# **CURRICULUM**

**Adult and High School Divisions** 

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# WILLOUGHBY-EASTLAKE SCOOOL OF PRACTICAL NURSING PHILOSOPHY

The faculty believes that nursing education is a deliberate process of learning by the student interested in providing nursing care to others. In order to facilitate this learning process, we build our curriculum on these concepts:

#### WE BELIEVE...

*the person* is a holistic being who is an individual, a member of a family, a member of a local, regional, and world community. Each person possesses individual, physical, emotional, social, economic, and spiritual self-care requisites. These self-care requisites can be met by either self-care agency, dependent-care agency, or nursing-care agency.

*health* exists when the person has the ability to meet self-care requisites that contribute to the maintenance and promotion of structural and/or emotional integrity, functioning, and development. Illness occurs when an individual is incapable of maintaining self-care as a result of health-related limitations.-

**society/environment** includes all internal and external factors which effect the person's ability to adjust or maintain self-care agency or meet self-care needs.

**nursing** is a service of deliberately selected and performed actions to assist individuals to maintain self-care, including structural integrity, functioning, and development. These actions should be based on the organized approach of nursing process which includes the following:

- assessment of the individual/patient in terms of self-care, developmental and health deviation requisites
- > identifying problems specific to the individual/patient and their unmet health care requisites
- > using a cooperative effort with the individual/patient to establish goals
- > establish a plan of care using appropriate members of the health care team and the individual/patient
- implement the plan
- > evaluate and revise the plan of care as necessary

*nursing education* is the process by which the nursing instructor facilitates the student's psychomotor, cognitive, and affective skills to attain an entry level of nursing knowledge and competency. Entry level practical nursing skills are learned through the use of various competency builders.

**Program Curriculum** - The core of knowledge obtained in this curriculum is viewed as a basis for beginning practice in the nursing field. It is stressed to the student that as a member of a very dynamic profession, accountability for current knowledge is ever present. A continuous process of learning is emphasized because of constant changes within the study of the science of nursing.

#### WILLOUGBY-EASTIAKE SCHOOL OF PRACTICAL

#### **NURSING OBJECTIVES**

The Willoughby-Eastlake School of Practical Nursing graduate, under the supervision of the registered nurse, licensed physician, licensed dentist or podiatrist, will be prepared to:

- 1. Deliver nursing care through application of health concepts derived from the biological, physical, psychosocial, and nursing sciences to assist client to attain optimal level of self-care agency.
- 2. Implements the nursing process from a holistic point of view to attain, maintain, or regain optimal level of self-care agency.
- 3. Contribute to the development and evaluation of health care plans utilizing the nursing process.
- 4. Apply knowledge, judgment, and skill to safely and accurately administer medications.
- 5. Safely perform nursing skills within established legal and ethical perimeters.
- 6. Use various teaching methods in collaboration with the client, family, and health care team to provide information and instruction to exercise and enhance self-care agency.
- 7. Employ verbal and written communication to convey pertinent information about the client's self-care requisites to the health care team.

#### **CONCEPTUAL FRAMEWORK**

The conceptual framework consists of three areas of focus based on Orem's Self-Care Theory. These areas will progressively provide knowledge beginning with the overall needs of all persons at various stages of development followed by the needs of those persons with health deviations.

Included throughout the course will be the concepts of nursing process, health concepts, communications, ethics, nursing skills, and safety.

**Universal Self-Care Requisites:** Introduces the beginning student to the basic function and needs of the individual. During this phase of the course, the student will acquire the foundation skills to permit them to deliver appropriate care.

**Developmental Self-Care Requisites**: Focus upon human developmental processes and conditions and events that occur during various stages of the life cycle, as well as with events that may adversely affect development. This phase of the course will enable the student to identify developmental deficits of a person and incorporate the skills and knowledge learned in the previous phase in order to provide nursing care agency.

**Health Deviation Self-Care Deficit:** During this final phase of the curriculum, the student will identify basic universal, developmental, and health deviation self-care deficits and apply the nursing process to provide nursing care agency.

CONCEPTUAL FRAMEWORK												
	Universal Self-Care Requisites				Developmental Self-Care Requisites		Health Deviation Self-Care Requisites					
	Nursing	Body	Nutrition	PVR	Growth	Maternal	Medical	Pharm	Intro	Math		
	Fundamentals	Structure			Development	Health	Surgical		Pharm			
	and Skills											
Nursing	X	X	X	X	X	X	X	X	X			
Process												
Health	X	X	X	X	X	X	X	X	X			
Concepts												
Communication	X	X	X	X	X	X	X	X	X			
Ethics	X			X	X	X	X	X	X			
Nursing Skills	X		X	X		X	X	X	X	X		
Safety	X			X	X	X	X	X	X	X		

#### **BODY STRUCTURE**

#### **COURSE DESCRIPTION – 90 hours**

This is an elementary study of human anatomy and physiology, tracing the organization of the body from the single cell to the coordinated whole. The main theme is the interaction of all body systems for the maintenance of homeostasis. A prime concern is the ability to describe, and to explain the fundamental facts and principles of anatomy and function. Examples of body structure and its relationship to universal self-care requisites and deficits are presented so as to provide a scientific basis for nursing practice and theory.

# **COURSE OBJECTIVES**

Upon the completion of the student will be prepared to:

- ➤ Identify the Systems of the human body, their functions, and how they relate to universal self-care requisites
- Recognize the interrelationship of all structures of the body.
- > Apply concepts of normal body function to case studies in order to help identify health deviations.

# **TEXTBOOKS**

Memmler's Structure and Function of the Human Body by Barbara Cohen

# **TEACHING STRATEGIES**

A combination of lecture, discussion, handouts, SmartBoard Technology, E-Instruction and participation activities will be used to present materials. Videos, computerized tutorials, and simulation are used to enhance student understanding. Students are required to read all assigned pages and be prepared to participate during class.

#### **EVALUATION**

Frequent testing will be done to help assess continuing progress of the student. At the end of the course there will be a comprehensive final exam. All tests and finals are weighted on a total point scale. A minimum grade of 84% is required for the course.

100 - 90 % = A89 - 80 % = B

Below 84 % = Unsatisfactory

# **BODY STRUCTURE**

- ❖ Introduction to the human body
  - Body systems and processes
  - > Directions in the body
  - Cavities
  - ➤ Chemistry of Life
    - Introduction to chemistry
      - Acid/base balance
      - Organic compounds
  - > Tissues
    - Epithelial
    - Connective
    - Nerve
    - Muscle
  - Membranes
  - > Tumors
- Universal self-care requisites
  - ➤ Activity/Rest
    - Bones
      - Structure
      - Cells
      - Tissue
      - Marrow
      - Membranes
      - Growth and function
      - Divisions of the skeleton
        - ♦ Axial
          - > Head
          - > Trunk
        - ♦ Appendicular
      - Landmarks
      - Health-care deviations
        - ♦ Cleft palate
        - ♦ Osteoporosis
        - ♦ Osteomyelitis
        - **♦** Tumors
        - ♦ Rickets
        - ♦ Curvature of the spine
        - ♦ Changes of aging
        - ♦ Fractures
    - Joints
      - Types
      - Structure
      - Health-care deviations

- ♦ Dislocation/sprain
- ♦ Arthritis
- ♦ Bachache
- Muscles
  - Structure
  - Characteristics
  - Attachments
  - Movement
  - Body mechanics
  - Muscle groups
    - ♦ Head/neck
    - ♦ Upper extremities
    - ♦ Trunk
    - ♦ Lower extremities
  - Health-care deviations
    - ♦ Aging
    - ♦ Spasm
    - ♦ Strains/sprains
    - ♦ Muscular dystrophy
    - ♦ Bursitis/tendonitis
    - **♦** Flatfoot
- Skin
  - Structure
  - Function
  - Observation of skin
  - Health-care deviations
    - **♦** Dermatitis
    - ♦ Sunburn
    - ♦ Eczema
    - ♦ Acne
    - ♦ Impetigo
    - ♦ Alopecia
    - ♦ Athlete's foot
    - ♦ Care of the skin
- Nerves
  - Organization of the nervous system
    - ♦ Central and peripheral nervous system
      - ➤ Voluntary
      - > Involuntary
    - ♦ Spinal cord
      - > Structure
      - > Function
      - > Cerebral spinal fluid

- > Health care deviations
  - Poliomyelitis
  - Multiple sclerosis
  - Amytropic lateral sclerosis
- ♦ Autonomic nervous system
  - > Sympathetic nervous system
  - > Parasympathetic nervous system
  - Meninges
  - ➤ Health-care deviations
    - Encephalitis
    - Cerebrovascular accident
    - Alzheimer's
    - Parkinson's
    - Cerebral palsy
    - Epilepsy
    - Tumors
    - Bell's palsy
    - Neuralgia
- Senses
  - Eye
    - ♦ Structure
    - ♦ Muscles
    - ♦ Nerve supply
    - ♦ Health-care deviations
      - > Infections
      - > Eye strain
      - > Structural defects
      - > Strabismus
      - **▶** Blindness
  - Ear
    - ♦ Structure
    - ♦ Function
    - ♦ Nerves
    - ♦ Health-care deviations
      - > Otitis media
      - Deafness
      - ➤ Otosclerosis
  - Other senses
    - **♦** Taste
    - ♦ Smell
    - ♦ Pressure
    - **♦** Temperature
    - ♦ Touch
    - ♦ Pain
    - Position

#### > Water

- Blood
  - Functions
  - Consituents
  - Hemostasis
  - Typing
    - ♦ Use of blood components
  - Health-care deviations
    - ♦ Anemia
    - ♦ Leukemia
    - ♦ Clotting disorders
    - ♦ Studies
      - > Hematocrit
      - ➤ Hemoglobin
      - ➤ Blood count
      - **≻** Chemistry
      - > Coagulation studies
      - ➤ Bone marrow

#### Heart

- Structure
- Physiology
- Cycle
- Output
- Conduction
- Heart rate and sounds
- Health-care deviation
  - **♦** Inflammation
  - ♦ Congenital heart disease
  - Rheumatic heart disease
  - ♦ Coronary heart disease
  - ♦ Heart failure
  - ♦ Prevention
  - Studies
    - > Electrocardiogram
    - > Fluoroscope
    - > Catheter
    - > Echocardiography
    - Medication
    - Pacemaker
    - Surgery
- Blood vessels
  - Arteries
    - ♦ Structure
    - ♦ Function
    - ♦ Pulse

- ♦ Blood pressure
- Veins
  - ♦ Structure
  - ♦ Physiology of circulation
- Health-care deviations
  - ♦ Aneurysm
  - ♦ Arterial degeneration
  - ♦ Hemorrhage
  - ♦ Shock
  - ♦ Varicose veins
  - ♦ Phlebitis
  - ♦ Embolus
  - ♦ Ulcers
- Lymphatic
  - Function
  - Structure
  - Tissue
  - Nodes
  - Thymus
  - Health-care deviations
    - **♦** Lymphangitis
    - ♦ Lymphadenitis / lymphadenopahty
    - ♦ Splenomegaly
    - ♦ Hodgkin's disease
  - Hormones
    - ♦ Functions
    - **♦** Types
      - > Protein
      - > Steroid
    - ♦ Regulation
  - Glands
    - ♦ Pituitary
    - ♦ Thyroid
      - > Hyperthyroid
      - > Hypothyroid
    - ♦ Parathyroid
    - ♦ Adrenals
      - ➤ Medulla
      - > Cortex
    - ♦ Pancreas
    - ♦ Sex glands
    - ♦ Thymus
    - ♦ Pineal
    - ♦ Kidneys

# ♦ Placenta

- > Air
  - Respiratory system
    - Function
    - Structure
    - Physiology
      - Gas exchange and transport
    - Regulation
    - Health-care deviations
      - ♦ Abnormal respirations
      - ♦ Infection
      - ♦ Allergy
      - ♦ COPD
      - ♦ Atelectasis
      - ♦ Lung cancer
      - ♦ Pleurisy
      - ♦ Pneumothorax
      - ♦ Hemothorax
      - Respiratory equipment
        - > Bronchoscope
        - Oxygen
        - > Suction
        - > Tracheostomy
        - > CPR

#### > Food

- Digestive system
  - Function
  - Structure
  - Accessory organs
    - ♦ Liver
    - ♦ Pancreas
    - ♦ Gallbladder
  - Process of digestion
  - Health-care deviations
    - **♦** Gastritis
    - ♦ Enteritis
    - ♦ Diverticulitis
    - ♦ Diarrhea
    - **♦** Constipation
    - ♦ Hepatitis
    - **♦** Cirrhosis
    - ♦ Jaundice
    - ♦ Cholelithiasis

- Metabolism
  - Phases
  - Minerals
  - Vitamins
  - Healthy diet
- Body temperature
  - Heat production and loss
  - Regulation
  - Hyperthermia
  - Hypothermia
  - Extreme body temperature
  - Fluid compartments
- Water balance
  - Electrolytes
  - Regulation
  - Acid/base balance
  - Health-care deviations
    - ♦ Edema
    - ♦ Water intoxication
    - ♦ Dehydration
    - ♦ Effusion
    - ♦ Ascites
- **Elimination** 
  - Urinary system
    - Function
    - Kidneys
      - ♦ Structure
      - ♦ Physiology
      - ♦ Function
      - ♦ Ureters
    - Bladder
    - Micturation
    - Urethra
    - Health-care deviations
      - ♦ Glomerulonephritis
      - ♦ Pyelonephritis
      - ♦ Renal failure
      - ♦ Calculi
      - **♦** Cystitis
      - ♦ Urethritis
  - Male Reproductive System
    - Structure
    - Hormones
    - Hormonal control

- Health-care deviations
  - **♦** Infertility
  - ♦ Cryptochidism
  - ♦ Inguinal hernia
  - **♦** Infections
  - **♦** Tumors
- Female reproductive system
  - Structure
  - Menstrual cycle
  - Health-care deviations
    - **♦** Leucorrhea
    - ♦ Menstrual disorders
    - **♦** Tumors
    - ♦ Infection
    - **♦** Infertility
  - Pregnancy
    - ♦ Fertilization
    - ♦ Early pregnancy
    - ♦ Childbirth
    - **♦** Lactation
    - ♦ Multiple birth
    - ♦ Health-care deviations
      - Ectopic pregnancy
      - > Placenta previa
      - ➤ Placental abruption
      - > Toxemia
      - **➤** Abortion
      - > Menopause
      - > Contraception
- > Safety
  - Types of microorganisms
    - Cell animal
      - ♦ Materials through cell membrane
        - Osmosis
        - Diffusion
        - > Active transport
      - ♦ Bacterial cell
        - Organelles
        - > Functions of organelles
        - ➤ Characteristics morphology
        - ➤ Motility
        - **➢** Growth
        - > Pathogenic bacteria
      - ♦ Virus
        - ➤ Rickettsias, chlamydias, mycoplasmas

- > Protozoa
- > Fungi
- > Parasitic worms
- Diseases and disease producing microorganisms
  - Causes of disease
    - ♦ Direct
    - ♦ Indirect
  - Study of disease pathophysiology
    - ♦ Etiology
    - ♦ Incidence
    - ♦ Disease description
    - ♦ Diagnosis
      - > Symptom, sign, syndrome
    - ♦ Prognosis
    - **♦** Therapy
    - ♦ Prevention
- Control microorganisms inside the body
  - Factors that influence occurrence of infection
  - Nonspecific defenses against disease immunity
  - Specific defenses against disease immunity

#### NURSING FUNDAMENTALS

# COURSE DESCRIPTION 125 Theory hours, 45 Lab hours, 20 Clinical hours

This course provides the beginning student with the fundamental concepts and skills nursing to meet universal self-care requisites of the client throughout the lifespan. Laboratory and clinical experience correlates these concepts to the care of the client. Evaluation of the student is based upon the nursing process, health concepts, communications, ethics, nursing skills, and safety.

# **COURSE OBJECTIVES**

Upon the completion of the student will be prepared to:

- ➤ Deliver nursing care through the applications of health concepts to assist the client to attain optimal levels of self-care agency.
- Implement the nursing process from a holistic point of view to attain, maintain, or regain optimal levels of self-care agency.
- ➤ Contribute to the development and evaluation of health care plans utilizing the nursing process.
- > Safely perform nursing skills within established legal and ethical perimeters.
- Employ verbal, written and electronic communication to convey pertinent information about the client's self-care requisites to the health care team.

## **TEXTBOOKS**

Fundamental Skills and Concepts in Patient Care by Barbara Timby

Study Guide for Fundamental Skills and Concepts in Patient Care by Barbara Timby

#### **TEACHING STRATEGIES**

A combination of lecture, discussion, handouts, SmartBoard Technology, E-Instruction and participation activities will be used to present materials. Videos, computerized tutorials, and simulation are used to enhance student understanding. Students are required to read all assigned pages and be prepared to participate during class.

#### **EVALUATION**

Frequent testing will be done to help assess continuing progress of the student. At the end of the course there will be a comprehensive final exam. All tests and finals are weighted on a total point scale. A minimum grade of 84% is required for the course.

100 - 90 % = A

89 - 80 % = B

Below 84 % = Unsatisfactory

# **NURSING FUNDAMENTALS**

- Activity
  - Universal Self-Care Requisites
    - Activity/Rest
      - Introduction
      - Posture
      - Body Mechanics
      - Transfer/ambulation
      - Benefits of activity and exercise
      - Assessing fitness
  - ➤ Health deviation
    - Impaired physical mobility
      - Identifying Risk Factors
      - Affect of immobility on body systems
    - Knowledge deficit: Types of exercise
- Nursing Process
  - Data collection for the LPN
    - Types of data
  - > Assessment for the RN
  - Nursing diagnosis
  - > Planning and outcome
  - > Implementation
  - > Evaluation
- ❖ Admitting, Transferring, Referring and Discharging a Client
  - > Introduction
    - Trends in health care delivery
    - Common reactions
    - Preparing for admission
    - Admission
      - Anxiety
        - Orienting the client
      - Loss of identity related to hospitalization
        - ♦ Valuables and clothing
      - ♦ Helping client undress
    - Transferring client
    - Referring client
    - Discharge client
      - Teaching
      - Against medical advice
  - > Developmental self-care requisites
    - Admitting a child
    - Adjustment of children to hospital setting
    - Adjustment of elderly to hospital admission
- Promoting personal hygiene
  - > Introduction

- Structure and function of skin and mucosa
- Assessment of skin
  - High risk for self-care deficit related to hygiene
    - Purpose of providing bath
    - ♦ Types of baths
      - Complete
      - > Assisted
      - > Shower
      - > Tepid
    - ♦ Perineal care
    - ♦ Backrub
    - ♦ Shaving
    - ♦ Teeth and mouth care
    - ♦ Eve care
    - ♦ Ear care
    - ♦ Nail care
    - ♦ Hair care
- Promoting rest and safety in the environment
  - ➤ Universal self-care requisites
    - Activity/Rest
      - Environment
        - ♦ Client's room
          - > Furnishings
          - > Lighting
          - > Temperature
      - Diversional activities
      - Personal items
      - Modifying the environment
      - Sensory alterations
    - Safety
      - High risk for injury
        - ♦ Safety signals
        - ♦ Identification of client
        - **♦** Restraints
        - ♦ Electrical injury
        - ♦ Fall risk
      - Fire
      - Communication
        - ♦ Recording and reporting accidents
- Performing Data Collection
  - > Air
    - Respiratory assessment
      - Lung sounds
        - ♦ Normal
        - Rhonchi

- ♦ Wheezes
- ♦ Rales
- Respiratory patterns
- Respiratory depth and expansion
- Cardiovascular assessment
  - Pulse
    - ♦ Rhythm
    - ♦ Quality
  - Blood pressure
  - Neurovascular data collection
- > Water
  - Weight
  - Edema
- > Food
  - Diet and special needs
  - Weight and height
  - Habits
- **Elimination** 
  - Gastrointestinal system
    - Palpation of abdomen
    - Bowel sounds
    - Bowel movements
      - **♦** Characteristics
    - Hemorrhoids
  - Genitourinary
    - Examination of genitalia
    - Palpation of bladder
    - Urine
      - ♦ Amounts and characteristics
- ➤ Activity/Rest
  - Musculoskeletal system
    - Range of movement
    - Mobility
      - ♦ Strength
      - ♦ Gait walking
- > Solitude/Social Interaction
  - Sensory-perceptual
    - Mental status
    - Neurological data collection
    - Vision
    - Hearing
    - Touch, taste, smell
    - Skin
      - **♦** Integrity
      - ♦ Discharge

- **♦** Turgor
- Social and family status
- Coping strategies
- Vital Signs
  - ➤ Universal self-care requisites
    - Determining pain levels
    - Body temperature
      - Thermometers
      - Factors affecting body temperature
      - Assessing body temperature
        - ♦ Obtaining body temperature
        - ♦ Elevated body temperature
        - ♦ Cooling measures
        - Subnormal body temperature
    - Pulse
      - Normal pulse
      - Factors influencing pulse rate
      - Assessing pulse
      - Obtaining pulse
        - ♦ Tachycardia
        - ♦ Bradycardia
        - ♦ Rhythm
        - ♦ Volume apical
        - ♦ Apical-radial
    - Respirations
      - Factors influencing respirations
      - Assessing respirations
        - ♦ Normal rates
        - ♦ Bradypnea
        - **♦** Tachypnea
        - ♦ Characteristics of breathing
    - Blood pressure
      - Factors influencing blood pressure
      - Assessing blood pressure
        - ♦ Obtaining blood pressure
        - ♦ Normal blood pressure
        - ♦ Hypertension
        - ♦ Hypotension
        - ♦ Postural hypotension
        - ♦ Pulse pressure
- ❖ Elimination Bowel
  - ➤ Universal self-care deficit
    - Elimination
      - Introduction

- ♦ Bowel structure and function
- Factors affecting bowel elimination
- ♦ Characteristic of stool
- Constipation
  - ♦ Types and causes
  - ♦ Prevention
  - ♦ Relief
    - ➤ Diet/activity
    - > Suppository
    - > Enemas
      - Types
  - ♦ Impaction
    - Causes
    - Relief
  - ♦ Distention
    - Causes
    - > Relief
- Diarrhea
  - **♦** Causes
  - ♦ Relief
- Bowel incontinence
  - **♦** Causes
  - **♦** Managing
- Situational low self-esteem
  - ♦ Stomas for bowel elimination
  - **♦** Colostomy
    - > Care of site
    - > Irrigation
    - ➤ Alteration in body image
  - **♦** Ileostomy
    - > Stool
    - Care of site
- Miscellaneous
  - ♦ Stool specimens
- Elimination Urinary
  - > Universal self-care requisite
    - Introduction
      - Urinary system
      - Urinary function
      - Urinary patterns
      - Characteristics of urine
    - Toileting self-care deficit
      - Promoting urinary elimination
      - Commode
      - Bedpan

- Urinal
- Incontinence
  - Bladder retraining
  - Pelvic floor exercise
  - Crede
  - Skin care
  - External Catheter
- Urinary retention
  - Urinary catheters
    - **♦** Types
    - **♦** Insertion
    - ♦ Catheter care
    - **♦** Irrigation
    - ♦ Removal
- Altered urinary elimination
  - Urinary stoma
- High risk for infection
  - Collecting specimens
    - ♦ Void
    - **♦** Catheter
    - ♦ Stoma
- Miscellaneous
  - Specific gravity
  - Acetone test
- ➤ Developmental self-care requisites
  - Promoting urinary elimination in children
  - Pregnancy and it's effect on the urinary system
  - Effect of aging on urinary elimination
    - Prostate
    - Kidney function
- Maintaining and restoring fluid and chemical balance
  - ➤ Universal self-care requisites
    - Water
      - Functions of body fluid
      - Elimination
      - Fluid regulation and distribution
        - ♦ Assessment of fluid balance
      - Fluid volume excess
        - Restriction of fluids
        - ♦ Intake and output
      - Fluid volume deficit
        - ♦ Encourage fluid intake
        - ♦ Intravenous fluids
          - > Purpose
          - > Types

- ➤ Maintaining IV Therapy
  - Assessment
  - Flow rates
- Complications
- Discontinuing
- Blood transfusion
  - > Typing
  - Maintaining
  - > Assessment
    - Vital signs
    - Complications
- Electrolyte balance
  - ♦ Major electrolytes and their function
  - ♦ Electrolyte imbalance
- Acid/Base
  - ♦ Normal
  - **♦** Imbalance
- > Developmental self-care requisites
  - Encouraging fluids with children
  - Safety related to IV therapy and children
  - Elderly clients and IV therapy
- Providing Nutrition
  - Universal self-care requisites
    - Food
      - Introduction
        - ♦ Nutritional needs
          - ➤ Water
          - > Proteins
          - Carbohydrates
          - > Fats
          - Minerals
          - Vitamins
          - > Food groups
          - > Nutritional assessment
  - ➤ Health deviation self-care requisites
    - Altered nutrition: More than body requirement
      - Measures to promote weight gain
      - Relieving anorexia, nausea, vomiting, and stomach gas
    - Fluid volume deficit
      - Measuring fluid intake
    - Feeding self-care deficit
      - Providing food for the client
    - Knowledge deficit: therapeutic diet
      - Commonly prescribed diets
    - Impaired swallowing
      - Alternative methods of providing nutrition

- ♦ Nasal gastric tubes
- ♦ Gastrostomy tubes
- ◆ Parenteral hyperalimentation (TPN)
- ♦ Aspiration risk
- > Developmental self-care deficits
  - Feeding an infant with cleft palate
  - Teaching methods of feeding infant and children
  - Understanding the effects of aging related to nutrition
- Promoting Comfort, Relaxation, and Sleep
  - Universal self-care requisite
    - Activity/Rest
      - Sleep and relaxation
        - ♦ Biological cycles
        - ♦ Promoting relaxation
        - ♦ Characteristics of sleep
        - ♦ Stages of sleep
        - ♦ Factors affecting sleep
        - ♦ Assessing sleep
  - ➤ Health deviation
    - Sleep pattern disturbance
      - Common sleep disorders
      - Promoting sleep
    - Pain
      - Pain scale
      - Characteristics
        - ♦ Types
      - Relieving acute pain
        - ♦ PCA
        - Relieving chronic pain
        - ♦ Acupuncture
        - ♦ Biofeedback
        - ♦ Hypnosis
        - ♦ Placebos
        - ◆ TENS
  - ➤ Developmental self-care requisites
    - Promoting sleep in children
    - Promoting sleep in elderly
- Examinations and Special Tests
  - Nursing Responsibilities
    - Understanding procedure and client needs
    - Teaching
    - Carrying out test requirements
    - Preparing equipment
    - Preparing client
      - Positioning

- Assisting with exam
- Support client
- Documentation
- > Types of tests and nursing responsibilities
  - X-Rays
    - Contrast medium use
    - Chest
    - KUB
    - Upper GI
    - Lower GI
    - Cholecystography
    - IVP
    - Angiography
    - Myelography
    - Computerized Axial Tomography
  - Electrical Impulse testing
    - Electrocardiography
    - Electroencephalography
    - Electromyography
  - Radiation testing
    - Thyroid scan
  - Ultrasonography
  - Endoscopes
    - Bronchoscopy
    - Cystoscopy
    - Colonoscopy
    - Gastroscopy
  - Body fluid tests
    - Gastric
    - Lumbar puncture
    - Thoracentesis
    - Paracentesis
    - Amniocentesis
    - Capillary blood glucose
    - Urinalysis
- Caring for the Surgical Client
  - > Introduction
    - Types of surgery
    - Types of anesthesia
    - Identifying surgical risks
    - Informed consent
    - Preparing the surgical site
    - Preoperative teaching involving prevention of complications
  - ➤ Universal self-care requisites
    - Air

- Preventing respiratory complications
  - ♦ Assessment
  - ♦ Impaired gas exchange
    - > Atelectasis
      - Teach turning, cough, deep breathing exercise
      - Encourage movement
      - Incentive spirometry (Inhale on mouth piece)
  - ♦ Impaired tissue perfusion
    - Pulmonary embolism
  - ♦ Ineffective airway clearance
  - ♦ High risk for Infection (Pneumonia)
    - Signs and symptoms
- Preventing Circulatory complications
  - ♦ Impaired tissue perfusion
    - > Thrombus
      - Antiembolism stockings
      - ROM
    - ➤ Hemorrhage/shock
      - Signs and symptoms
- Food
  - Nutrition: less than body requirements
    - ♦ Nausea/vomiting
- Elimination
  - Bowel
    - **♦** Constipation
    - ♦ Pain related to abdominal distention
  - Urinary
    - ♦ Urinary retention
    - ♦ High risk for infection
      - > Foley
      - > Retention
- Activity/Rest
  - Activity intolerance
    - ♦ Progressive Rom to ambulation
  - Pain
    - **♦** Medication
    - Relaxation techniques
- Solitude/Social Interaction
  - Fear
  - Grieving
  - Body image disturbance
- Promoting Tissue Healing
  - > Introduction
    - Functions of skin
    - Types of wounds

- Inflammatory response
- Healing mechanisms
- Factors affecting healing
- ➤ Universal self-care requisites
  - Air
    - Impaired tissue perfusion
      - ♦ Pressure sores
        - **Causes**
        - Signs and symptoms
        - > Prevention
        - > Treatment
      - Impaired skin integrity
        - Dressings
          - Types
          - Dressing changes
          - Irrigations
          - Drains
        - > Packing wounds
  - Safety
    - High risk for Injury
      - ♦ Securing dressing
      - Bandages and binders
        - > Purpose
        - > Application
      - ♦ Cold application
        - ➤ Ice bag
        - Compresses
        - ➤ Cool water bath
        - ➤ Hypothermic blanket
      - ♦ Heat application
        - > Heating pads
        - ➤ Hot water bottle
        - > Hyperthermia pad
        - > Sitz bath
        - Soaks
        - Compresses
- Developmental self-care requisites
  - Precautions for using heat and cold with elderly
- Promoting Cardiopulmonary Function
  - ➤ Universal self-care requisites
    - Air
      - Ineffective airway clearance
        - ♦ Liquefying secretions
        - **♦** Humidifications
        - ♦ Postural drainage
        - Percussion and vibration

- **♦** Suctioning
- ♦ Sputum specimen
- ♦ Artificial airways
  - > Upper oral airway
  - > Tracheostomy
    - Suctioning
    - Caring for tracheostomy
- ♦ Ineffective gas exchange
  - > Inhaled medications
  - Oxygen therapy
    - Methods
    - Safety
  - Chest tubes
    - Maintaining
    - Assessment
- Caring for the Mechanically Immobilized Client
  - > Introduction
    - Purpose of immobilization
    - Splints
    - Braces
    - Casts
      - Application
      - Care
    - Traction
      - Types
      - Maintaining traction
  - ➤ Universal self-care requisites
    - Air
      - Impaired tissue perfusion
        - ♦ Assessing swelling and circulation
        - ♦ Assess for thrombus
      - Impaired gas exchange
        - ♦ Cough and deep breath
    - Food
      - Alterations in Nutrition: less than body requirement related to calcium needs
    - Elimination
      - Constipation
    - Activity/Rest
      - Pain
      - Ambulation
        - ♦ Range of motion
    - Solitude/Social Interaction
      - Alteration in body image
      - Diversional activity deficit

- Safety
  - High risk for trauma related to impaired mobility
- ➤ Developmental self-care requisites
  - Children and immobilization
  - Elderly and immobilization
- **❖** Medical and Surgical Asepsis
  - ➤ Infection infectious cycle
    - Modes of transmission
    - Portals of entry
  - > Control microorganisms outside body
    - Spread of microorganisms
    - Public health measures
    - Aseptic methods
      - Sterilization
      - Disinfection
      - Antisepsis
    - Universal standards
    - Surgical asepsis
      - Principles
  - > Control microorganisms inside the body
    - Factors that influence occurrence of infection
    - Nonspecific defenses against disease immunity
    - Specific defense against disease immunity
    - Antibiotics/Anti-infectives
  - > Preventing the spread of communicable disease
    - Types of infection control practices
      - Disease specific isolation
      - Category isolation
      - Universal precautions/standards
      - Transmission barrier
  - > Psychological implications of communicable disease
    - Understanding client's feelings
    - Human contact
    - Sensory stimulation

# PERSONAL VOCATIONAL RELATIONS (PVR)

# **COURSE DESCRIPTION - 25 Theory hours**

A variety of teaching strategies will enhance the student's verbal, written and electronic communication so as to convey pertinent information about the client's self-care requisites to the client, family, and health care team. Employability issues such as: Goal setting, communication skills, maintaining currency of practice, networking, continuing education, professional organizations, career opportunities, steps and procedures involved in securing the right job, preparation for the NCLEX-PN, help the student prepare for the entry level position in the health care field.

# **COURSE OBJECTIVES**

Upon the completion of the student will be prepared to:

- ➤ Identify concepts related to self-care, health deviation, health care delivery systems, and nursing care agency
- Explain the difference between civil and public law and implications to nursing practice.
- ➤ Describe collaboration with the client, family and health care team to provide information and instruction to exercise and enhance self-care agency.
- Discuss verbal, written and electronic communication to convey pertinent information about the client's self-care requisites to the client, family, and health care team.

#### **TEXTBOOKS**

Fundamental Skills and Concepts in Patient Care by Barbara Timby

Foundations of Nursing by Lois White

# **TEACHING STRATEGIES**

A combination of lecture, discussion, handouts, SmartBoard Technology, E-Instruction and participation activities will be used to present materials. Videos, computerized tutorials, and simulation are used to enhance student understanding. Students are required to read all assigned pages and be prepared to participate during class.

#### **EVALUATION**

Frequent testing will be done to help assess continuing progress of the student. At the end of the course there will be a comprehensive final exam. All tests and finals are weighted on a total point scale. A minimum grade of 84% is required for the course.

100 - 90 % = A

89 - 80 % = B

Below 84 % = Unsatisfactory

# PERSONAL VOCATIONAL RELATIONS (PVR)

- Introduction and Orientation
  - ➤ Willoughby-Eastlake School of Practical Nursing Philosophy
    - Nursing foundations and Nursing Theory
    - The History of Nursing
    - The Nurse-Client Relationship
    - Levels of Education and Practice
- Health Deviation
- Health and Illness
  - Universal Needs
  - ➤ Acute vs. Chronic Illness
  - Developmental Self-Care Deficits
- Health Prevention
- Homeostasis
  - > Adaptation
  - > Stress vs. Eustress
  - > Stress Management
- Self-Care Capabilities
  - ➤ Culture and Ethnicity
  - Caring
- **❖** Self-Care Practices
  - > Fostering Communication
    - Essential Factors in Communication
    - Verbal Communication
    - Nonverbal Communication
    - Electronic Communication
    - Barriers to Communication
    - Therapeutic Communication
- Listening Skills
- Criticism
- Teaching
- Nursing
  - ➤ Nursing Care Agency
  - Nursing Care Systems
  - ➤ Laws and Ethics
    - Code of Nursing
    - The Nurse Practice Act
    - The Politics of Medicine
    - Advance Directives
    - Living Wills
    - Good Samaritan Act
    - Malpractice and Liability
  - ➤ Nursing Organizations
    - State Boards of Nursing

- NCLEX-PN Examination
- Licensure
- Professional Organizations
- Continuing Education
- > Human Relations at Work
  - Role and Responsibilities of the Nurse
  - Expectations of the Employer
  - Seeking Employment
  - Resume writing
  - Job interviewing
  - Workplace Ethics

Safety and Health Regulations

#### MATH FOR MEDICATION ADMINISTRATION

# **COURSE DESCRIPTION - 20 Theory hours**

A variety of teaching strategies will enhance the student's ability to successfully solve math problems in the classroom and in the clinical setting. Successful completion of this course will ensure the student's ability to safely administer medications as defined in their scope of practice as Licensed Practical Nurses. This further enhances the safety and accountability towards the clients that they care for during their employment by a healthcare agency.

## **COURSE OBJECTIVES**

Upon the completion of the student will be prepared to:

- ➤ Utilize common metric conversions in theory and practice.
- > Solve with accuracy common medication administration problems.
- ➤ Identify safe versus unsafe prescribed doses using weight based calculations.
- > Solve IV drip equations using drip factor and pump formulas with accuracy.
- Determine accurate dosages 100% of the time for all clients in the clinical area.

# **TEXTBOOKS**

Fundamental Nursing Skills and Concepts by Barbara Timby

Foundations of Nursing by Lois White

# **TEACHING STRATEGIES**

A combination of lecture, discussion, handouts, SmartBoard Technology, E-Instruction and participation activities will be used to present materials. Videos, computerized tutorials, and simulation are used to enhance student understanding. Students are required to read all assigned pages and be prepared to participate during class.

# **EVALUATION**

Frequent testing will be done to help assess continuing progress of the student and to assist the student with mastery. A midterm exam and a comprehensive final exam are weighted on a total point scale to determine the students' final exam grade. A minimum grade of 84% is required for the course.

100 – 90 % = A 89 – 80 % = B Below 84 % = Unsatisfactory

## MATH FOR MEDICATION ADMINISTRATION

- Introduction to basic math concepts
  - Decimal placement
    - Ten thousand
    - Thousand
    - Hundreds
    - Tens
    - Ones
    - Tenths
    - Hundredths
    - Thousandths
  - ➤ Working with decimals
    - Addition
    - Subtraction
    - Multiplication
    - Division
- Metric System
  - ➤ Metric equivalences to memorize
    - 1 grain = 60 mg
    - $\blacksquare$  1 mg = 1000 mcg
    - 1 gram = 1000 mg
    - 1 kg = 2.2 pounds
    - 1 liter = 1000 mL
    - 1 liter = 1 quart
    - 1 tsp = 5 mL
    - 3 tsp = 1 tablespoon
    - 1 oz = 30 mL
  - > Memorize common metric abbreviations
    - Microgram = mcg
    - Liter = L
    - Kilogram = kg
    - Milliliter = mL
    - Centimeter = cm
    - Millimeter = mm
    - Gram = g
- Dimensional Analysis
  - ➤ Solving basic math problems using Dimensional Analysis "The Box"
    - Doctor's order or what the question is asking you to solve for
    - Placement of the constant NUMBER 1
    - Placement of known conversion or how it is supplied to you
    - Identify the need to use a 4 box versus a 6 box and successfully solve problems
- \* Reading medication labels
  - > Trade name

- ➤ Generic name
- Dosage strength
- Number of pills in container
- > Types of pills
- > Tablets
- Scored tablets
- > Enteric coated tablets
- > Capsules
- ➤ Controlled release capsules
- ➤ Gelatin capsules
- ❖ Working with and solving problems using hypodermic syringes/measurements
- ❖ Word problems to solve for correct dosages of ordered medication using:
  - > Tuberculin
  - > 1 mL
  - > 3 mL
  - > 5 mL
  - > 6 mL
  - ➤ 10 mL
  - ➤ 12 mL
  - ≥ 20 mL
- Solving weight based problems for medication dosages
  - > Convert patient's weight to correct unit
- Calculate dosages from drug label/drug book
  - ➤ Lower range for daily dose
  - > Upper range for daily dose
- ❖ Determine if dosage ordered is:
  - ➤ Within recommended dose range
  - > Safe dose
  - > Accurate and effective
- **❖** IV Therapy
  - > Pump IV formula for determining flow rate
  - > IV drip factor formula if no pump is being used

#### **NUTRITION**

# **COURSE DESCRIPTION** - 45 Theory hours

This course introduces nutrition theory, modified and therapeutic diets as required to meet universal self-care requisites.

# **COURSE OBJECTIVES**

Upon the completion of the student will be prepared to:

- ➤ Apply nutritional concepts for a better understanding of human growth maintenance and repair
- ➤ Utilize the nursing process with case studies to:
  - Assess client's financial, psycho-social and developmental needs related to nutritional self-care requisites.
  - o Identify problems related to poor diet and diet modifications.
  - Collaborate with health care providers to plan and implement various diet therapies.
  - o Evaluate changes in client assessment, nutritional needs and knowledge.
- ➤ Identify teaching tools that provide information regarding dietary requirements of essential nutrients.
- > Discuss various disease processes related to nutrition.
- Recognize various routes and techniques of providing nutrition safely.

### **TEXTBOOKS**

Nutrition Essentials for Nursing Practice by Susan Dudek

### **TEACHING STRATEGIES**

A combination of lecture, discussion, handouts, SmartBoard Technology, E-Instruction and participation activities will be used to present materials. Videos, computerized tutorials, and simulation are used to enhance student understanding. Students are required to read all assigned pages and be prepared to participate during class.

## **EVALUATION**

Frequent testing will be done to help assess continuing progress of the student. At the end of the course there will be a comprehensive final exam. All tests and finals are weighted on a total point scale. A minimum grade of 84% is required for the course.

100 - 90 % = A

89 - 80 % = B

## **NUTRITION**

#### Food

- > Essential nutrients
- Characteristic of good nutrition
  - Effects of malnutrition
- ➤ How the body uses food
  - Digestion
  - Absorptioin
  - Metabolism
- Carbohydrates
  - Function
  - Sources
  - Classifications
  - Digestion/absorption
  - Metabolism/elimination
  - Requirements
- > Fats
  - Functions
  - Sources
  - Classification
  - Digestion/absorption
  - Metabolism/elimination
  - Requirements
- > Protein
  - Function
  - Sources
  - Classification
  - Digestion/absorption
  - Metabolism/elimination
  - Requirements
- ➤ Vitamin
  - Classifications
    - Fat soluble
      - **♦** Functions
      - **♦** Sources
      - **♦** Requirements
      - ♦ Health deviations related to imbalance
    - Water soluble
      - ♦ Functions
      - ♦ Sources
      - **♦** Requirements
      - ♦ Health deviations related to imbalance

- **➤** Minerals
  - Classifications
    - Major minerals
      - **♦** Functions
      - ♦ Sources
      - **♦** Requirements
      - ♦ Health deviations related to imbalance
- > Trace minerals
  - Functions
  - Sources
  - Requirements Health deviations related to imbalance
- ➤ Water
  - Functions
  - Electrolyte balance
  - Acid/Base balance
- ➤ Self-care knowledge related to nutritional needs
  - Teaching
    - Balanced diet
    - Guidelines
    - Food pyramid
    - Four food groups
    - Meal planning
    - Food customs
    - Reading labels
- Safety
  - ➤ Illnesses caused by microorganisms
    - Prevention
    - Poisonings
  - ➤ Allergies
    - Reactions
    - Treatment
  - > Evaluating and preserving food quality
- ❖ Developmental self-care requisites
  - > Pregnancy
    - Nutritional needs
    - Nausea
    - Weight gain
    - Pica
    - Anemia
    - Foods to avoid
    - Diabetes
    - Adolescence
  - **Lactation** 
    - Requirements

- > Infancy
  - Requirements
  - Breastfeeding
  - Bottle feeding
  - Supplementary foods
  - Metabolic disorders
- Childhood
  - Requirements
  - Habits
- ➤ Adolescence
  - Requirements
  - Habits
  - Health deviations
    - Anorexia Nervosa
    - Bulimia
    - Obesity
    - Alcohol
    - Athletics
- > Adulthood
  - Requirements
  - Habits
  - Weight
- Geriatrics
  - Effects of aging
  - Requirements
  - Habits
  - Health deviations
    - Osteoporosis
    - Arthritis
    - Cancer
    - Diabetes
    - Hypertension
    - Heart disease
- Health deviation
  - ➤ Weight control
  - > Nutritional care of client
    - Feeding client
    - Disabled
    - Blind
    - Dysphagia

### INTRODUCTION TO PHARMACOLOGY

# **COURSE DESCRIPTION** - 25 Theory hours; 10 Lab hours

This course introduces the beginning student to the calculation of drug dosages, methods of safe medication administration and usage of pharmaceutical symbols, abbreviations and terminology. The laboratory and clinical components provide the student an opportunity to develop safe skills in medication administration.

## **COURSE OBJECTIVES**

Upon the completion of the student will be prepared to:

- Calculate drug dosages.
- ➤ Identify the six rights of medication, so as to assure client safety.
- ➤ Identify symbols and abbreviations used in medication orders.
- > Recognize common pharmaceutical preparations and how to effectively administer them to the client.

# **TEXTBOOKS**

Fundamental Skills and Concepts in Patient Care by Barbara K. Timby

## **TEACHING STRATEGIES**

A combination of lecture, discussion, handouts, SmartBoard Technology, E-Instruction and participation activities will be used to present materials. Videos, computerized tutorials, and simulation are used to enhance student understanding. Students are required to read all assigned pages and be prepared to participate during class.

### **EVALUATION**

Frequent testing will be done to help assess continuing progress of the student. At the end of the course there will be a comprehensive final exam. All tests and finals are weighted on a total point scale. A minimum grade of 84% is required for the course.

100 - 90 % = A89 - 80 % = B

# **INTRODUCTION TO PHARMACOLOGY**

### Introduction

➤ The self-care requisite of safety, related to the administration of medications, will be the focus throughout this course.

# Safety

- > Drug regulations
  - Laws
  - FDA
  - DEA
- > Drug classifications
  - Identifying names
- > Drug action
- > References
- > Effects of drugs
  - Systemic
  - Local
  - Therapeutic
- > Preocessing of drugs by the body
  - Absorption
  - Distribution
  - Metabolism
  - Excretion
  - Variables
- > Drug interactions
- Dosage
- > Route
- > Unexpected responses
- > Medication preparation
  - Supplies
- ➤ Abbreviations
- Measurements
- Dosage preparation
  - Math
- Principles of administration
  - The five rights
  - Administration by gastrointestinal route
  - Administration by parenteral route

### **GROWTH AND DEVELOPMENT**

# **COURSE DESCRIPTION** - 45 Theory hours

This course highlights the human developmental processes, conditions, and events that occur during the various stages of the life cycle from infancy to old age. The family constellation is affected by cultural, religious, and environmental influences. A learning of these factors will provide the nursing student with the knowledge and appreciation of clients in their struggle to maintain, promote, and restore health. Developmental self-care requisites throughout the lifespan are presented with each major stage of life examined in terms of universal and developmental self-care requisites. An understanding of normal growth and development is essential to deliver care with nursing agency assisting in promoting self-care agency.

# **COURSE OBJECTIVES**

Upon the completion of the student will be prepared to:

- > Clarify differences between concepts of growth and development.
- ➤ Identify general stages of physical growth and developmental self-care requisites from birth to the older adult.
- ➤ Distinguish among major theories of development by theorists' growth framework.
- ➤ Identify appropriate communication related to a client's stage of development.
- ➤ Use various teaching methods in collaboration with the client, family, and health care team to provide information and instruction to facilitate client's exercising and enhancing their self-care agency.

## **TEXTBOOKS**

Journey Across the Lifespan by Polan

## **TEACHING STRATEGIES**

A combination of lecture, discussion, handouts, SmartBoard Technology, E-Instruction and participation activities will be used to present materials. Videos, computerized tutorials, and simulation are used to enhance student understanding. Students are required to read all assigned pages and be prepared to participate during class.

### **EVALUATION**

Frequent testing will be done to help assess continuing progress of the student. At the end of the course there will be a comprehensive final exam. All tests and finals are weighted on a total point scale. A minimum grade of 84% is required for the course.

100 - 90 % = A

89 - 80 % = B

## **GROWTH AND DEVELOPMENT**

#### **❖** Introduction

- ➤ General stages of development to their age ranges.
- ➤ Distinguish among major theories of development with their general framework, and specified stages.
- Maslow's Hierarchy of Human Needs Theory related throughout growth and development illustrating how nursing agency can facilitate clients meeting universal self-care requisites along with developmental care requisites.
- Assess factor's influencing growth and development considering family pattern, culture, religion, and environment with an emphasis on the role of the nurse in health promotion.

## ❖ Infant Universal Self-Care Requisites

- > Air
  - Respiratory rate
  - Pulse
  - Blood Pressure
  - Diaphragmatic breathing
- > Water
  - Percentage of water weight
  - Assessment of dehydration
- > Food
  - Breastfeeding
  - Bottle feeding
- **Elimination** 
  - Bowel
  - Urine
    - Amount increases with age
- ➤ Activity/Rest
  - Sleep
  - Hours awake
  - Gross to fine motor skills
- > Safety
  - Car seats
  - Prevention of infection
- > Teaching
  - Measures to promote health
- Infant development
  - > Piaget
    - Sensorimotor
      - Birth -2 years
  - Erickson
    - Trust vs. Mistrust
      - Birth to 18 months

- > Freud
  - Oral
    - Birth 18 months
- **❖** Toddler Universal Self-Care Requisites
  - > Air
    - Vital signs
  - > Water
    - Assessment for dehydration
    - Large percentage of weight is water
  - > Food
    - Nutritious food choices
    - Nutritional counseling
    - Dental health
  - **▶** Elimination
    - Toilet independence
  - ➤ Activity/Rest
    - Adequate space to explore
    - Sleep
  - > Safety
    - Accidents
      - Increased mobility
      - Prevention
  - ➤ Solitude/Social Interaction
    - Parallel play
    - Daycare
  - > Teaching
    - Speech
    - Mimicry
- ❖ Toddler developmental care requisites
  - > Erickson
    - Autonomy vs. shame and self doubt
      - 18 months 3 years
  - > Piaget
    - Preoperational
      - 2 years 6 years
  - > Freud
    - Anal
      - 18 months 3 years
- ❖ Preschool Universal Self-Care Requisites
  - > Air
    - Vital signs
  - > Water
    - hydration
  - > Food
    - Nutrition
  - **Elimination**

- Enuresis
- ➤ Activity/Rest
  - Environment for active play
- > Safety
  - Identify most common safety issues
- ➤ Solitude/Social Interaction
  - Values play
  - Discipline
- > Teaching
  - Introduction to school
- Preschool Developmental Care Requisites
  - > Erickson
    - Initiative vs. guilt
      - 3 years 6 years
  - > Piaget
    - Preoperational
      - 2 years 6 years
  - > Freud
    - Phalic
      - 3 years 6 years
  - ➤ Kohlberg's Theory of Moral Development
    - Preconventional
      - 4 years 10 years
- ❖ School age Universal Self-Care Requisites
  - > Air
    - Vital signs
  - > Water
    - Hydration
  - > Food
    - Nutrients
      - Proteins
      - Vitamin D
      - Simple food preparation
  - **Elimination** 
    - Normal development
  - ➤ Activity/Rest
    - Group activities
    - Same gender
    - Sport activities
    - Sleep 8 10 hours
  - > Safety
    - Identify hazard
    - Prevent sport accidents
  - ➤ Solitude/Social Interaction
    - Family impact on nutrition habits

- > Teaching
  - Health promotion
- ❖ School Age development requisites
  - > Erickson
    - Industry vs. inferiority
      - 6 years 12 years
  - > Piaget
    - Concrete operational
      - 6 years 12 years
  - > Freud
    - Latency
      - 6 years 12 years
  - ➤ Kohlber's Moral Development
    - Preconventional
      - Common from 4 years 10 years
- ❖ Adolescent Universal Self-Care Requisites
  - > Air
    - Vital signs
  - > Water
    - Hydration
  - > Food
    - Increased
      - Calories
      - Proteins
      - Calcium
      - Vitamin D
  - **▶** Elimination
  - ➤ Activity/Rest
    - Active
    - Athletic events
    - Sleep 10 hours per day
  - > Safety
    - Automobile accidents
    - Sports
    - Experimentation
    - Weapons
  - ➤ Solitude/Social Interaction
    - Body image
    - Established value system
    - Established heterosexual relationships
  - > Teaching
    - Health promotion
- ❖ Adolescent developmental self-care requisites
  - > Erikson
    - Identity vs. Role Confusion
      - 12 20 years

- Piaget
  - Formal operations
    - 12 years 15 years
- > Freud
  - Genital
    - 13 years 20 years
- ➤ Kohlberg's Moral Development
  - Conventional
    - 10 years 13 years
  - Post-conventional
    - Can occur from adolescence on
- ❖ Adult Universal Self-Care Requisites
  - > Air
    - Vital signs
  - ➤ Water
    - Hydration
  - > Food
    - Well-balanced diet
  - **Elimination**
  - ➤ Activity/Rest
    - Organized exercise activities
    - Sleep 8 hours per day
  - > Safety
    - Motor vehicle accidents
  - ➤ Isolation/Social Interactions
    - Family
    - Relationships
  - > Teaching
- ❖ Adult Developmental Self-Care Requisites
  - > Erickson
    - Intimacy vs. Isolation
      - Young Adult
        - ♦ 20 years 30 years
    - Generativity vs. Stagnation
      - Adulthood
        - $\bullet$  30 years 65 years
  - > Piaget
    - Abstract thought
  - ➤ Kohlberg's Moral Development
    - Conventional and Post-conventional
- Older Adult Universal Self-Care Requisites
  - > Air
    - Normal vital signs
    - Respiratory System
    - Cardiovascular system

- > Water
  - Integumentary system
- > Food
  - Digestive system
  - Meeting nutritional needs
- **Elimination** 
  - Digestive system
- ➤ Activity/Rest
  - Musculoskeletal system
  - Neurological system
- > Safety
  - Sensory system
    - Visual deficits
    - Hearing deficits
- ➤ Solitude/Social Interactions
  - Financial resources
  - Housing
  - Loss of social contacts
  - Losses
  - Alternative living
- > Teaching
  - Health promotion
- ❖ Older Adult developmental Self-Care Requisites
  - > Erickson
    - Ego integrity vs. Despair
      - Old age: 65 years death

## **INTRAVENOUS THERAPY**

# **COURSE DESCRIPTION** 25 hours Theory; 20 hours Lab

This course provides the beginning student with the fundamental concepts and skills needed to prepare, initiate, and maintain intravenous therapy for the adult client. Laboratory and clinical experience correlated these concepts to the care of the client. Evaluation of the student is based upon the nursing process, health concepts, communications, ethics, nursing skills, and safety.

## **COURSE OBJECTIVES**

Upon the completion of the student will be prepared to:

- > Prepare the client for intravenous therapy.
- Implement the nursing process to initiate, maintain, and monitor IV therapy.
- ➤ Safely perform nursing skills within established legal and ethical perimeters while in the clinical areas.
- Employ verbal, written, and electronic communication to convey pertinent information related to intravenous therapy.
- > Successfully complete competency skill test on simulator.

## **TEXTBOOKS**

<u>Foundations of Nursing</u> by Lois White <u>Fundamental Skills and Concepts in Patient Care</u> by Barbara K. Timbly <u>Memmler's Structure and Function of the Human Body</u> by Barbara Cohen

# **TEACHING STRATEGIES**

A combination of lecture, discussion, handouts, SmartBoard Technology and participation activities will be used to present materials. Correlated lab experiences will be provided. Videos are used to enhance student understanding.

#### **EVALUATION**

Frequent testing which includes review of math skills will be done to help assess continuing progress of the student. At the end of the course there will be a comprehensive final exam. All tests and finals are weighted on a total point scale. A minimum grade of 84% is required for both the theory portion and clinical portion of this course.

100 - 90 % = A

89 - 80 % = B

## **INTAVENOUS THERAPY**

- ❖ The Ohio LPN in IV Therapy Practice
  - ➤ Legal overview, general information
    - Sources of the law
    - Legal terms
    - Standards of care
    - Breech of duty related to IV Therapy
  - Nursing Practice in Ohio
    - Nurse Practice Act Chapter 4723 Ohio Revised Code (ORC)
    - OBN rules promulgated from the law regulating the Practice of Nursing, Chapter 4723 Ohio Administrative Code (OAC)
  - ➤ Law Regulating the role of the LPN in IV Therapy
    - House Bill 87
    - Senate Bill 178
    - Incorporation into the Nurse Practice Act Sections 4723-17 and 4723-171
       ORC
  - ➤ OBN rules relating to IV Therapy
  - ➤ LPN accountability and responsibility relating to IV Therapy
- Universal Self-Care Requisites
  - > Air
    - Vital Signs
  - ➤ Water
    - Fluid volume excess
    - Fluid volume deficit
    - Skin integrity
  - > Food
    - Nutrition
  - **Elimination** 
    - Intake vs. Output
  - ➤ Activity/Rest
  - > Safety
    - Mobility with IV tubing
  - ➤ Solitude/Social Interaction
  - > Teaching
    - Knowledge deficit related IV Therapy
- ❖ Homeostatic and Regulatory Functions in Relation to IV Therapy
  - > Fundamentals of fluid balance
    - Fluid composition
    - Fluid distribution
    - Fluid function
    - Hemeostatic mechanisms
    - Fluid volume imbalances
  - > Fundamentals of electrolyte balance
    - Basic principles of electrolyte balance
    - Sodium

- Potassium
- Calcium
- Magnesium
- Phosphorus
- Chloride
- ➤ Acid/Base Balance
  - Values
  - Mechanisms controlling the pH of body fluids
- ➤ Major Electrolyte Imbalances
  - Metabolic acid base imbalances
  - Respiratory acid base imbalances
- > Parenteral solutions
  - Purpose of solutions
  - Key elements of parenteral fluids
  - Isotonic, hypotonic, and hypertonic solutions
  - Common IV fluids
- ❖ Equipment and Devices Used to Deliver IV Therapy
  - ➤ Infusion delivery systems
    - Glass system
    - Plastic system
  - ➤ Administration sets
    - Basic components
    - Primary sets
    - Secondary sets
    - Primary Y
    - Standards of practice for administration sets
  - Peripheral Infusion Devices
    - Over the needle catheters
    - Winged cannula
  - ➤ Midline Catheter
  - Central Infusion Devices
  - ➤ Electronic Infusion Devices
  - > Accessory Equipment
    - Latex resealable locks (heparin locks)
    - Add on devices
    - Needleless systems
- Calculation of IV flow rate
  - > Information needed to calculate flow rate
  - ➤ Calculation of flow rate/formulas
  - > Factors affecting flow rate
- ❖ Initiation of IV Therapy
  - > Principles of infection control
  - ➤ Anatomy and physiology
  - > Precannulation
  - ➤ Patient assessment/psychological preparation
  - > Site selection and vein dilation

- **Cannulation**
- ➤ Post cannulation
- Documentation
- ❖ Additional Procedures and IV Antibiotic Administration
  - ➤ Additional procedures
    - Hanging IV infusions
    - Maintain infusions
    - Changing IV dressing sites
    - Changing IV tubing
    - Conversion to heparin lock
    - Flushing intermittent infusion device
    - Reconstituting an antibiotic
    - Administration of IV antibiotic
    - Nursing implications and considerations
  - ➤ Knowledge related to Antibiotics
    - Pharmocologic review
    - Reconstitution
    - Administration/safety issues
- **❖** Local and Systemic Complications
  - > Local complications
    - Hematoma
    - Thrombosis
    - Phlebitis
    - Thrombophlebitis
    - Infiltration and extravasation
    - Infection
  - > Systemic complications
    - Septicemia
    - Circulatory overload
    - Pulmonary edema
    - Air embolism
    - Catheter embolism
    - Nursing interventions to prevent complications
  - ➤ Complications related to the administration of antibiotics
    - Local
    - Systemic

### MEDICAL SURGICAL NURSING

### **COURSE DESCRIPTION**

185 Theory hours 122 Clinical hours

This course presents the theory, health concepts, and clinical experiences in medical/surgical nursing across the lifespan. The learner develops nursing care agency while promoting client self-care agency to meet the client's self-care requisites. This course also incorporates the study of mental health issues related to the self-care requisites related to mental health issues. There is a clinical component to this course.

## **COURSE OBJECTIVES**

Upon the completion of the student will be prepared to:

- Apply concepts of various health-deviations in the care of clients across the lifespan with universal self-care deficits.
- > Apply concepts of various health-deviations in the care of clients across the lifespan with universal self-care deficits.
- ➤ Utilize the nursing process to:
  - Observe client status related to health deviation.
  - Assist with the identification of problems related to pathological conditions and their impact of client self-care requisites.
  - Assist with the planning of nursing-agency appropriate to client needs.
  - Assist with the implementation of nursing-agency.
  - o Evaluate client response to plan of care.
- ➤ Provide client with information necessary to attain optimal level of self-care agency and/or dependent-care agency.
- ➤ Demonstrate ability to collaborate with others on the health care team in providing dependent-care agency.
- ➤ Teach client appropriate nutritional information related to developmental stage and specific therapeutic diets.
- Employ ethical behavior in the provision of health care. Perform nursing skills safely following proper procedure.
- ➤ Provide safe and accurate care that does not place client, others, student or environment at risk.
- ➤ Use clinical judgment that incorporates time management strategies when planning and implementing client care.
- ➤ Demonstrate competence in the role of learner, including: cognitive, affective and psychomotor preparation for each clinical experience; self-direction in initiating and participating in the learning process; and asking for/accepting guidance from clinical supervisors as required.
- > Present and conduct themselves professionally in a range of settings.

## **TEXTBOOKS**

Foundations of Nursing by Lois White

Nutrition Essentials for Nursing Practice by Susan Dudek

Lippincott's Review for NCLEX-PN by Timby, Carmack and Rupert

HESI Comprehensive Review for the NCLEX-PN Examination by Elsevier

### **TEACHING STRATEGIES**

A combination of lecture, discussion, handouts, SmartBoard Technology, E-Instruction and participation activities will be used to present materials. Videos, computerized tutorials, and simulation are used to enhance student understanding. Students are required to read all assigned pages and be prepared to participate during class. A clinical experience is provided to each student weekly to allow students to demonstrate appropriate clinical judgment in a variety of health care settings that encompasses care throughout the lifespan.

# **EVALUATION**

Frequent testing will be done to help assess continuing progress of the student with the course content. At the end of the course there will be a comprehensive final exam. All tests and finals are weighted on a total point scale. The student will receive a clinical grade for each rotation they are assigned to. A minimum grade of 84% is required in this course and in each rotation.

100 - 90 % = A89 - 80 % = B

# Problems affecting the respiratory system

- Introduction
  - > Structure and function of the respiratory system
- Universal health care requisites
  - > Air
    - Ineffective breathing patterns
      - Assessment
    - Ineffective airway clearance
      - Coughing and deep breathing
      - Suctioning
      - Postural Drainage and percussion
      - Humidification and aerosols
      - Impaired Gas Exchange
      - Intubation and Mechanical Ventilation
      - Oxygen Therapy
      - Chest tubes
  - > Water
    - High risk for fluid volume deficit
  - > Food
    - Impaired swallowing
    - Altered Nutrition-Less than body requirement
  - ➤ Acitvity/Rest
    - High risk for activity intolerance
    - Sleep pattern disturbances
  - ➤ Solitude/Social interaction
    - Anxiety
    - Fear
    - Powerlessness
  - > Safety
    - High risk for infection
    - High risk for suffocation
  - > Teaching
    - Diagnostic tests
      - Arterial Blood Gas Studies
      - Sputum examination
      - Pulmonary Function Tests
      - Radiographic Examinations
      - Bronchoscopy
      - Thoracentesis
    - Self care deficit related to medication, diet, and rehabilitative services
- Developmental self-care requisites
  - Cystic fibrosis

- > Croup
- > Epiglottitis
- > Tonsillectomy
- ❖ Health deviation self-care requisites
  - ➤ Client with disease and disorders of Respiratory System
    - Epistaxis
    - Chronic Obstructive Pulmonary Disease
      - Emphysema
      - Chronic Bronchitis
      - Asthma
    - Pulmonary Embolism
    - Pulmonary Edema
    - Atelectasis
    - Infectious Respiratory Conditions
      - Acute Coryza
      - Acute Pharyngitis
      - Acute laryngitis
      - Tonsillitis
      - Sinusitis
      - Influenza
      - Pneumonia
      - Tuberculosis
      - Pleurisy
      - Brachiectasis
  - ➤ Obstruction of Respiratory Tract
    - Deviated Septum and polyps
    - Tonsils
    - Foreign Bodies
  - > Tumors of the respiratory system
    - Laryngeal Cancer
      - Laryngectomy
    - Lung Cancer
  - Chest Surgery
    - Pre-operative Care
    - Post-operative Care
    - Chest Wounds

## Problems affecting circulation

- Introduction
  - > Structure and function of the cardiovascular system
    - The heart
    - Electrical conduction system
    - Lymph-vascular system
- Universal health care requisites
  - > Air
    - Alteration in tissue perfusion
      - Venous congestion
      - Ischemia
  - ➤ Water
    - High risk for fluid volume excess
  - > Food
    - Altered health maintenance
      - Low-sodium diet
      - Potassium-rich diet
  - **Elimination** 
    - High risk for constipation
    - Alteration in urinary pattern, diuresis therapy
  - ➤ Activity/Rest
    - Alteration in comfort
    - Activity intolerance related to decrease cardiac output
    - Sleep pattern disturbance related to treatment and hospitalization
  - ➤ Solitude/Social Interaction
    - Anxiety related to pain
    - Fear related to pain, and unknown future
    - Altered self-concept related to actual or perceived cardiac condition
    - Grieving/loss related to job, family role and recreational activities
    - High risk for altered sexual patterns related to angina and self-concept
  - > Safety
    - Self-care deficit related to cardiac risk factors
      - Nursing assessment of client with cardiovascular problem
        - ♦ Client and family history and cardiac risk
        - ♦ Cigarette smoking, hypertension, increased cholesterol, diabetes and gout, obesity, physical inactivity, sex, menopause, heredity, race, personality
      - Physical assessment of heart and blood vessels

## > Teaching

- Nursing responsibilities for diagnostic tests and procedures
  - Laboratory examinations
  - Central venous pressure
  - Pulmonary artery pressure
  - Exercise tolerance test
  - Echocardiogram
  - Cardiac catheterization
- ECG interpretation
  - Dysrhythmias
- Electronic cardiac pacemakers
- Coronary care unit cardiopulmonary unit
- Self-care deficit related to medication, diet risk factors and rehabilitation
- Developmental self-care requisites
  - ➤ Congenital anomalies of the heart and great vessels
  - > Rheumatic fever and rheumatic heart disease
- ❖ Health deviation self-care requisites
  - ➤ Client with diseases and disorders of the cardiovascular system
    - Arteriosclerosis and atherosclerosis
    - Hypertension and hypertensive heart disease
    - Mitral and aortic stenosis
    - Bacterial endocarditis
    - Coronary artery and heart disease
      - Angina pectoris
      - Mypocardial infarction
    - Congestive heart failure
    - Cardiogenic shock
    - Acute pulmonary edema
  - > Diseases and disorders of the arteries, veins and lymphatics
    - Aneurysm
    - Arterial occlusive disase
    - Raynaud's disease
    - Thrombophlebitis
    - Varicose veins
    - Lyphangitis
  - ➤ Client with operative conditions of the cardiovascular system
    - Cardiac surgery
      - Pre-operative and post-operative treatment and nursing care
      - Percutaneous transluminal coronary angioplasty
      - Heart transplants
      - Embolectomy

## Problems affecting the blood

- Introduction
  - > Structure and function of blood and blood forming tissues
  - Classification of cells and blood fractions
- Universal health care requisites
  - > Air
    - Alteration in tissue perfusion
      - Insufficient oxygen, decrease red blood cell count
    - Ineffective breathing pattern, fatigue
  - > Water
    - High risk for decreased cardiac output, hemorrhage
  - > Food
    - Altered nutrition less than body requirement
    - Altered oral mucosa and anorexia
  - **Elimination** 
    - High risk for constipation
  - ➤ Activity/Rest
    - Fatigue related to decreased oxygen carrying capacity
    - Activity intolerance related to decreased oxygen carrying capacity
    - Alteration in comfort related to painful oral mucosa
  - ➤ Solitude/Social Interaction
    - Fear related to treatment plan
    - Altered self-concept related to bruising
  - > Safety
    - Potential for infection, decreased white cells
    - Potential for injury due to bleeding tendencies
    - High risk for injury related to decreased oxygenation
  - > Teaching
    - Nursing responsibilities for diagnostic tests and procedures
      - Blood cell examination
      - Coagulation studies
      - Blood gas analysis
      - Schilling test
      - Bone marrow aspiration and biopsy
      - Blood chemistry
      - Blood typing and cross-matching
    - Nursing responsibility for blood collection and administration
      - Complications of blood administration
- Developmental self-care requisites
  - > Anemia
    - Iron-deficiency
    - Sickle cell anemia and sickle cell disase

- > Hemophilia
- > Leukemia
- > Idiopathic thrombocytopenic purpura
- Health deviation self-care requisites
  - > The client with dyscrasias
    - Hemorrhagic anemia
    - Pernicious anemia
    - Aplastic anemia
    - Hodgkin's disease
    - Throbocytopenic purpura
    - Splenomegaly
  - > Pre-operative and post-operative care of the splenectomy client

# Problems affecting the endocrine system

#### Introduction

- > Structure and function of the endocrine glands
  - Thyroid glands
  - Parathyroid glands
  - Adrenal glands
  - Pituitary body
  - Gonads
  - Pancreas
- Universal health care requisites
  - > Air
    - Alteration in tissue perfusion secondary to complications of endocrine disorders
  - > Water
    - High risk for fluid volume deficit or excess
  - Food
    - Alteration in nutrition: less than or more than body requirement
    - Knowledge deficit related to therapeutic diet
    - High risk for impaired skin integrity
  - **Elimination** 
    - Alteration in urinary pattern, polyuria
  - ➤ Activity/Rest
    - Alteration in comfort related to injections and testing
    - Sleep pattern disturbance
  - ➤ Solitude/Social Interaction
    - Alteration in thought processes
    - Self-concept disturbance related to physical changes
      - Libido, impotence, cessation of menses
    - Powerlessness related to disease control
    - Ineffective coping and non-compliance
  - > Safety
    - High risk for injury related and risk for crisis
    - High risk for infection
    - High risk for injury related to sensory input
  - > Teaching
    - Nursing responsibilities for and procedures
      - Blood chemistry
      - Urinalysis
      - Basal metabolic rate
      - Protein-bound iodine
      - Radioactive iodine uptake
      - Ultrasound and CT scanning

- Self-care deficit related to medication, diet
  - Blood glucose monitoring
  - Diet, hygiene and exercise
  - Insulin and oral hypoglycemic agents
  - Hyper and Hypoglycemic reations
- Altered health maintenance related to signs and symptoms of crisis and emergency management
- Nursing assessment of the client with endocrine problems
- Developmental self-care requisites
  - Congenital anomalies
    - The thyroid gland
      - Cretinism
      - Juvenile myxedema
    - The pancreas
      - Diabetes mellitus in the child
    - The pituitary gland
      - Gigantism
      - Dwarfism
- ❖ Health deviation self-care requisites
  - Client with diseases and disorders of the endocrine system
    - The thyroid gland
      - Simple goiter
      - Hyperthyroidism: Graves' Disease
      - Hypothyroidism: Myxedema
      - Tumors of the thyroid gland
    - The pancreas
      - Diabetes mellitus in the adult
        - ♦ Insulin-dependent diabetes
        - ♦ Non-insulin-dependent diabetes
        - ♦ Treatment goals
          - ➤ Blood glucose monitoring
          - ➤ Diet, hygiene and exercise
          - > Insulin and oral hypoglycemia agents
        - ♦ Hypoglycemic reactions
        - ♦ Diabetic ketoacidosis
        - ♦ Hperglycemic hyperosmolar non-ketotic coma
    - The adrenal gland
      - The adrenal cortex
      - The medulla
      - Addison's disease
      - Secondary hypoadrenalism
      - Cushing's syndrome
      - Phenochromocytoma
      - Nursing care of the client with adrenalectomy

- The pituitary gland
  - Acromegaly
  - Diabetes insipidus
  - Influence on other body systems

# Problems affecting nutrition and bowel elimination

- Introduction
  - > Structure and function of the gastrointestinal system
  - > The process of digestion and absorption
- Universal health care requisites
  - > Air
    - Alteration in tissue perfusion
      - Insufficient oxygen, decreased red blood cell count
    - Ineffective breathing pattern related to fatigue
  - > Water
    - High risk for fluid volume deficit
      - NPO status, NG drainage, vomiting, diarrhea, or bleeding
  - > Food
    - Altered nutrition less than body requirement
      - Anorexia, heartburn, eructation, and dysphagia
      - Fatigue, altered oral mucosa and NPO status
      - Alteration in nutrition, inability to digest or assimilate foods
      - Alteration is skin integrity
        - ♦ Diarrhea or ostomy secretion
        - ♦ NG tube placement
        - **♦** Surgery
  - ➤ Acitvity/Rest
    - Alteration in comfort
      - Altered oral mucosa, heartburn, abdominal cramping, surgery
    - Activity intolerance related to fatigue and deconditioning
  - ➤ Solitude/Social Interaction
    - Anxiety related to incontinence, appliance leakage, and odor
    - Altered self-concept related to bowel elimination pattern
    - High risk for altered sexuality related to ostomy
  - > Safety
    - Potential for infection
    - Potential for injury
  - > Teacing
    - Nursing responsibilities for diagnostic tests and procedures
      - Endoscopy
        - ♦ Esophagogastroduodenoscopy (EGD)
        - **♦** Colonoscopy
      - Gastrointestinal series and barium enema
      - Stool examination
      - Liver function tests
      - Liver biopsy and scanning

- Cholangiography
- Ultrasonogrpahy and computed tomography
- Assessment of the digestive system
  - Causes of diseases and disorders
- Nursing responsibilities for therapeutic techniques
  - Gastric lavage
  - Gastric gavage
  - Gastrointestinal decompression
  - Total parenteral nutrition (TPN)
- Pre-operative and post-operative care for the client with abdominal surgery
- Colostomy and ileostomy nursing care
  - High risk for self-care deficit
- Developmental Self-Care Requisites
  - Congenital anomalies
    - Esophageal stenosis
    - Gastroesophageal reflux
    - Congenital pyloric stenosis
    - Colic
    - Abdominal hernias
  - Infections and infestations
    - Oral moniliasis
    - Diarrheas
    - Parasitic infestations
- ➤ Health deviation self-care requisites
  - Client care with disorders of the digestive system
    - Inflammatory diseases
      - **♦** Stomatitis
      - **♦** Gastritis
      - **♦** Peritonitis
      - ♦ Chron's disease
      - ♦ Ulcerative colitis
      - ♦ Appendicitis
      - ♦ Diverticular disease
    - Intestinal obstruction
    - Tumors of the gastrointestinal system
    - Peptic ulcer
    - Hernia: abdominal and hiatal
    - Hemorrhoids
  - Client care with disorders of the accessory organs of digestion
    - Diseases and disorders of the liver
      - ♦ Viral hepatitis
      - ♦ Cirrhosis of the liver
      - ♦ Hepatic coma

- Diseases of the biliary system
  - ♦ Cholecystitis
  - ♦ Cholelithiasis
- Diseases of the pancreas
  - ♦ Pancreatitis
- Tumors of the organs of digestion

# Problems affecting the urinary system

- Introduction
  - ➤ Review of Structure of the Urinary System
  - ➤ Review of Function of the Urinary System
- Universal Health Care Requisites
  - > Air
    - High risk for altered respiratory function
      - Infection, tachypnea
  - ➤ Water
    - Risk for fluid volume excess
      - Elevated blood pressure, edema, impaired skin integrity
      - Electrolyte imbalances
      - Shortness of breath, crackles, pleural effusion
      - Increased weight
    - Risk for fluid volume deficit
      - Vomiting, diarrhea, impaired skin integrity, decreased output
      - Elevated temperature, decreased blood pressure
  - > Food
    - Altered nutrition
      - Rigid dietary requirements
      - Necessary supplement vitamin/minerals
      - Less than body requirements
  - **Elimination** 
    - High risk for decreased urinary output
    - High risk for diarrhea, constipation
  - ➤ Activity/Rest
    - High risk for activity intolerance, bed rest, weakness fatigue, anemia, chronic fluid overload
    - Alteration in comfort/pain
      - Condition related to different types of pain
      - Assessment and relief of pain
  - ➤ Solitude/Social Interaction
    - High risk for ineffectual individual coping
    - Powerlessness
    - Body image disturbance
    - Alteration in thought processes related to impaired perception reality
  - > Safety
    - High risk for infection, injury
    - Altered urinary elimination
  - > Teaching
    - Ineffective management of therapeutic regimen

- ❖ Health Deviation Self-Care Requisites and Treatment Regimen
  - Diagnostic tests and nursing responsibilities
  - ➤ Urine specimen
  - ➤ Blood
  - ➤ Radiologic studies
    - KUB
    - Pyelography
    - Radioisotipes
  - ➤ Bladder studies
- Client Care with disorders of the Urinary System
  - ➤ Infectious disorders of the urinary system
    - Cystitis
    - Pyelonephritis
    - Acute and Chronic Glomerulonephritis
  - > Obstructive disorders of the urinary system
    - Urolithiasis
    - Urinary bladder tumors
    - Renal tumors
  - Renal Failure
    - Acute and chronic
    - End stage renal disease
    - Dialysis: hemodialysis and peritoneal
    - Kidney transplant
  - Developmental Self-Care Requisites
    - Nephrotic Syndrome
    - Wilm's tumor
- Operative Conditions of Urinary System
  - > Cystectomy
  - Urinary Diversion
  - Cystotomy
  - Ureterotomy and Lithotomy
  - > Nephrectomy and Nephrostomy

## Problems affecting the neurologic function

- Introduction
  - > Structure and function of nervous system
    - Central nervous system
    - Peripheral nervous system
    - Autonomic nervous system
      - Sympathetic nervous system
      - Parasympathetic nervous system
- Universal Health Care Requisites
  - > Air
    - High risk for altered respiratory function
      - Ineffective airway clearance
  - > Water
    - High risk for fluid volume deficit
      - Dysphagia
      - Fatigue
    - High risk for fluid volume overload
      - IICP
  - > Food
    - High risk for impaired skin integrity
    - Alteration in nutrition related to impaired swallowing
  - **Elimination** 
    - High risk for constipation
    - Alteration in urinary pattern, incontinence or urinary retention
  - ➤ Activity/Rest
    - Impaired physical mobility
    - High risk for activity intolerance, deconditioning and disuse syndrome
      - Position, exercise, and body mechanics
      - Requirements for prevention of contractures/deformities
  - ➤ Solitude/Social Interaction
    - High risk for sensory-perceptual disturbances
    - Impaired verbal communication
    - Powerlessness
    - Body image disturbance
    - Grieving/loss related to job, family role and recreational activities
    - Altered sexual patterns
  - > Safety
    - Alteration in neurological/neuromuscular integrity
      - Signs of neurological impairment and assessment

- Altered states of awareness
  - Consciousness-unconsciousness
  - Confusion-delirium
- Increased intracranial pressure
  - Assessment and intervention
- High risk for infection
- High risk for injury
  - Seizures-convulsions
    - ♦ Observation, intervention, injury prevention
  - Abnormal body temperature elevation
- > Teaching
  - Nursing responsibilities for diagnostic tests and procedures
    - Basic neurologic examination
    - Lumbar puncture and cisternal puncture
    - Neuroradiologic studies
    - Electrodiagnostic studies
  - Self-care deficit related to medication, diet and rehabilitative services
- Developmental self-care requisites
  - Cerebral palsy
  - > Spina bifida
  - Developmentally handicapped
- ❖ Health deviation self-care requisites
  - ➤ Client with diseases and disorders of the nervous system
    - Infectious diseases
      - Meningitis
      - Encephalitis
    - Degenerative diseases
      - Multiple sclerosis (MS)
      - Amyotrophic lateral sclerosis (ALS)
      - Parkinson's disease
      - Huntington's chorea
      - Myasthenia gravis
    - Cerebrovascular accident (CVA)
    - Epilepsy
    - Head injuries
    - Neuritis and neuralgia
    - Bell's palsy
    - Spinal cord injuries
      - Emergency intervention and nursing care
      - Spinal shock and autonomic hyperreflexia
      - Nursing care and rehabilitation
        - ♦ Bladder and bowel reconditioning
        - ♦ Sexual counsel
    - Reptured intervertebral disk
      - Conservative intervention and surgery

- Laminectomy: Preoperative and postoperative intervention Tumors of brain and spinal cord
- - Brain tumor and neuroblsastoma
  - Craniotomy: Preoperative and postoperative intervention
    - ◆ Cardiac and respiratory emergencies

## Problems affecting the musculoskeletal system

- Introduction
  - > Structure and function of musculoskeletal system
- Universal Health Care Requisites
  - > Air
    - High risk for altered respiratory function
      - Pneumonia
      - Pulmonary and fat emboli
  - ➤ Water
    - High risk for altered tissue perfusion
      - Thrombus formation
      - Gas gangrene
      - Tetanus
  - > Food
    - High risk for impaired skin integrity
  - **Elimination** 
    - High risk for constipation
    - High risk for urinary infection and calculi
  - ➤ Activity/Rest
    - High risk for activity intolerance and impaired physical mobility
      - Position, exercise, and body mechanics
      - Requirements for prevention of contracture and deformity
    - Alterations in pain and comfort
      - Types of orthopedic pain
      - Assessment and relief of pain
  - ➤ Solitude/Social Interaction
    - High risk for sensory-perceptual disturbances
    - Powerlessness
    - Body image disturbance
  - > Safety
    - Alteration in neurovascular integrity
      - Signs of neurovascular impairment and assessment
      - Compartment syndrome
    - High risk for infection
    - High risk for injury
  - > Teaching
    - Nursing responsibilities for diagnostic tests and procedures
    - Self-care deficit related to medication, diet and rehabilitative services
- ❖ Health deviation self-care requisites and treatment
  - Client with a cast

- Client with orthopedic device
  - Traction
    - Skin traction
    - Skeletal traction
  - Frames
  - Splints
  - Crutches, braces, walker
- ❖ Developmental self-care requisites
  - > Congenital deformities
    - Clubfoot
    - Torticollis
    - Congenital hip dislocation
    - Legg-Calve'-Perhes disease
  - > Arthritis
    - Rheumatoid arthritis
    - Rheumatoid spondylitis
    - Osteoarthritis
    - Surgical intervention for arthritis
    - Gout
    - Bursitis
  - ➤ Rickets
  - > Spinal curvature
  - > Neuromuscular conditions
    - Muscular dystrophy
    - Cerebral palsy
- Health deviation and effects of pathology
  - > Infectious diseases and disorders
    - Osteomyelitis
  - > Traumatic injuries
    - Contusions-bruises
    - Sprains
    - Dislocations
    - Fractures
      - Classification
      - Intervention by open or closed reduction and immobilization
      - Fracture healing
      - Nursing interventions
    - Whiplash injuries-flexion/extension injury
  - ➤ Bone tumors
    - Interventions
  - > Amputation
    - Preoperative interventions
    - Postoperative interventions

# Problems affecting special senses

- Introduction
  - > Structure and function
    - Eyes
    - Ears
    - Skin
- Universal health care requisites
  - > Air
    - High risk for alteration in tissue perfusion
      - Ischemia
  - > Water
    - High risk for fluid volume excess
      - Glaucoma
      - Meniere's syndrome
      - Burns
    - High risk for fluid volume deficit
      - Burns
  - > Food
    - Altered health maintenance
      - High calorie, high protein diet related to burns
      - Protein supplements related to burns
      - Low salt diet
  - **Elimination** 
    - High risk for constipation related to diuresis, narcotic
  - ➤ Activity/Rest
    - Alteration in comfort
      - Pruritis
    - Activity intolerance
      - Visual disturbances
      - Dizziness, labrynthitis, Meniere's syndrome
    - Atlerations in skin integrity
      - Decubitus ulcer formation
      - Increased risk for infection
  - ➤ Solitude/Social Interaction
    - Anxiety related to visual impairment
    - Anxiety related to hearing impairment
    - Fear related to isolation
    - Altered self concept related to actual or perceived impairment
    - Altered self concept related to skin problems
  - > Safety
    - Self care deficit related to impairments

- Nursing assessment of client with visual deficit
  - ♦ Client and family history
  - ♦ Home evaluation for risk factors such as electrical cords, throw rug, use of cane, use of hand rails in bathroom, etc.
- Nursing assessment of client with hearing deficit
  - ♦ Client and family history
  - ♦ Evaluation of gate
- Nursing assessment of client with skin integrity deficit
  - ♦ Client and family history
  - ♦ Alterations in skin integrity
- > Teaching
  - Nursing responsibilities for diagnostic tests and procedures
    - Visual and hearing screening
    - Intraocular pressure test
      - **♦** Tonomenter
    - Culture and sensitivity
- ❖ Developmental self-care requisites
  - Congenital anomalies
- ❖ Health deviation self-care requisites
  - > Client with diseases and disorders of the eye
    - Hyperopia
    - Myopia
    - Presbyopia
    - Foreign body
    - Cataract
    - Glaucoma
      - Angle closure glaucoma (acute)
      - Open angle glaucoma
    - Retinal detachment
  - > Client with diseases and disorders of the ear
    - Hearing loss: conductive and sensorineural
    - Otitis media
    - Labrinthitis
    - Meniere's syndrome
    - Otosclerosis
  - > Client with diseases and disorders of the skin
    - Tumors
      - Benign
      - Malignant
    - Parasites
    - Eczema
    - Psoriasis
    - Impetigo
    - Herpes virus

- Acne
- Lupus erythemotosus
  - Discoid
  - Systemic Burns

# Problems affecting the client with cancer

- Introduction
  - Pathophysiology of Cancer
    - Neoplasm
    - Benign
    - Malignant
  - ➤ Knowledge deficit related to causes, prevention and control
    - Risk factors
    - Warning signs
    - Diagnostic tests and procedures
      - Cytology
      - Biopsy
      - Bronchoscopy
      - Gastroscopy
      - Colonoscopy
      - Imaging studies
      - Tumor markers
- ❖ Treatments and their affects on universal self-care requisites
  - > Radiotherapy
  - > Chemotherapy
  - > Bone Marrow Transplant
  - > Air
    - Ineffective breathing patterns
  - > Water
    - High risk for fluid volume deficit
      - Diarrhea
      - Nausea/vomiting
  - > Food
    - Impaired swallowing
    - Nutrition: Less than body requirements
  - **▶** Elimination
    - Diarrhea
  - ➤ Activity/Rest
    - High risk for activity intolerance: fatigue
  - ➤ Solitude/Social Interaction
    - Fear
    - Grieving
    - Body image disturbance
  - > Safety
    - High risk for infection
  - > Teaching
    - Self-care deficit involving rehabilitation

## Problems affecting sexuality

### Introduction

- > Structure and function of the reproductive system
  - The female reproductive system
  - The male reproductive system
  - Nursing assessment of the client with reproductive problems
- Universal health care requisites
  - > Air
    - Potential altered respiratory function related to surgical intervention
  - > Water
    - High risk for fluid volume deficit related to inflammatory process or surgical intervention
  - > Food
    - High risk for altered nutrition: less than body requirements, related to surgical wound healing, pain, nausea or vomiting
  - **Elimination** 
    - Alteration in urinary pattern related to pain, pathology, or urinary diversion
  - ➤ Activity/Rest
    - Alteration in comfort
  - ➤ Solitude/Social Interaction
    - Self-concept disturbance related to loss of body part
    - Altered sexuality patterns related to loss of libido, impotence cessation of menses
    - Grieving
  - > Safety
    - High risk for infection
    - High risk for injury related to complications
  - > Teaching
    - Nursing responsibilities for diagnostic tests and procedures
      - Physical examination
      - Laboratory examination
      - Papanicolaou (Pap) smear
      - Dilation and curettage (D and C)
      - Biopsy
      - Semen analysis
    - Self-care deficit related to medication or treatment
- ❖ Developmental self-care requisites
  - ➤ Phases of reproductive function throughout the life cycle
    - Puberty
    - Menstruation
    - Sexual role behavior
    - The reproductive years
    - Menopause

- Congenial malformations of the reproductive organs
- ❖ Health deviation self-care requisites
  - ➤ Client with diseases and disorders of the reproductive system
    - Disturbances in the menstrual cycle
    - Premenstrual syndrome
    - Toxic shock syndrome
    - Venereal diseases
    - Conditions that affect male and female genitalia
      - Inflammatory conditions
      - Fistulas
      - Relaxation of the musculature and prolapse
      - Tumors
    - Conditions of the vagina, cervix and uterus
      - Inflammatory conditions
      - Tumors and malignancies
        - Nursing care of the hysterectomy client
    - Conditions affecting the ovaries and fallopian tubes
      - Inflammatory conditions
      - Tumors and malignancies
    - Conditions affecting the breast
      - Inflammatory conditions
      - Tumors and malignancies
        - Nursing care of the mastectomy client
    - Conditions of pregnancy
      - Abortion
      - Ectopic pregnancy
    - Conditions affecting the testes, prostate gland and erectile function
      - Inflammatory conditions
      - Tumors and malignancies
        - ♦ Nursing care of the prostatectomy client
        - ♦ Nursing care of the client after TURP
      - Hormonal disorders
      - Vascular and neurological disorders

## Problems affecting psychological aspects of client care

- Introduction
  - ➤ Mental health and mental illness
  - > Therapeutic communication
  - Coping
- Universal Health Care Requisites
  - > Air
    - High risk for breathing pattern disturbances related to anxiety
  - ➤ Water
    - High risk for fluid volume excess related to medication therapy
  - > Food
    - Alteration in nutrition: Less than body requirement
    - Alteration in nutrition: More than body requirement
  - **Elimination** 
    - Potential risk for constipation related to medication therapy, inactivity
  - ➤ Activity/Rest
    - Activity intolerance
      - Anxiety, depression, psychosis
  - ➤ Solitude/Social Interaction
    - Isolation related to mental illness
    - Anxiety related to disease process
    - Fear
  - > Safety
    - Suicide
    - Compliance
- ❖ Health deviation self-care requisites
  - ➤ Mental health
    - Effects of anxiety
    - Defense mechanisms
    - Development of emotional problems
  - Mood disorders
    - Depression
    - Bipolar Disorder
  - > Anxiety disorders
    - Generalized anxiety
    - Panic
    - Obsessive Compulsive Disorder
    - Post Traumatic Stress Disorder
    - Phobias
  - > Psychosis
    - Schizophrenia
      - Affective disorders
        - ♦ Dexamethasone suppression test

- > Personality disorders
  - Paranoid personality
  - Schizoid personality
  - Obsessive-compulsive personality
  - Antisocial personality
  - Passive-aggressive personality
- Organic brain syndromes
  - Dementia vs. dilerium
  - Alzheimer's disease
- ➤ Addictive disorders Substance Abuse
- ❖ The therapeutic relationship in nursing
- Psychopharmacology
- Psychological
- treatment methods

#### WILLOUGHBY-EASTLAKE SCHOOL OF PRACTICAL NURSING

### **PHARMACOLOGY**

# **COURSE DESCRIPTION – 70 Theory hours; 40 Clinical hours**

This course is integrated within the study of medical-surgical, pediatrics, maternity, and geriatric nursing. Common drugs are studied with an emphasis on classification, action, side effects and patient education for self-care administration. To correlate learning, practical experiences in medication administration is provided in the clinical setting.

### **COURSE OBJECTIVES**

Upon the completion of the student will be prepared to:

- List and practice the 'five rights' of safe administration of medications.
- > Demonstrate ability to check appropriate references for drug information.
- ➤ Promote client self-care practices for medication administration.
- ➤ Utilize the nursing process to:
  - Observe for desired action or side effects of medications.
  - Assist with identifying client problems and needs related to the medication orders.
  - Assist in the planning of care related to specific medications, actions, and side effects.
  - Assist in the implementation of client care related specific medications, actions, and side effects.
- Administer medications using various routes.
- ➤ Recognize major drug classifications, actions, side effects, and special nursing considerations.

#### **TEXTBOOKS**

<u>Foundations of Nursing</u> by Lois White <u>Davis' Drug Guide</u>

## **TEACHING STRATEGIES**

A combination of lecture, discussion, handouts, SmartBoard Technology and participation activities will be used to present materials. Videos and computerized tutorials are used to enhance student understanding. Students are required to read all assigned pages and be prepared to participate during class. Nursing experience in a variety of clinical settings and institutions will provide the student practical nurse with the knowledge and skill to obtain an entry level position in the health care field.

# **EVALUATION**

Frequent testing will be done to help assess continuing progress of the student. At the end of the course there will be a comprehensive final exam. All tests and finals are weighted on a total point scale. A minimum grade of 84% is required for the course.

# **PHARMACOLOGY**

- **❖** Introduction
  - ➤ Pharmacology is integrated within Medical-Surgical Nursing and Clinical
- Universal Health Care Requisites
  - > Air
    - Breathing pattern disturbances related to anaphylaxis
  - ➤ Water
    - Fluid volume excess related to side effects
    - Fluid volume deficit related to side effects
  - > Food
    - Alteration in nutrition: Less than body requirements
    - Alteration in nutrition: More than body requirements
  - **Elimination** 
    - Alteration in bowel elimination: Diarrhea
    - Alteration in bowel elimination: Constipation
  - ➤ Activity/Rest
    - Alteration in comfort
    - Sleep pattern disturbance
- Skin Medications
  - > Drugs
    - Antipruritics
    - Emollients and Demulents
    - Keratolytics
    - Scabicides and pediculicides
    - Antifungals
    - Glucocorticosteroids
    - Antibiotics
  - > Cautions for topical medications
- ❖ Autonomic Nervous System Drugs
  - > Drugs
    - Adrenergics
    - Adrenergic Blockers
    - Cholinergics
    - Cholinergic Blockers
- **❖** Antineoplastic
  - > Drugs
    - Antimetabolites
    - Alkylating agents
    - Plant alkaloids
    - Antitumor antibiotics
    - Hormones
    - Radioactive Isotopes
  - ➤ Cautions for Antineoplastic drugs
  - > Cytotoxic Drug dangers to health care personnel
- Urinary System

## > Drugs

- Diuretics
  - Thiazides
  - Loop
  - Potassium Sparing
  - Osmotic agents
- Antispasmotic
- Analgesics
- Cholinergics
- Antibiotic
  - Sulfa
- Medications for the treatment of gout
  - Uricosuric Agents
  - Allopurinol

# Gastrointestinal System

- Drugs
  - Antacids
  - Anti-diarrhea Agents
  - Anti-ulcer
  - Anti-flatulents
  - Laxatives
    - Bulk
    - Stool Softeners
    - Evacuants: Bowel Preps
    - Stimulants
  - Anti-emetic
- ❖ Anti-infective/Antibiotics
  - > Drugs
    - Aminoglycosides
    - Cephalosporins
    - Chloramphenicol
    - Erthromycins
    - Penicillins
    - Quinolones
    - Tetracyclines
    - Antifungals
    - Antituberculosis agents
    - Antiviral
    - Sulfonamides
    - Urinary Anti-infective
- Eye Medications
  - > Drugs
    - Antiinfectives
    - Anti-inflammatory
    - Miotic

- Midriatic
- ❖ Analgesics, Sedatives, and Hypnotics
  - > Drugs
    - Analgesics
      - Narcotic
      - Non-narcotic
        - **♦** Salicylates
        - ♦ Acetaminophen
        - ♦ NSAID
    - Sedatives/Hypnotics
      - Barbiturates
      - Non-barbiturates
- ❖ Psychotropic medications, Alcohol and Substance Abuse
  - Drugs
    - Stimulants
    - Antidepressants
      - Tricyclics
      - SSRI
      - MAO Inhibitor
    - Anti-mania
      - Lithium
    - Anti-anxiety
    - Antipsychotic Medications
    - Mood Altering Drugs Substance Abuse
      - Hallucinogens
      - Alcohol
        - ♦ Alcoholism
        - ♦ The role of the nurse
      - Stimulants
- Musculosketeltal System
  - > Drugs
    - Skeletal Muscle Relaxants
    - Anti-inflammatory medications
    - Non-steroidal anti-inflammatory medications
    - Anti-gout
- Anticonvulsants and Antiparkinsonian Drugs
  - > Drugs
    - Anticonvulsants
    - Antiparkinsonian
      - Levodopa
      - Anticholinergic
      - Amantadine
- Endocrine System
  - > Drugs
    - Pituitary Hormones

- Adrenal Corticosteroids
- Thyroid Agents
- Antithyroid agents
- Antidiabetic agents
  - Insulin
  - Oral hypoglycemic agents
- \* Reproductive System
  - > Drugs
    - Estrogens
    - Progestins
- Cardiovascular System
  - > Drugs
    - Cardiac glycosides
    - Anti-arrhythmic agents
    - Adrenergic blockers
    - Calcium channel blockers
    - Lidocaine
    - Precainamide
    - Quinidine
    - Antihypertensives
      - Ace Inhibitor
      - Beta-adrenergic blocker
      - Calcium channel blocker
    - Antilipemic agents
    - Anticoagulants
      - Coumadin
      - Heparin
      - Aspirin
    - Thrombolytics
- Respiratory System
  - > Drugs
    - Oxygen
    - Respiratory stimulants
    - Bronchodilators
    - Sympathomimetics
    - Corticosteroids
    - Mucloytics and Expectorants
    - Anti-tussive
    - Antihistamines
    - Decongestants
- Preoperative and Postoperative Medications/Local Anesthetics
  - Durgs
    - Preoperative medications
    - Postoperative medications
    - Local anesthetics

### WILLOUGHBY-EASTLAKE SCHOOL OF PRACTICAL NURSING

### **OBSTETRICAL NURSING**

## **COURSE DESCRIPTION – 45 hours; 3 clinical hours**

This course introduces nursing concepts related to women's health, pregnancy and care of the newborn. Building on the foundation of previous nursing courses and the nursing process, the student will explore nursing care for women with reproductive concerns as well as nursing care during preconception, perinatal, postpartum, and neonatal periods. Tasks of pregnancy, psychosocial adaptation, biological-behavioral concepts in obstetric nursing care within the context of social justice, cultural competence, and equity will be addressed. This course includes the study of basic information related to the developmental requisites related to pregnancy, labor, delivery, and the newborn. There is a clinical component to this course.

### **COURSE OBJECTIVES**

Upon the completion of the course the student will be prepared to:

- > Deliver nursing care with application of maternal-child health concepts.
- ➤ Teach and promote good health care for the mother/child unit, so as to encourage development of a strong foundation for the family to build on.
- ➤ Identify deviations from normal pregnancy, labor, and puerperium.

## **TEXTBOOKS**

Fourndations of Nursing by Lois White

### **TEACHING STRATEGIES**

A combination of lecture, discussion, handouts, SmartBoard Technology, E-Instruction and participation activities will be used to present materials. Videos, computerized tutorials, and simulations are used to enhance student understanding. Students are required to real all assigned pages and be prepared to participate during class. A clinical experience is provided that will allow the student to demonstrate appropriate clinical judgment in an obstetrical setting.

## **EVALUATION**

Frequent testing will be done to help assess continuing progress of the student. At the end of the course there will be a comprehensive final exam. All tests and finals are weighted on a total point scale. A minimum grade of 84% is required for the theory portion of this course. The student will receive a clinical grade for the obstetrical clinical experience. A minimum grade of 84% is required for the clinical component of this course.

### **OBSTETRICAL NURSING**

#### Introduction

- > Structure and function of the female reproductive system
- ➤ Menstrual cycle
- > Structure and function of the male reproductive system
- Signs and symptoms of pregnancy
- > Prenatal care
- **Examination**
- > Post partum care
- Newborn care

# Teaching

- Nutrition
- > Signs and symptoms to report during pregnancy
- > Teratogens
- Viruses and parasites
- > Hygiene
- > Exercise
- Preparation for nursing
- Wardrobe
- > Employment
- Sexual relations
- ➤ Community education resources
- Preparation for baby
- > Cultural differences during pregnancy, birth

### ❖ The laboring mother

- > Presentations
- Position
- > Effacement
- ➤ Mechanisms of labor
- > Stages of labor
  - First stage of Labor
    - Emotional changes
    - Physical changes
    - Signs of labor
    - Assessment of client
    - Monitoring fetal heart rate changes
    - Fetal heart rate patterns
      - **♦** Treatment
    - Monitoring contractions
    - Rupture of membranes
    - Monitor fluid color
    - Self-Care requisites
      - ♦ Air

- ➤ Alteration of tissue perfusion
  - Vital signs
  - Oxygenation and effect on fetus
- > Water
  - Intake and output
  - Hydration
- > Food
  - Alteration in nutrition: less than body requirements
  - Effects of labor on GI tract
- **Elimination** 
  - Increased pressure to bladder and rectum
  - Hygiene
- ➤ Activity/Rest
  - Pain
    - Analgesics
    - Anesthesia
      - ♦ Regional
      - ♦ Local
    - Relaxation and breathing
    - Acupressure
- ➤ Solitude/Social Interaction
  - Support of client and significant others
- Second Stage of Labor
  - Signs and symptoms
  - Pushing
  - Position
  - Perineal preparation
    - ♦ Forceps
    - ◆ Episiotomy
  - Delivery
  - Immediate care of infant
    - ♦ Universal self-care requisites
      - > Air
        - High risk for impaired tissue perfusion
          - Vital signs
          - Temperature Control
          - Systems Assessment APGAR
- Third Stage of Labor
  - Assessment of client
  - Delivery of placenta
- Fourth Stage of Labor
  - Assessment of client

- Care of the client
- Promoting family bonding
- Ceasarean birth
- Breech
- Twins
- > Postpartum care
  - Universal self-care requisites
    - Air
      - ♦ High risk for impaired tissue perfusion
        - ➤ Vital signs
        - ➤ Lochia
        - > Fundus
        - > Hemorrhage
          - Treatment
            - Massage
            - Pitocin
            - Methergine
    - Water
      - High risk for fluid volume deficit related to hemorrhage
    - Food
      - ♦ Alteration in nutrition
        - Diet
    - Elimination
      - ♦ High risk for urine retention
        - > Assessment
        - > Encourage voiding
      - ♦ Knowledge deficit related to self-care
        - > Perineal care
        - > Constipation
        - Urinary retention
    - Activity/Rest
      - ♦ Ambulation
      - ♦ Pain
        - > Assessment
        - > Causes
        - Medication
    - Teaching
      - ♦ Breast-care
        - > Anatomy
        - > Engorgement
          - Treatment
        - ➤ Breast Feeding
          - Pumping
          - Diet
      - ♦ Contraception

- ♦ Perineal care
- ♦ Special Needs
  - > Ceasarean
  - > Sorrowing mother
  - > Postpartum blues
  - > Infection
- **❖** Newborn
  - ➤ The typical newborn
    - Appearance
    - Vital signs
    - Gastrointestinal system
    - Circulatory system
    - Respiratory system
    - Urinary system
    - Endocrine
    - Genitalia
    - Neuromuscular system
  - > Routine care of the newborn
    - Air
      - High risk for impaired airway
        - ♦ Assessment
        - ♦ Suction
        - ♦ Position
        - ♦ Warmth
        - ♦ Cold stress
        - ♦ Hemorrhage
          - ➤ Vitamin K
      - High risk for infection
        - ♦ Opthalmia Neonatrum
          - > Erythromycin eye ointment
          - Prevention
    - Water
      - Risk for Fluid volume deficit
    - Food
      - Bottle feeding
      - Breastfeeding
    - Elimination
      - Meconium
      - Voiding
      - Circumcision
    - Activity/Rest
      - Sleep
    - Solitude/Social Interaction
      - Bonding

- Health Deviation health care requisites
  - > Pre-term
    - Causes
    - Appearance
    - Nutrition
  - > Anomilies of the newborn
    - Injury
    - Hydorcephalus
    - Down's syndrome
    - PKU
    - Spina bifida
    - Cleft lip/palate
    - Hypospadias
    - Hemolytic reaction
    - Congenital hip dysplasia
    - Clubfoot
  - ➤ Health deviations during pregnancy
    - Nausea
    - Varicosities
    - Muscle cramps
    - Infection
    - Diabetes
    - Cardiac
    - Syphilis
    - Gonorrhea
    - Chlamydia
    - Urinary
    - AIDS
    - Herpes
    - Abortion
    - Ectopic pregnancy
    - Placenta previa
    - Abruptio placenta
    - Pregnancy induced hypertension (PIH)
    - Uterine rupture
    - Amniotic emboli
    - Premature labor
    - Teen pregnancy