I. TITLE OF COURSE : FUNDAMENTAL OF ADULT CARE 2

Code & number : NURS 2233
Credits : Six (6)
Academic Term : 
Professor : 
Office Hours : 
Professor : 
Office Hours : 
Office phone number : 250-1912 Ext. 2202
Email :

II. DESCRIPTION

Discussion of the acute and chronic dysfunctions of health related to functional patterns: cognitive-perceptual, activity-exercise, & sexuality-reproduction. Includes anatomical, Pathophysiological, microbial, biochemical & environmental concepts that affect human function. Integration of skills in communication, management of care, research and the nursing process in the care of the client. Requires 30 additional hours in the integrated science tutorial lab. Prerequisite: NURS 1231. Co requisites NURS 2141, 2142.

III. TERMINAL OBJECTIVES

1. Utilizes critical thinking skills while offering a safe, effective, efficient, timely, and equitable basic direct care to patients/clients with acute and chronic dysfunctions of health related to the functional patterns: cognitive-perceptual, activity-exercise, & sexuality-reproduction. (nursing process)

2. Offers humanistic care that is patient centered considering their needs, values, preferences, and cultural insights. (humanistic care).

3. Demonstrates competence in therapeutic evidence–based interventions with rational that includes anatomy, pathophysiology, microbiology, biochemistry, and environmental concepts. (wellness /Illness)

4. Initiates the use of effective verbal and nonverbal communication, including information technology skills to support quality patient/client care and teamwork. (Communication)

5. Apply evidence-base knowledge for decision making processes as guided by nursing faculty when offering nursing care to adult patients/clients within the context of their family. (Research)

6. Demonstrate basic leadership characteristics and management skills within the nursing teamwork in order to facilitate patient safety and quality of care. (Leadership and Management)

7. Implement conducts that demonstrate responsibility and commitment for lifelong learning within the profession. (Leadership and Management)
IV. CONTENT

FUNCTIONAL HEALTH PATTERN: COGNITIVE PERCEPTUAL

Unit I – Problems of Mobility, Sensation, and Cognition: Management of Patients and Problems of the Nervous System

A. Basic concepts of anatomy and physiology, biochemistry and microbiology related to the nervous system
   1. Anatomy and physiology of the central nervous system, peripheral, autonomic
      a. Nervous system cells
         1. General properties and functions
         2. Structure
      b. Encephalon
         1. General considerations
      c. Cranial Nerves
      d. Spinal Cord
      e. Spinal nerves
      f. Autonomic Nervous System
      g. Nerve impulse conduction
      h. Neurosensitive tracts
      i. Motor nerve tracts
   2. Chemical principles related to the nervous system
   3. Microbiology principles related to the nervous system
   4. Relationship of the nervous system to the whole body

B. The Nursing Process Applied to the Patient with Pathophysiological Problems of the Nervous System
   1. Assessment
      a. Patient History
      b. Physical assessment
      c. Psychosocial assessment
      d. Diagnostic assessment
      e. Considerations in the older adult
   2. Common Acute and Chronic Conditions
      a. Stroke
      b. TIA
      c. Parkinson Disease
      d. Alzheimer
      e. Epilepsy
      g. Meningitis
      h. Multiple Sclerosis
      i. Spinal Cord Injury
      j. Traumatic Brain Injury
   3. Common Nursing Diagnosis and Collaborative Problems
   4. Planning
   5. NOC
   6. Nursing Interventions (NIC)
      a. Prevention of Falls (6490)
      b. Seizure precautions (2690)
      c. Management of Seizure (2680)
      d. Monitoring ICP
      e. Neurological Monitoring
      f. Medication Management
UNIT 2 – Problems of sensation: Management of Patients with Problems of the sensory system

A. Basic concepts of anatomy and physiology, biochemistry and microbiology related to auditory system

1. Anatomy and physiology of the auditory system
   a. Structures of the ear
      1. External
      2. Middle
      3. Inner
   b. Physiology of hearing
   c. Neural control of hearing
   d. Equilibrium

2. Biochemical principles of the auditory system
3. Microbiological concepts related to the auditory system

B. Basic concepts of anatomy and physiology, biochemistry and microbiology related to visual system

1. Anatomy and physiology of the visual system
   a. External and internal structures of the eye
   b. Physiology of vision
      1. Refraction
      2. Accommodation
      3. Convergence
      4. Adaptation to light
   c. Neural Pathway of Vision
      1. Retinal neurons

2. Biochemical principles related to vision
3. Microbiological concepts related to vision

C. The Nursing Process Applied to the Patient with Pathophysiological Problems of the Visual System

1. Assessment
   a. Patient History
   b. Physical assessment
   c. Psychosocial assessment
   d. Diagnostic assessment
   e. Considerations in the older adult

2. Common Acute and Chronic Conditions
   a. Glaucoma
   b. Cataract

3. Common Nursing Diagnosis and Collaborative Problems

4. Planning

5. NOC

6. Nursing Interventions (NIC)
   a. Communication Enhancement: Visual Deficit (4978)
   b. Eye Care (1650)
   c. Medication Management
   d. Health Literacy
   e. Transcultural Care
   f. Patient Safety Goals

7. Therapeutic Communication
8. Evidenced-Based Practice
9. Team STEPPS strategies

FUNCTIONAL HEALTH PATTERN: ACTIVITY-EXERCISE

Unit III: Problems of Cardiac Output and Tissue Perfusion: Management of Patients with Problems of the Cardiovascular System

A. Basic concepts of anatomy and physiology, biochemistry and microbiology related to the cardiovascular system

1. Anatomy and physiology of the cardiovascular system
   a. Structure of the cardiovascular system
      1. Heart
      • Structure
      • Function
      • ECG tracing
   2. Blood Vessels
   b. Function of the circulatory system
   c. Physiology of circulation
      1. Definitions
      2. Cardiac output
      3. Principles of circulation
      4. Pulse
   d. Biophysical principles related to the cardiovascular system
   e. Biochemical principles related to the cardiovascular system
   f. Microbiological concepts related to the cardiovascular system
   g. Relationship of the cardiovascular system to the whole body

B. The Nursing Process Applied to the Patient with Pathophysiological Problems of the Cardiovascular System

1. Assessment
   a. Patient History
   b. Physical assessment
   c. Psychosocial assessment
   d. Diagnostic assessment
   e. Considerations in the older adult

2. Common Acute and Chronic Conditions
   a. Atherosclerosis
   b. Hypertension
   c. Heart Failure
   d. ACS Algorithm
   e. Dysrhythmias (AF, PVCs, Heart Block, VF) Algorithms
   f. Pacemakers, AED
   g. Venous thrombosis

3. Common Nursing Diagnosis and Collaborative Problems
4. Planning
5. NOC
6. Nursing Interventions (NIC)
   a. Cardiac Care: Acute (4044)
   b. Management of Dysrhythmias (4090)
   c. Management of Cardiogenic shock (4254)
   d. Medication Management
   e. Health Literacy
   f. CLAS
f. Patient Safety Goals
7. Therapeutic Communication
8. Evidence-Based Practice
9. Team STEPPS strategies

Unit IV: Problems of Cardiac Output and Tissue Perfusion: Management of Patients with Problems of the Respiratory System

A. Basic concepts of anatomy and physiology, biochemistry and microbiology related to the respiratory system

1. Anatomy and physiology of the respiratory system
   a. Function of the respiratory system
   b. Upper respiratory system
   c. Lower respiratory system
   d. Physiology of respiratory system
      1. Mechanics of respiration (inhalation & exhalation)
      2. Neural and chemical control
      3. Volume
      4. Diffusion of gases
      5. Transport of O2 & CO2 in the blood
      6. Normal respiratory sounds

2. Physical principles related to the respiratory system
   1. Law of gravity
   2. Impulse
   3. Elasticity
   4. Liquids
   5. Gases

f. Biochemical principles related to the respiratory system
   1. Acid-base balance

f. Microbiological concepts related to the respiratory system

g. Relationship of the respiratory system to the whole body

B. The Nursing Process Applied to the Patient with Pathophysiological Problems of the Respiratory System

1. Assessment
   a. Patient History
   b. Physical assessment
   c. Psychosocial assessment
   d. Diagnostic assessment
   e. Considerations in the older adult

2. Common Acute and Chronic Conditions
   a. Asthma
   b. COPD
   c. TB
   d. Pneumonia
   e. ARDS
   f. Pneumothorax

3. Common Nursing Diagnosis and Collaborative Problems

4. Planning

5. NOC

6. Nursing Interventions (NIC)
   a. Respiratory Monitoring (3350)
   b. Asthma Management
   c. Acid-Base Management
d. Mechanical ventilation (3300)
e. Care of chest tubes (1872)
f. Medication Management
g. Health Literacy
h. CLAS
i. Patient Safety Goals
7. Therapeutic Communication
8. Evidenced-Based Practice
9. Team STEPPS strategies

Unit V: Problems of Tissue Perfusion: Management of Patients with Problems of the Hematologic System
A. Basic concepts of anatomy and physiology, biochemistry and microbiology related to the hematologic system
1. The hematologic system
   a. Blood system
      1. Components
      2. Physical properties
      3. Blood group types and RH
         a. Compatibility
         b. Incompatibility
      4. Homeostasis
         a. Coagulation
         b. Importance of nutrition
   b. Newton’s law
   c. Viscosity
2. Biophysical principles related to the hematologic system
   a. Newton’s law
   b. Viscosity
3. Biochemical principles related to the hematologic system
4. Microbiological concepts related to the hematologic system
5. Relationship of the hematologic system to the whole body
B. The Nursing Process Applied to the Patient with Pathophysiological Problems of the cardiovascular System
1. Assessment
   a. Patient History
   b. Physical assessment
   c. Psychosocial assessment
   d. Diagnostic assessment: normal values
   e. Considerations in the older adult
2. Common Acute and Chronic Conditions
   a. Anemia
   b. Sickle Cell Anemia
   c. Vitamin B12 Deficiency
   d. Aplastic Anemia
   e. Polycytemia
   f. Leukemia
   g. Platelet disorders
   h. Hemachromotosis
3. Common Nursing Diagnosis and Collaborative Problems
4. Planning
5. NOC
6. Nursing Interventions (NIC)
   a. Nutritional Management (1100)
   b. Medication Management

Prof. A. Santiago, Prof. C. Padilla, Prof. E. Mateo
c. Health Literacy
d. CLAS
e. Patient Safety Goals
7. Therapeutic Communication
8. Evidenced-Based Practice
9. Team STEPPS strategies

Unit VI: Problems of Mobility: Management of Patients with Problems of the Musculoskeletal System

A. Basic concepts of anatomy and physiology, biochemistry and microbiology related to the musculoskeletal system

1. Structure and function of the musculoskeletal system
   a. Function of the skeletal system
   b. Number, names, and types of bones
   c. Articulations
   d. Skeletal differences between men and women
   e. Formation of bone

2. Structure and functions of the muscular system
   a. Purpose of the muscular system
   b. Types of muscles and nervous control
   c. Skeletal muscles
      1. Characteristics
      2. Metabolism of skeletal muscles
      3. Basic principles of the action of skeletal muscles
   d. Synovial joints
   d. Biophysical principles related to the musculoskeletal system
   e. Biochemical principles related to the musculoskeletal system
   f. Microbiological concepts related to the musculoskeletal system
   g. Relationship of the musculoskeletal system to the whole body

B. The Nursing Process Applied to the Patient with Pathophysiological Problems of the Musculoskeletal System

1. Assessment
   a. Patient History
   b. Physical assessment
   c. Psychosocial assessment
   d. Diagnostic assessment
   e. Considerations in the older adult

2. Common Acute and Chronic Conditions
   a. Fractures
   b. osteoporosis

3. Common Nursing Diagnosis and Collaborative Problems

4. Planning

5. NOC

6. Nursing Interventions (NIC)
   a. Cast Care (0762)
   c. Medication Management
   d. Health Literacy
   e. CLAS
   f. Patient Safety Goals

7. Therapeutic Communication

8. Evidenced-Based Practice

9. Team STEPPS strategies
FUNCTIONAL HEALTH PATTERN: REPRODUCTION-SEXUALITY

Unit VI: Management of Patients with Problems of the Male and Female Reproductive-Sexuality System

A. Basic concepts of anatomy and physiology, biochemistry and microbiology related to the female and male system

1. Anatomy and physiology of the male and female reproductive system
   a. Biophysical principles related to the male and female reproductive system
   b. Biochemical principles related to the male and female reproductive system
   c. Microbiological concepts related to the male and female reproductive system
   d. Relationship of the male and female reproductive system to the whole body

B. The Nursing Process Applied to the Patient with Pathophysiological Problems of the male and female reproductive system

1. Assessment
   a. Patient History
   b. Physical assessment
   c. Psychosocial assessment
   d. Diagnostic assessment
   e. Considerations in the older adult

2. Common Acute and Chronic Conditions
   a. Breast Cancer
   b. Prostate Cancer

3. Common Nursing Diagnosis and Collaborative Problems

4. Planning

5. NOC

6. Nursing Interventions (NIC)
   a. Medication Management
   b. Health Literacy
   c. CLAS
   d. Patient Safety Goals

7. Therapeutic Communication

8. Evidenced-Based Practice

9. Team STEPPS strategies

V. ACTIVITIES

Case studies
Small group discussions
Internet
Independent study
Supplemental readings
ATI
Online web-based

VI. EVALUATION

Partial Exams (3) 75%
Final Exam 25%

Total 100%
VII. SPECIAL NOTES

1. All students who require auxiliary services or special assistance should apply at the beginning of the course or as soon as they acquire the knowledge of the needs, through registration with the Office of the Professional Counselor, Professor José Rodriguez located in the University Orientation Program.

2. Honesty, fraud and plagiarism (General Student Regulations (Chapter V, Article 1)
   Plagiarism, the lack of honesty, fraud and the manipulation of falsification of information are contrary to institutional principles and norms and are subject to disciplinary sanctions, as established in Chapter V Article 1, of these regulations. Major infractions, as General Students Regulations dispose, can have consequences of suspension of the University for a definite time of more than one year, permanent expulsion from the University, or other sanctions.

3. All cellular phones and any other electronic devices that might interrupt the learning and teaching process or alter the environment that conduces to academic excellence must be deactivated. Special situations must be taken care of, accordingly. The use of electronic devices that allow access, storage or sending of information during evaluations or tests is prohibited.

4. Exams will start on time. Students will not be allowed into the classroom after the exam has started. No makeup exams will be given except for serious documented valid reasons and those will be given orally. No make ups for oral reports missed.

VIII. TEXTBOOKS


IX. REFERENCES


X. WEB SITES

Anatomy & Physiology Tutorial
www.getbodysmart.com

Assessment Technologies Institute
www.atitesting.com

Assessment Using Functional Health Patterns
http://www.delmarlearning.com/companions/content/0766822257/apps/appb2.pdf

Agency for Healthcare Research and Quality-Clinical Practice Guidelines Online
http://www.ahrq.gov/clinic/cpgonline.htm

American Nurses Association (Nurses Code of Ethics & Nursing Standards)
http://www.nursingworld.org

Colegio Profesionales de Enfermería de Puerto Rico- código de ética y estándares de enfermería
http://www.cpepr.org

Critical Thinking Indicators
www.AlfaroTeachSmart.com

National Council State Boards of Nursing
http://www.ncsbn.org

Cultural Competence:

US Department of Health & Human Service, Office of Minority Health
https://www.thinkculturalhealth.org

Modules 1, 2 y 3

Evidence based tutorials practice
http://ebp.lib.uic.edu/nursing/?q=node/38
Evidence-based tutorial University of Minnesota Libraries
http://www.biomed.lib.umn.edu/learn/ebp/mod01/index.html

Health Literacy

Head-to-Toe Assessment
http://www.delmarlearning.com/companions/content/0766822257/apps/appb3.pdf

Head-to-Toe Assessment pt 1 of 6
http://www.youtube.com/watch?v=jGf8NvqoTNs&feature=related

Human Anatomy Online
www.innerbody.com

Institute for Safe Medication Practices (ISMP)
www.ismp.org

National Patient Safety Goals 2010
http://www.jointcommission.org/PatientSafetyGoals/

Nursing Informatics Competencies –Self-Assessment
www.nursing-informatics.com

Patient Education Tutorials
www.nlm.nih.gov/medlineplus/tutorials

Systemic Reviews
www.cochrane.org

Team STEPPS
http://teamstepps.ahrq.gov/

TIGER Nursing Informatics Competencies Model
www.tigercompetencies.pbworks.com

Transcultural CARE model
www.transculturalcare.net