Patient-Controlled Analgesia (PCA)
- G. Epidural Analgesia
- H. Implantable Pumps
- VI. Sleep
 - A. Functions of Sleep
 - B. Stages of Sleep
- VII. Normal Sleep Requirements
- VIII. Factors Affecting Sleep
- IX. Sleep Disorders
 - A. Insomnia
 - B. Sleep Apnea
 - C. Snoring
 - D. Narcolepsy
- X. Application of the Nursing Process
 - A. Assessment
 - B. Nursing Diagnosis
 - C. Planning
 - D. Implementation
 - E. Evaluation

Lesson Objectives:

Upon completion of this chapter, the student will be able to:

1. Discuss the application of The Joint Commission pain standards in planning patient care.
2. Give the rationale for why pain is considered the “fifth” vital sign”.
3. Illustrate the physiology of pain using the gate control theory.
4. Describe the use of a variety of nursing interventions for pain control, including biofeedback, distraction, guided imagery, massage, and relaxation.
5. Analyze the need for normal sleep.
6. Recognize how the need for sleep changes over the life span.
7. Delineate factors that can interfere with sleep.
8. Recognize the sleep disorders insomnia, sleep apnea, and narcolepsy.

Clinical Practice

1. Assist the patient in accurately describing sensations of pain and discomfort.
2. Accurately and appropriately record the patient’s report of pain using clear, descriptive terms.
3. Teach the patient to use a transcutaneous electrical nerve stimulator. (TENS unit)

4. Evaluate the effects of various techniques used for pain control.
5. Care for patients receiving patient-controlled analgesia (PCA) or epidural analgesia.
6. Evaluate the effects of pain medication, and accurately report and record observations.
7. Develop a plan designed to assist the patient in getting adequate sleep.

Chapter 37

Care of the Surgical Patient

3 hr

Testing 1 hr.

Lesson Content:

- I. Key Terms
- II. Reasons for Surgery
 - A. Elective
 - B. Palliative
 - C. Curative
- III. Patients at Higher Risk for Surgical Complications
- IV. Perioperative Nursing
- V. Enhancements to Surgical Technique
 - A. Laser Surgery
 - B. Fiberoptic Surgery
 - C. Robotic Surgery
- VI. Anesthesia
 - A. General Anesthesia
 - B. Regional Anesthesia
 - C. Procedural (Moderate) Sedation Anesthesia
 - D. Local Anesthesia
- VII. Preoperative Procedures
 - A. Surgical Consent
 - B. Surgical Site Identification
 - C. Physical Examination
 - D. Teaching for Postoperative Exercises
 1. Deep Breathing
 2. Forced Exhaled Coughing
 3. Using an Incentive Spirometer
 4. NPO Status
 5. Elimination
 6. Expected Tubes and Equipment
 7. Rest and Sedation
 8. Pain Control
 9. Skin Preparation
 10. Immediate Preoperative Care
 11. Preoperative Medications
 12. Preparation to the Unit

- VIII. Intraoperative Care
 - A. Role of the Scrub Person and Circulating Nurse

- IX. Postanesthesia Immediate Care
 - A. Postanesthesia Care Unit
 - B. Postanesthesia Care in the Same-Day Surgery Unit

- X. Postoperative Care
 - A. Protect the Patient from Injury
 - B. Promote Respiratory Function
 - C. Promote Circulation
 - D. Maintain Fluid Balance
 - E. Promote Gastrointestinal Function
 - F. Promote Comfort
 - G. Rest and Activity
 - H. Prevent Infection
 - I. Complications of Surgery

Lesson Objectives:

Upon completion of this chapter, the student will be able to:

1. Discuss the reasons for performing surgery.
2. Identify potential risk factors for complications of surgery.
3. Explain the nurse's role in the various phases of perioperative nursing.
4. Illustrate how robotic surgery has shortened recovery time.
5. Compare the types of anesthesia used for surgery.
6. Verify the safety measures now in place to prevent errors regarding the surgical site.
7. Assist the patient with psychological preparation for surgery.
8. State the nurse's role during the signing of a consent form for surgery.
9. Compare the roles of the scrub person and the circulating nurse.
10. Select interventions to prevent each of the potential postoperative complications.

Clinical Practice:

Lab 1 hr

1. Perform preoperative teaching for the patient and the family.
2. Implement physical preparation of the patient before surgery.
3. Prepare to perform an immediate postoperative assessment when a patient returns to the nursing unit.
4. Promote adequate ventilation of the lungs during recovery from anesthesia.
5. Assess for postoperative pain and provide comfort measures and pain relief.
6. Promote early ambulation and return to independence in activities of daily living.

7. Perform discharge teaching necessary for postoperative home self-care.

Skill 37-1 Applying Antiembolism Stockings

Chapter 38
3 hr
Testing 1hr

Providing Wound Care Treating Pressure Ulcers

Lesson Content:

- I. Key Terms
- II. Types of Wounds and the Healing Process
 - A. Partial Thickness
 - B. Full Thickness
 - C. Clean vs Dirty
- III. Phases of Wound Healing
 - A. Inflammation
 - B. Proliferation
 - C. Maturation
- IV. Factors Affecting Wound Healing
 - A. Age
 - B. Nutrition
 - C. Lifestyle
 - D. Medications
 - E. Infection
 - F. Chronic Illness
- V. Complications of Wound Healing
 - A. Infection
 - B. Dehiscence and Evisceration
- VI. Treatment of Wounds
 - A. wound Closure
 - B. Wounds and Drainage Devices
 - C. Debridement
 - D. Dressings
 - 1. Transparent Film Dressings
 - 2. Hydrocolloid Dressing
 - 3. Securing Dressings
 - 4. Binders
- VII. Negative Pressure Treatment
- VIII. Treatment of Pressure or Vascular Ulcers
- IX. Application of the Nursing Process
 - A. Nursing Diagnosis
 - B. Planning
 - C. Implementation
 - D. Evaluation
- X. Patient Teaching for Wound Care
- XI. Suture and Staple Removal
- XII. Eye, Ear, and Vaginal Irrigations
- XII. Hot and Cold Applications
 - A. Uses

B. Patient Teaching

Learning Objectives:

Upon completion of this chapter, the student will be able to...

1. Describe the physiologic process by which wounds heal.
2. Discuss factors that affect wound healing.
3. Describe four signs and symptoms of wound infection.
4. Discuss actions to be taken if wound dehiscence or evisceration occurs.
5. Explain the major purpose of a wound drain.
6. Identify the advantages of vacuum-assisted wound closure.
7. Compare and contrast the therapeutic effects of heat and cold.

Clinical Practice:

Lab Practice 2hr

1. Perform wound care, including emptying a drainage device and applying a sterile dressing.
2. Provide appropriate care for a pressure ulcer.
3. Perform wound irrigation.
4. Remove sutures or staples from a wound and apply Steri-Strips.
5. Give a heat or cold treatment to a patient.

Skills & Steps

Skill 38-1 Sterile Dressing Change

Skill 38-2 Wound Irrigation Skill

38-3 Apply a Wet-to-Damp or Wet-to-Dry Dressing

Step 8-1 Maintaining a Closed Wound Drainage Unit

Step 38-2 Applying a Hydrocolloid Dressing

Step 38-3 Removing Sutures or Staples

Step 38-4 Irrigating the Eye or Adult Ear

Chapter 39 **Promoting Musculoskeletal Function**
3hr

Testing 1hr

Lesson Content:

- I. Key Terms
- II. Systemic Effect of Immobilization
- III. Psychosocial Effects of Immobilization
- IV. Types of Immobilization
 - A. Splints
 - B. Traction
 - 1. Manual
 - 2. Skin
 - 3. Skeletal
 - C. Casts
 - 1. Bivalved
 - 2. Spica
 - 3. Moleskin
- V. External Fixators
- VI. Devices Used to Prevent Problems of Immobility
 - 1. Air-Fluidized Beds
 - 2. Low Air-Loss Beds
 - 3. Continuous Lateral-Rotation Beds
- VII. Pressure Relief Devices
- IX. Continuous Passive Motion Machine
- X. Therapeutic Exercises
- XI. Application of the Nursing Process
 - A. Assessment/Nursing Diagnosis
 - B. Planning
 - C. Implementation
- X. Bandages Used to Support, Apply Pressure or Immobilize
 - A. Circular Turn
 - B. Spiral Turn
 - C. Spiral Reverse Turn
 - D. Figure-of-8 Turn
 - E. Recurrent Turn
 - F. Thumb Spica
 - G. Immobilizing and Supporting with a Sling
 - H. Using a Mechanical Lift to Transfer the Immobile Patient
 - I. Whirlpool Bath
 - J. Assisting with Aids to Mobilization
 - 1. Walker
 - 2. Crutches
 - 3. Wheelchair
 - 4. Braces, Splints, and Protheses for Stabilization
- XI. Rehabilitation

- XII. Evaluation
- XIII. Documentation

Learning Objectives:

Upon completion of this chapter, the student will be able to...

1. Discuss the effects of inactivity on respiratory exchange and airway clearance.
2. Describe appropriate care of a cast as it dries.
3. Verbalize the differences among an air-fluidized bed, low-air-loss bed, and continuous lateral-rotation bed, listing the reasons for their use.
4. Name at least four pressure relief devices that help prevent skin injury in immobile patients.
5. Describe how to perform a neurovascular assessment on an immobilized extremity.
6. Discuss the use of bandages and slings to immobilize a body part.

Clinical Practice:

Lab Practice 1hr

1. Devise a plan of care for meeting the psychosocial needs of the alert immobile patient.
2. Correctly care for the patient undergoing skin traction.
3. Use lift sheets and roller or slide devices to move immobilized patients.
4. Teach a patient to properly care for a cast after discharge.
5. Correctly apply an elastic bandage to a stump after an amputation.
6. Transfer a patient using a mechanical lift.
7. Assist a patient with the use of each of the following: walker, crutches, cane, brace, prosthesis, and wheelchair.

Skills & Steps

Skill 39-1 Cast Care

Skill 39-2 Care of the Patient in Traction

Skill 39-3 Transferring with a Mechanical Lift

Steps 39-1 Using a Continuous Passive Motion Machine

Steps 39-2 Applying an Elastic Bandage

Steps 39-3 Applying a Triangular Bandage Sling

Final

2hr.

Students will take and pass the final exam with a minimum of 80% for the overall combined score