

Imperial Valley College  
Nursing and Allied Health Department  
**Nursing 231**

## **Nursing Process & Application III**

### **I. Course Description:**

This course is designed to integrate previous science and nursing course theory. This course provides theoretical perspective, science-based knowledge and principles needed by students to guide their application of the nursing process and choice of nursing interventions for individuals with common physiological alterations. Professional, legal and ethical issues are explored.

Through utilization of developmental theories (primarily Erikson) and the Roy Adaptation Model, this course focuses on the nursing role as communicator, provider of care, and client teacher for individuals experiencing adaptation problems across the lifespan in the physiologic mode, psychologic mode, and selected adaptation problems for person with common and/or chronic medical and/or surgical conditions related to the Hematology/Immune, Endocrine, Cardiac, Renal, Neurology, and Gastrointestinal Systems. Variations in nursing care for individuals of different socio-economic and cultural backgrounds will be considered. Theories of leadership and management as related to nursing in the acute care setting is introduced.

This course involves clinical application of both theoretical concepts and tactile skills taught in Nursing Process and Nursing Application I and II, Nursing Skills Laboratory III, II, and I, and Pharmacology. All aspects of the nursing process will be applied to client situations.

### **II. A. Prerequisites, if any:**

- NURS 125 Nursing Process & Application II
- NURS 121 Nursing Skills Lab II
- NURS 123 Pharmacology II
- NURS 224 Psychiatric & Mental Health Nursing
- NURS 225 Psychiatric & Mental Health Nursing Applications

### **B. Co-requisites, if any:**

- NURS 211 Nursing Skills Lab III

### **III. Student Learning Objectives:**

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

1. Define and differentiate leadership and management in nursing practice.
2. Demonstrate an understanding of delegation and supervision of nursing care.
3. Utilize knowledge of interdisciplinary models of delivery and management to plan and coordinate the health care of clients.
4. Determine actual and potential common problems of the neurological system in adult, geriatric, and pediatric clients and plan for health promotion, maintenance or restoration through the implementation of appropriate nursing care.
5. Differentiate history and physical data to determine the client's level of neurological adaptation and application of appropriate nursing care.
6. Determine actual and potential common problems of the cardiac system in adult, geriatric, and pediatric clients and plan for health promotion, maintenance or restoration through the implementation of appropriate nursing care.
7. Differentiate history and physical data to determine the client's level of cardiac adaptation and application of appropriate nursing care.
8. Determine actual and potential common problems of the gastrointestinal system in adult, geriatric, and pediatric clients and plan for health promotion, maintenance or restoration through the implementation of appropriate nursing care.
9. Differentiate history and physical data to determine the client's level of gastrointestinal adaptation and application of appropriate nursing care.

10. Determine actual and potential common problems of the endocrine system in adult, geriatric, and pediatric clients and plan for health promotion, maintenance or restoration through the implementation of appropriate nursing care.
11. Differentiate history and physical data to determine the client's level of endocrine adaptation and application of appropriate nursing care.
12. Determine actual and potential common problems of the renal system in adult, geriatric, and pediatric clients and plan for health promotion, maintenance or restoration through the implementation of appropriate nursing care.
13. Differentiate history and physical data to determine the client's level of renal adaptation and application of appropriate nursing care.
14. Demonstrate appropriate "team leading" within a nursing unit.
15. Demonstrate proper use of delegation and supervision on a nursing unit or floor
16. Demonstrate the use of an interdisciplinary model to manage and/or coordinate the health care of selected patients.
17. Plan, , implement and evaluate nursing care for adult , geriatric and pediatric patients with common and/or chronic adaptive disorders of the neurological system, including the following:
  - a. Pathophysiology
  - b. Diagnostic tests
  - c. Pharmacologic agents
  - d. Nutritional requirements
  - e. Teaching/Learning needs
  - f. Nursing interventions
  - g. Growth and developmental needs
  - h. Coping mechanisms
  - i. Legal/ethical issues
  - j. Cultural aspects
  - k. Psychosocial needs
18. Plan, implement and evaluate nursing care for adult, geriatric and pediatric patients with common and/or chronic adaptive disorders of the cardiac system, including the following:
  - a. Pathophysiology
  - b. Diagnostic tests
  - c. Pharmacologic agents
  - d. Nutritional requirements
  - e. Teaching/Learning needs
  - f. Nursing interventions
  - g. Growth and developmental needs
  - h. Coping mechanisms
  - i. Legal/ethical issues
  - j. Cultural aspects
  - k. Psychosocial needs
19. Plan, implement and evaluate nursing care for adult, geriatric and pediatric patients with common and/or chronic adaptive disorders of the gastrointestinal system, including the following:
  - a. Pathophysiology
  - b. Diagnostic tests
  - c. Pharmacologic agents
  - d. Nutritional requirements
  - e. Teaching/Learning needs
  - f. Nursing interventions
  - g. Growth and developmental needs
  - h. Coping mechanisms
  - i. Legal/ethical issues
  - j. Cultural aspects
  - k. Psychosocial needs

20. Plan, implement and evaluate nursing care for adult, geriatric and pediatric patients with common and/or chronic adaptive disorders of the endocrine system, including the following:
  - a. Pathophysiology
  - b. Diagnostic tests
  - c. Pharmacologic agents
  - d. Nutritional requirements
  - e. Teaching/Learning needs
  - f. Nursing interventions
  - g. Growth and developmental needs
  - h. Coping mechanisms
  - i. Legal/ethical issues
  - j. Cultural aspects
  - k. Psychosocial needs
  
23. Plan, implement and evaluate nursing care for adult, geriatric and pediatric patients with common and/or chronic adaptive disorders of the renal system, including the following:
  - a. Pathophysiology
  - b. Diagnostic tests
  - c. Pharmacologic agents
  - d. Nutritional requirements
  - e. Teaching/Learning needs
  - h. Nursing interventions
  - i. Growth and developmental needs
  - j. Coping mechanisms
  - k. Legal/ethical issues
  - j. Cultural aspects
  - k. Psychosocial needs
  
24. Plan, implement and evaluate nursing care for adult, geriatric and pediatric patients with common and acute adaptive disorders of the Hematologic/Immune system, including the following:
  - a. Pathophysiology
  - b. Diagnostic tests
  - c. Pharmacologic agents
  - d. Nutritional requirements
  - e. Teaching/Learning needs
  - f. Nursing interventions
  - g. Growth and developmental needs
  - h. Coping mechanisms
  - i. Legal/ethical issues
  - j. Cultural aspects
  - k. Psychosocial needs

#### IV. Course Requirements:

##### A. Hours

Nursing Process III, Nursing 231, is an 8.5 unit theory and clinical course. Lectures are held 4 hours and 30 minutes per week and clinical hours are 12 per week. **Clinical hours may be adjusted to meet the required assignment locations. Students are responsible for transportation to clinical sites and attendance at all scheduled clinical rotations.**

**B. Assignments:**

Reading, CD/video, and writing assignments are required. Students will be expected to read, understand, and critique information from college level textbooks or equivalent. The reading list will include texts used in prior nursing courses and those required of this course (see text book list). Additional reading assignments may be required to supplement textbook material. Writing assignments will reflect the objectives listed and may include, but not be limited to, short essays and/or professional papers. Outside assignments including but not limited to nursing lectures, independent exercises, and learning center activities may be assigned and are required.

Clinical pre-assignments will include preparing for clinical by obtaining patient data, developing a mini-care plan, and completing pre-assignments as designated for each clinical area. Clinical hours will be spent providing professional nursing care to assigned patients and observations in various clinical departments. Written post-assignments will relate to the clinical experience and may include but not be limited to case studies, professional papers, and journal entries. Clinical sites may include hospitals, clinics, and social service agencies. Students are responsible for transportation to all clinical sites.

Simulations may be utilized during this class and simulation materials will be handed out during the semester. All advance assignments must be completed before the start of class. Failure to complete the pre-assignment will prevent you from attending the class for the day and results in a clinical absence.

**C. Methods of Evaluation:**

Students must maintain a “C” average grade as determined by the scale below:

- A = 92-100%
- B = 83-91%
- C = 75-82%
- D = 68-74%
- F = Below 68%

Grades will not be “rounded”. To advance to the next semester, a “C” or better is required in this course and the co-requisite courses. The final examination must be passed at 75% or better to pass this class regardless of GPA.

All the following must be attained to successfully pass this course:

- a. Final theory exam score must be passed at a 75%
- b. Clinical grade must total equivalent of 75% or greater based on all points accumulated
- c. Theory grad must total equivalent of 75% or greater
- d. Pharmacology math quiz must be passed as described below
- e. Attendance requirements as noted below must be met.
- f. Less than 3 unsatisfactory in clinical work must occur
- g. Level 1 or better on selected ATI test

ATI testing is a part of the Nursing 231 course and is addressed in the student handbook and ATI Policy (see ATI algorithm).

Once the above are met, theory and clinical grades will be combined with theory worth 70% and clinical worth 30% to give the final overall grade.

Testing will include unit examinations in addition to written and oral assignments, midterm, and a final examination. Pop quizzes may be included. **MAKE-UPS FOR QUIZZES MISSED DUE TO ABSENCE** will be at the discretion of the Instructor.

Clinical evaluation will be done on an ongoing basis with a student required to “meet expectations” in all areas to pass the course. Evaluation is based on written assignments, adherence to nursing standards of care, and professional performance. An unsatisfactory in clinical may be given based on the same standards of care and professional performance and will require remediation in the learning center. Three unsatisfactory grades given in clinical or failure to meet the objectives will result in failure of this class regardless of the overall grade.

Areas used to evaluate student clinical performance:

- a. Clinical math test 100 points
- b. Case Study x3 100 points
- c. Clinical performance final 100 points

Schedule and total points available may change at the discretion of the instructor, taking into account the progress of students with the materials.

You are responsible for dropping (W) the class before the deadline as outlined on your registration forms. Failure to pass this class will affect your ability to progress to the next semester. Students failing must make an appointment to speak with the Director of Nursing Education.

**D. Attendance:**

It is the responsibility of each student to attend all classroom hours and to contact the faculty person before the start of class of any need to be excused from class. If a student does not contact the faculty member by the assigned time and is absent, a clinical unsatisfactory for professional behaviors will be given. ADN students are expected to attend all classes. **Absences are limited to 4 hours and 30 minutes of theory and 12 hours of clinical throughout the semester or (equivalent to number of hours class meet in one week).** A student who reaches the maximum allowable hours of absenteeism may be dropped by the instructor.

Acceptance of absenteeism excuses is at the discretion of the faculty member and may result in failure of the class. A student who reaches the maximum allowable number of hours absent and is not allowed to continue may file a petition to reenter the nursing program. The teaching team will meet with the student to discuss remediation and the possibility of reentry.

Students who are late for class/clinical three times will be considered absent for one day.

**V. Methods of Instruction**

The appropriate method of instruction will be determined by each instructor and may include, but not be limited to the following: classroom lecture, small group discussions, student presentations, demonstration, simulations, video/CD assisted instruction, audiovisuals, textbooks, handouts, and required reading and assignments.

## VI. Institutional/Student Learning Outcomes

1. The student will learn and understand nursing theory to plan, implement and evaluate nursing care for adult, geriatric and pediatric patients with acute adaptive disorders of the neurological, cardiac, respiratory, and /or endocrine systems.
  - a. Demonstrate integration of knowledge in all areas of nursing by passing the ATI Pediatrics exam with a level 1 or above.
  - b. Demonstrate integration of knowledge in all areas of nursing by passing the ATI Pharmacology exam with a level 1 or above.
2. The student will apply relevant nursing theory to patient care to individualized patient and families with acute and chronic body systems stressors in the hospital.
  - a. Assessed by clinical evaluation tool.
  - b. Assessed by clinical case studies.
3. The student will implement critical thinking skills in the implementation of the nursing process while providing safe patient care and meeting the needs of culturally diverse patients within multidisciplinary healthcare systems
  - a. Assessed by clinical case studies.
  - b. Assessed by clinical evaluation tool.
4. Demonstrate proper use of delegation, team leading, and the use of interdisciplinary model to manage and/or coordinate the health care of selected patients.
  - a. Assessed by clinical competency.
5. Student will use evidence based research to provide quality health care, initiate change and improve nursing practice.
  - a. Assessed by clinical case studies.

## VII. Disabilities

If applicable, any student with a documented disability who may need educational accommodations should notify their Instructor(s) and the Disabled Student Programs and Services (DSP&S) office as soon as possible. Otherwise, your examinations could be delayed.

Request for Accommodation of Disabilities at DSP&S, Health Science Building, Room 2117 760-355-6312

Imperial Valley College does not discriminate in the admission nor in the offering of programs and activities because of ethnic group identification, national origin, age, gender, race, color, medical condition, Vietnam era status, ancestry, sexual orientation, marital status, or physical or mental disability, or because he or she is perceived to have one or more of those characteristics.

**Standards and procedures may be found in the Student Handbook, also refer to the College Catalog or website.**

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**Unit # 1: Nursing Leadership**

**Description:**

This unit focuses on theoretical and practical knowledge necessary for leadership application.

**Unit Outcome Competencies:**

Student will articulate the merits and application of nursing leadership styles.

**Student Classroom Learning Objectives:**

The student will be able to:

1. Distinguish among theories of leadership.
2. Identify the importance of culture for leadership and management in nursing.
3. Compare and contrast the qualities of leadership and different leadership styles.
4. Discuss the importance in critical thinking in nursing leadership.
5. Compare and contrast leadership roles and management functions in nursing.
6. Identify factors affecting leadership in the independent and interdependent roles.
7. Discuss characteristics of effective leaders and identify leadership styles.
8. Describe the relationship between communication and leadership.
9. Describe leadership role in resolving conflict.

**Learning Activities:**

1. Know terminology
2. Discuss in class various styles of leadership
3. Compare and contrast leadership and management styles in nursing
4. As a nurse you will be in a leadership role. What style or theory of leadership will you practice? Present this in skills lab.

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**Unit # 2: Application of the Nursing Process in Client's with Common Adaptive Disorders of the Endocrine System**

**Description:**

This module focuses on the essential regulating function of the endocrine system. Pharmacological and physiological impact on the endocrine system will be discussed. Historical and physical finding will be explored to describe the variety of clinical findings that may be present.

**Unit Learning Competencies:**

The student will apply the nursing process to determine that client's level of endocrine adaptation and application of appropriate nursing care.

**Student Learning Classroom Objective:**

Upon completion of this module the student will be able to:

1. Describe the functions of the endocrine glands and the hormones secreted.
2. Discuss the interrelatedness of the endocrine system and the nervous system.
3. Describe the major diagnostic tests of the endocrine system and the application of nursing care.
4. Describe the major historical and physical findings, treatment, approaches and nursing care of the person with endocrine disorders.
5. Discuss pharmacological and nursing implications of hormonal and steroid therapy.
6. Outline the teaching needs of patients requiring hormone and steroid therapy.
7. Discuss the interrelatedness of the endocrine system and the nervous system as they control homeostasis.
8. Identify common health care problems encountered when alterations in endocrine function occur.
9. Differentiate between insulin-dependent and non-insulin dependent diabetes.
10. Distinguish among the types of insulin by source, purity, concentration, formulation, and time of activity.
11. Describe the relationship between diet, insulin, and exercise, for persons with diabetes.
12. Discuss hypoglycemia, diabetic ketoacidosis, and hyperosmolar hyperglycemic nonketotic coma
13. Discuss the pathophysiology of diabetes.

**Learning Activities:**

- a. Review anatomy and physiology (Endocrine System)
- b. Know terminology
- c. Discuss, in class each of the endocrine glands, their identifying functions, and alterations resulting from dysfunction.
- d. Develop a teaching plan for a newly diagnosed insulin-dependent diabetic, which includes self-administration of insulin, dietary planning, exercise regime, personal hygiene, and sick-day guides.
- e. Explain, in class, the acute and chronic complications of diabetic mellitus and the relationship between diabetic control and prevention of complications.
- f. Investigate community services that are provided for the detection and prevention of diabetes and the education of persons who have diabetes.
- g. Develop a one-week meal plan for a diabetic patient, using the ADA Exchange Lists.
- h. Discuss, in class, the nursing care, medical/surgical treatment modalities used for pituitary, thyroid, adrenal, parathyroid, and pancreatic endocrine dysfunction.
- i. Review audio-visual materials on the endocrine system
- j. Read current articles as assigned by instructor
- k. Complete assigned computer programs

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**Unit # 3: Application of the Nursing Process in caring for Adult and Pediatric Patients with common Health Problems of the Neurological System**

**Description:**

This unit focuses on concept of pathophysiology of neurological dysfunction. Emphasis is placed on application of the nursing process to manifested adaptive problems.

**Unit Outcome Competencies:**

The student will be able to apply the nursing process to formulate nursing diagnosis for existing and potential neurological problems, utilizing the Roy adaptation model.

**Student Learning Classroom Objectives:**

Upon completion of this unit the student will be able to:

1. Identify the special nursing needs of patients with neurological conditions.
2. Describe the importance of physical assessment to the diagnosis of neurological dysfunction.
3. Discuss the psychological and emotional needs of patients with a neurological dysfunction; include the physiological and emotional needs of the family.
4. Describe clinical manifestations, diagnosis, and treatments of patients with neurological dysfunctions.
5. Explain common pharmacological agents used in treating conditions of neurological dysfunctions.
6. Identify the multi-system needs of the unconscious patient.
7. Describe possible infectious processes that result in neurological impairment.
8. Compare the various types of stroke, their- causes, clinical manifestations, nursing management and health teaching needs.
9. Discuss the rehabilitation process of stroke patients with emphasis on their cultural attitudes and beliefs.
10. Describe the clinical manifestations of increased intra cranial pressure.
11. Explain common method used in treating conditions of increased intra cranial pressure.
12. Use critical thinking skills in applying the nursing process to formulate a nursing care plan for adult with common neurological problems.

**Include:**

- a) Pathophysiology
- b) Diagnostic tests
- c) Pharmacologic agents
- d) Nutritional requirements
- e) Teaching/ learning needs
- f) Nursing interventions/Restorative measures
- g) Growth and developmental needs
- h) Coping mechanisms
- i) Legal/ethical issues
- j) Cultural aspects
- k) Psycho social needs
- l) Collaboration
- m) Teaching
- n) Spiritual

**Learning Activities:**

1. Know terminology
2. Review anatomy and physiology (Neurological System)
3. View audio-visual materials and review computer programs on neurological conditions and dysfunctions as assigned.
4. Read current articles as assigned by instructors.
5. Using the nursing process, develop a nursing care plan for a patient who has had a stroke.
6. Discuss, in class, the long term needs of the stroke patient and the impact of the condition on the family members.
7. Discuss, in class, how cultural beliefs can affect rehabilitation and recovery of chronic or long term neurological conditions.
8. List on a chart the most common diagnostic tests/procedures comparing their purpose and nursing implications.
9. Discuss, in class, personal experiences in performing neurological assessments on previous patients.
10. Discuss, in class, the psychological implications of the patient with a neurological dysfunction.
11. Familiarize yourself with the hospital forms used in performing neurological assessments.
12. Compare the different types of convulsive disorders and discuss the assessment and care of the patient experiencing a seizure.

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**Unit # 4: Applications of the Nursing Process in Caring for Pediatric Patients with Common Health Problems of the Neurological System**

**Description:**

This unit gives special emphasis to the congenital anomalies that can occur in the central nervous system as well as those injuries, tumors or other conditions that occur as the child matures. Both medical and surgical treatments are addressed. The nurse not only needs skill in observing and assessing clinical evidence of pediatric neurological dysfunction, but he/she must also develop skill in maintaining effective interpersonal relationships with parents and family members of the child.

**Unit Outcome Competencies:**

The student will be able to apply the nursing process to formulate a nursing diagnosis for existing and potential for pediatric patients utilizing the Roy's Adaptation Model.

**Student Learning Classroom Objectives:**

Upon completion of this unit the student will be able to:

1. Identify common congenital conditions that result in neurological problems.
2. Discuss medical and surgical modalities and nursing intervention for common neurological conditions.
3. Specify common infectious processes that result in neurological dysfunction
4. Discuss cultural beliefs which will impact on nursing care of infants and children with neurological conditions.
5. Describe the drug therapy, psycho social and educational needs of a child with a seizure disorder.
6. Compare the different types of convulsive disorders and discuss the assessment and nursing care of the child having a seizure.
7. Use critical thinking skills in applying the nursing process to formulate a nursing care plan for pediatric patients with common neurological problems.

**Include:**

- a) Pathophysiology
  - b) Diagnostic tests
  - c) Pharmacologic agents
  - d) Nutritional requirements
  - e) Teaching/ learning needs
  - f) Nursing interventions/Restorative measures
  - g) Growth and developmental needs
  - h) Coping mechanisms
  - i) Legal/ethical issues
  - j) Cultural aspects
  - k) Psycho social needs
  - l) Collaboration
  - m) Teaching
  - n) Spiritual
8. Complete a plan of care for a pediatric who is having surgical intervention for a neurological disorder. If a patient is not available, the instructor will provide a patient situation. Class discussion will include pre-operative, intra-operative and post-operative care.

**Learning Activities:**

1. Know terminology
2. View audio-visual materials on congenital anomalies of the neurological system disorders or diseases.
3. Review computer programs and read current articles as assigned by instructors.
4. Develop a nursing care plan for a patient with a seizure disorder. Include drug therapy.
5. List the common neurological congenital anomalies, their diagnosis, methods, management and nursing interventions.
6. Discuss inflammatory disorders and the care of the child with meningitis.

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**Unit # 5: Hematological /Immune System Adaptive Responses**

**Description:**

This unit will provide an exploration into the hematological system and immune system and its function in an adaptive mechanism. In addition, immunity and the body's inflammatory process will be mapped through wellness toward illness. Topics will cover common and important disorders involving the hematological and immune systems,

**Unit Outcome Competencies:**

The student will differentiate history and physical data to determine the client's level of Hematological/Immune adaptation and application of appropriate nursing care.

**Student Classroom Learning Objective:**

Upon completion of this module the student will be able to:

1. Identify the major concepts of the biological defense system and functions of formed elements of the blood and normal coagulation.
2. Explore the steps of inflammation, containment of infection, and inflammatory resolution.
3. Compare and differentiate between cellular and humoral immunity.
4. Describe the pathophysiology, clinical manifestations, nursing intervention, and medical and surgical modalities for clients with common hematological/Immune disorders.
5. Identify the historical and physiological data appropriate to the hematological/Immune systems.
6. Differentiate the various anemias and contrast their etiology, clinical manifestations and therapeutic management.
7. Describe common defects of hemostasis, the blood clotting mechanism and the most common coagulation disorders.
8. Identify pharmacological agents which interfere with coagulation, and discuss the instructions given to the client about the medication.
9. Discuss nursing considerations towards the bone marrow donor or recipient.
10. Describe the preoperative and postoperative nursing care for the patient experiencing surgery secondary to or with a hematological/Immune disorder.
11. Discuss the concept of immune suppression and the role of the nurse.
12. Discuss the nurse's role in providing health teaching in for immunizations, and for immunity-related problems.
13. Use critical thinking skills in applying the nursing process to formulate a nursing care plan for hematological/immune patients.

**Include:**

- a) Pathophysiology
- b) Diagnostic tests
- c) Pharmacologic agents
- d) Nutritional requirements
- e) Teaching/ learning needs
- f) Nursing interventions/ Restorative measures
- g) Growth and developmental needs
- h) Coping mechanisms
- i) Legal/ethical issues
- j) Cultural aspects
- k) Psycho social needs
- l) Collaboration
- m) Teachings
- n) Spiritual

**Learning Activities:**

1. Know terminology
2. Review the anatomy and physiology of the hematological and immune system
3. Discuss, in class, the role of the various components of the blood and blood-forming organs.
4. Discuss, in class the role of the immune system in anaphylaxis, auto-immune disease, graft rejection, and delayed hypersensitivity.
5. Identify diagnostic studies common to the patient with disorders of the blood and blood-forming organs.
6. Identify, in class the five cardinal signs of inflammation and describe local and systemic manifestations of inflammation.
7. Read current articles assigned.
8. Review assigned computer programs, A-V materials and journal articles.

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**Unit # 6:     Adult and Pediatric Patients with Common Health Problem of the Cardiovascular System**

**Description:**

This unit presents the cardiovascular system which is responsible for transporting oxygen and nutrients throughout the body and carrying waste products to the organs for elimination.

**Unit Outcome Competencies:**

The student will be able to develop a plan of care for adult and pediatric patients with common cardiovascular problems. Discuss the social psychological and physical problems of the patient with cardiovascular problems.

**Student Learning Classroom Objectives:**

Upon completion of this unit the student will be able to:

1. Utilize the Roy adaptation model to discuss the interrelatedness of the cardiovascular, renal, respiratory, and the nervous systems as they impact on homeostasis.
2. Explain common disorders of the cardiovascular system which cause interference in the delivery of an adequate blood supply to tissues and organs.
3. Compare and contrast environmental and cultural factors which impact on the functioning of the cardiovascular system.
4. Discuss diagnostic tests used to establish normal, functioning of the cardiovascular system.
5. Identify risk factors related to dysfunction of the cardiovascular system.
6. Discuss nursing interventions designed to prevent, restore, or rehabilitate, the cardiovascular system to a normal state of homeostasis.
7. Discuss health teaching needs of patients with common cardiovascular problems.
8. Identify the generic environmental and cultural factors which impact common cardiovascular functioning for adult and pediatric patients.
9. Use critical thinking skills in applying the nursing process to formulate a nursing care plan for cardiovascular adult and pediatric patient.

**Include:**

- a) Pathophysiology
- b) Diagnostic tests
- c) Pharmacologic agents
- d) Nutritional requirements
- e) Teaching/ learning needs
- f) Nursing interventions/Restorative measures
- g) Growth and developmental needs
- h) Coping mechanisms
- i) Legal/ethical issues
- j) Cultural aspects
- k) Psycho social needs
- l) Collaboration
- m) Teaching
- n) Spiritual

10. Complete a plan of care for an adult and pediatric patient who is having surgical intervention for a common cardiovascular disorder. If a patient is not available, the instructor will provide a patient situation. Class discussion will include pre-operative, intra-operative and post-operative care.

**Learning Activities:**

- a. Review the anatomy and physiology of the cardiovascular system.
- b. Review acid-base imbalanced
- c. Know terminology
- d. Review fluid and electrolyte changes
- e. Review assigned audio-visual materials, computer programs and journal articles.
- f. Using simulated situations, develop a plan of care for patients with common cardiovascular problems.
- g. Discuss the psychological implications for the patient with a common chronic cardiovascular problem.

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## **Unit # 7      Nursing Care of the Client with Common Problems of the Renal System**

### **Description:**

This unit presents the various congenital disorders, neurogenic disorders, urinary infections and renal failure.

### **Unit Learning Competencies:**

The student will apply to nursing process to identify actual potential nursing problems of the renal system and initiate the appropriate nursing intervention.

### **Student Learning Classroom Objectives:**

Upon completion of this (module) the student will be able to:

1. Identify the common health problems of the adult with an alteration in urinary function.
2. Discuss nursing problems identified for the renal patient including alteration in patterns of voiding; alterations in fluid and electrolyte balance; inadequate eliminations of metabolic waste products.
3. Identify the common health problems of the urinary system that occur involving inflammation, infection, neoplasia, lithiasis, immunological and degenerative disorders.
4. Discuss the various treatment modalities of clients experiencing alteration in urinary system function.
  - a. Medical management: medications, nutritional, metabolic considerations
  - b. Surgical interventions
  - c. Renal dialysis: hemodialysis, peritoneal dialysis
  - d. Acute/Chronic/ESRD
  - e. Nursing interventions
  - f. Psychosocial, lifestyle influences
  - g. Adaptation/maladaptation
5. Identify the various and laboratory tests commonly used to identify and assess renal function/dysfunction
6. Describe the client teaching needs for those experiencing renal dysfunction. Include the caring practices necessary to relieve anxiety and fear.
7. Identify the common health problems of the infant and child with an alteration in urinary function.

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**Units # 8:      Nursing Care of Adults and Pediatric Patients with Common Health Problems of the Upper and Lower Gastrointestinal System**

**Description:**

This unit presents common health problems of geriatric, adult and pediatric patients which may interfere with the upper and lower gastrointestinal systems which facilitate mechanisms for ingestion and digestion of nutrients to support growth and maintain metabolism and absorption of fluids and outlet for solid wastes.

**Unit Outcomes Competencies:**

The student will learn the assessment skills necessary for determining actual or potential nursing problems of the upper and lower gastrointestinal systems in order to provide information necessary to plan for health promotion, maintenance or restoration; and to implement and evaluate appropriate nursing care.

**Student Learning Objectives:**

1. Identify common conditions of the upper and lower gastrointestinal systems that result in problems for the adult.
2. Discuss malignancies common in the upper and lower gastrointestinal systems, including their treatment modalities.
3. Differentiate between those common health problems that are infectious and those that are not.
4. Explain the various diagnostic tests commonly used to identify problems of the gastrointestinal system.
5. Discuss the various treatment modalities for clients experiencing alterations in gastrointestinal function.
6. Describe the client teaching needs for those experiencing gastrointestinal dysfunction. Include the caring practices necessary to relieve anxiety and fear.
7. Identify the common conditions of the G.I. system that result in problems for the neonate, infant, and child.
8. Describe the alterations in nutrition as exemplified by obesity vs anorexia nervosa
9. Plan nursing care for adults/children having common problems of the upper G.I. system
10. Plan nursing care for adults/children having surgical treatment of common upper G.I. system problems
11. Explain the various diagnostic tests and treatment modalities common to lower G.I. dysfunction in the infant and child.
12. Identify the various common health problems of the young adult with lower G.I. dysfunction. Focus especially on the medical and surgical interventions.
13. Identify the various common health problems that occur across the lifespan.
14. Explain the common forms of intestinal obstruction and treatment modalities.

**Learning Activities:**

1. Review anatomy and physiology of upper and lower G.I. system
2. Know terminology
3. Complete a nursing care plan for pediatric and adult patients having a medical or surgical dysfunction of the gastrointestinal tract.
4. Prepare a teaching plan for a patient with G.I. dysfunction. Include: nutrition, medical, treatment, medications.
5. Review assigned computer programs, A-V material and journal articles

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**Unit # 1:     Nursing Leadership**

**Description:**

This unit theoretical and practical knowledge for clinical leadership application.

**Unit Outcome Competencies:**

The student will be able to relate leadership to clinical practice of nursing.

**Clinical Objectives:**

1. To develop skill in nursing management of a selected group of patients.
2. To assist in the selection of patients to be assigned to student group members.
3. To maintain the hospital patient care plan, and your copy of this care plan, for a selection group of patients. (Individualize computer care plan)
4. Demonstrate ability to keep patient's records current (e.g. physician's orders transcribed, nurses' notes recorded by group members of yourself)
5. Develop skill in preparing for, and giving, end-of-shift-report. Handed in report after giving

**Student Learning Activities:**

1. Make student group member assignments. Clinical instructor with check assignments and assist and make suggestions
2. Gather data for your care plans/case studies.
3. Check medication profiles for the assigned patients of your team.
4. Evaluate patient records and patient status on an ongoing basis throughout the day.
5. Make rounds routinely during your shift.
6. Take report from team members and formulate end-of-shift report.

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**Unit # 2:      Application of the Nursing Process to Patients with Endocrine System Problems**

The Endocrine System clinical objective are design to reinforce classroom theory and provide the practical skills necessary to assess, analysis, plan implement and evaluate the nursing care given to individual and groups of patients.

**Clinical Objectives:**

1. Assess assigned patients for indications of endocrine dysfunction
2. Develop and implement a nursing care plan, including a teaching plan, for a newly diagnosed diabetic patient.
3. Discuss social, financial, and cultural aspects of the patient with diabetes.
4. Prepare an assigned patient for diagnostic scanning; observe procedure when possible.
5. Perform glucometer testing on diabetic patient.
6. Administer insulin and hypoglycemics on selected diabetic patient
7. Administer medications using the six rights: Patient, dosage, route, amount, time and pain.
8. Discuss common diagnostic test and procedures and drug related therapy at post-conference
9. Perform a functional assessment of a patient with an endocrine problem and present at post-conference

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**Units # 3 and 4: The Neurological System Clinical Objectives are design to reinforce classroom theory and provide the practical skills necessary to assess analysis plan, implement and evaluate the nursing caregiver to individuals and groups of patients.**

**Clinical Objectives:**

1. Provide nursing care for patients with a variety of neurological conditions.
2. Assess assigned patients to determine the status of their neurological functioning.
3. Prepare patients for diagnostic procedures, observe and assist when possible.
4. Prepare an assigned patient for neurological diagnostic testing, and observe test when possible.
5. Observe and assist the physician in performing a neurological assessment.
6. Perform a neurological assessment on a patient with a CVA.
7. Administer medications (oral and parenteral) to patients with neurological problems.
8. Provide emotional support and encouragement appropriately to a stroke patient and his/her family.
9. Assess assigned patients for risk factors related to stroke and identify preventative measures.
10. Observe treatment modalities in rehabilitation units of the hospital to assess the interdisciplinary approach.
11. Complete a nursing care plan on a patient with a neurological dysfunction.
12. Complete neurological assessment forms and documentation on a patient with neurological dysfunction.
13. Prepare a teaching plan for a neurological patient and his/her family.
14. Provide nursing care to an infant or child with a neurological problem.
15. Prepare a child and the family for a diagnostic procedure; observe when possible.
16. Provide pre and postoperative nursing care for a pediatric patient having surgery for a neurological disorder.
17. Assist physician with a lumbar puncture on a pediatric patient.

18. Complete a nursing care plan for a pediatric patient with a neurological dysfunction.
19. Administer medications (oral and parenteral) to a pediatric patient.
20. Prepare a teaching plan for the family of a pediatric patient with minimal brain dysfunction.
21. Discuss common diagnostic test and procedures, and drug related therapy at post-conference.
22. Perform a functional assessment of a neurological patient and present at post-conferences.
23. Demonstrate Critical thinking skills in the development of a nursing care plan.
24. Consistently demonstrate critical thinking skills in making clinical judgments.

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**Unit # 5:    The Hematological and Immune objective are design to reinforce classroom theory and provide the practical skills necessary to assess analogsis plan, implement and evaluate the nursing care giver to individuals and groups of patients**

**Clinical Objectives:**

1.    Complete a nursing Concept Map for the pediatric/adult/geriatric patient with a hematological immune disorder. Include family, community, cultural, and psycho social considerations.
2.    Develop a teaching plan for home care of a person with a dysfunction of the hematological immune system.
3.    Identify community resources available of a person with a hematological immune disorder.
4.    If possible, interview the family of a person with a hematological immune disorder to identify the psycho-social impact and coping/support mechanisms of the family unit.
5.    When possible, implement nursing interventions specific to the adult or child with a common disorder of the blood or blood-forming organs.
6.    When possible, care for a patient using isolation precautions recommend by CDC guidelines.
7.    Administer medication using the six right, pain, time route, patient medication dosage.
8.    Demonstrate application of the principles of infection control for the protection of the patient, self, and others.
9.    Discuss common diagnostic test and procedures and drug related therapy at post-conference.
10.   Function as team leader for group of student.
11.   Demonstrate critical thinking skills in making clinical judgments involving patients with hematological and immune disorders.

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**Unit # 6:      **The Cardiovascular System Clinical Objectives are design to reinforce classroom theory and provide the practical skills necessary to assess analogsis plan, implement and evaluate the nursing care giver to individuals and groups of patients.****

**Clinical Objectives:**

1. Provide nursing care for patients with common of cardiovascular conditions.
2. Perform a cardiac assessment on an assigned patient.
3. Complete a nursing care plan on a patient with a common cardiac problem.
4. Prepare a teaching plan for a cardiovascular patient. Include family needs in the teaching plan.
5. Assist with medical procedures relevant to cardiovascular patients as possible.
6. Record appropriately on all flow charts required on the patient with a cardiac disorder.
7. Administer oral, and parenteral medications to patients with cardiovascular problems.
8. Discuss social, psychological, emotional, ethical, financial, and cultural issues of patients with common cardiovascular disease.
9. Identify common coping mechanisms employed by the family and the patient with common cardiovascular problem.
10. Provide nursing care for an infant or child with a common cardiovascular problem.
11. Prepare a child and the family for diagnostic procedures.
12. Administer oral and parenteral medications to cardiovascular patients.
13. Complete a Concept Map for pediatric/adult/geriatric patient with a common cardiovascular problem.
14. Discuss common diagnostic test and procedures and drug related therapy at post-conference.

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**Unit # 7:      The Renal System clinical objective are design to reinforce classroom theory and provide the practical skills necessary to assess, analysis, plan implement and evaluate the nursing care given to individual and groups of patients.**

**Clinical Objectives:**

1. Provide nursing care for patients having renal dysfunction.
2. Assist in the preparation of patients for diagnostic procedures.
3. Administer medications to patients having renal dysfunction (oral & parenteral).
4. Complete a nursing care plan for a patient having renal dysfunction.
5. Obtain specimens for laboratory analysis as relevant to patient condition.
6. Provide nursing care for the patient having dialysis therapy.
7. Demonstrate knowledge of the principles of infection control for the protection of the patient, self and others.
8. Discuss common diagnostic test and procedures and drug related therapy at post conference
9. Perform a functional assessment of a patient with a renal problem and present at post conference.

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**Unit # 8:     Application of the Nursing Process to patient with Gastrointestinal System Problems**

The Gastrointestinal system clinical objective are design to reinforce classroom theory and provide the practice skills necessary to assess, analysis, plan implement and evaluate the nursing care giving to individuals and groups of patients.

**Clinical Objectives:**

1. Provide nursing care for patients of all ages with a variety of upper and lower G.I. system conditions.
2. Assist in the preparation of patients for diagnostic procedures
3. Administer medications to patients with upper and lower G.I. system problems (oral-parenteral) or using the six rights
4. Administer nutrition by alternative feeding routes as possible.
5. Complete a nursing care plan for a patient with a dysfunction of the upper G. I. system
6. Complete a nursing care plan on a patient with a dysfunction of the lower G.I. system
7. Assist with endoscopy/colonoscopy, and other medical procedures as relevant to the patient's condition.
8. Obtain specimens as relevant to the patient's condition.
9. Demonstrate knowledge of infection control principles for the protection of the patient, self and others.
10. Discuss common diagnostic test and procedures and drug related therapy at post-conference.
11. Perform a functional assessment of it with a G.I. problem and present at post-conference