

**KS Council of PN Educators - PN
PN Program**

KSPN Nursing Care of Adults I Course Syllabus

Course Information:

Course Number and Title: KSPN 005 - KSPN Nursing Care of Adults I

Total Credit/Contact Hours: 4.00 – 5.00

Theory Credit/Contact Hours: 4.00 – 5.00

Course Description:

This course focuses on the care of adult clients experiencing common medical/surgical health alterations with predictable outcomes. Emphasis is placed on the care of clients with alterations in cardiac output and tissue perfusion, oxygenation, regulation and metabolism, and integument. Principles of pre-and post-operative care and IV therapy are also addressed.

Course Objectives:

1. Describe how to perform a focused assessment on adult clients with common alterations in health related to selected body systems.
2. Develop a relationship-centered plan of care that incorporates current evidence and includes cultural, spiritual, and developmentally appropriate interventions for clients with commonly occurring health alterations that have predictable outcomes.
3. Describe the role of members of the health care team in regard to caring for clients with commonly occurring health alterations that have predictable outcomes.
4. Apply a basic level of knowledge of pathophysiology, pharmacology, and nutrition as it relates to adult clients with commonly occurring health alterations that have predictable outcomes.
5. Articulate verbal and nonverbal communication strategies that are used to promote caring, therapeutic relationships with clients and their families.
6. Describe how information technology is used to communicate with members of the health care team by accurately documenting client care in a secure and timely manner.
7. Describe the health education needs experienced by clients with commonly occurring health alterations that have predictable outcomes.
8. Describe strategies that provide quality care in a safe environment for clients, self, and others.
9. Discuss how organizational and time management skills are used when providing care to adult clients.10. Describe the role of the practical nurse in maintaining personal and professional accountability for the delivery of standard-based, ethical and legal care to clients.

Alterations in Fluid and Electrolytes

Unit Objectives:

1. Recognize alterations in the laboratory values of urine osmolarity, and serum sodium, potassium, chloride, calcium, and phosphorus.
2. Recognize clinical manifestations of fluid imbalances and alterations in sodium, potassium, chloride, calcium, and phosphorus
3. Apply knowledge of pathophysiology when planning care for clients with alterations in fluid balance.
4. Apply knowledge of pathophysiology when planning care for clients with alterations in sodium, potassium, chloride, calcium, and phosphorus.
5. Identify priority actions for clients with an alteration in fluid balance or sodium, potassium, chloride, calcium, and phosphorus.



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Alteration in Oxygenation

Unit Objectives:

1. Recognize components of a focused assessment that should be included when collecting data on adults who have an alteration in oxygenation.
2. Apply knowledge of anatomy, physiology, basic pathophysiology, nutrition, and developmental variations when helping to plan care for adults who have an alteration in oxygenation.
3. Identify priority actions for adults who have an alteration in oxygenation.
4. Apply knowledge of the actions, potential side effects, and nursing implications when administering medications to adults who have an alteration in oxygenation.
5. Recognize alterations in pulse oximetry and other laboratory values related to alterations in oxygenation.
6. Discuss the correct use and functioning of therapeutic devices that support oxygenation.
7. Describe the role of the nurse in providing quality care to adults who have an alteration in oxygenation.
8. Identify health care education and safety needs for adults who have an alteration in oxygenation.

Content Topics:

- a. Health alteration/ Obstructive disorders (COPD- emphysema, chronic bronchitis; asthma; pulmonary embolism)
- b. Health alteration/ Trauma related disorders (pneumothorax, hemothorax)
- c. Health alteration/ Infectious & inflammatory disorders (bronchitis, pneumonia, influenza, tuberculosis)
- d. Health alteration/ Abnormal cell proliferation disorders (laryngeal cancer, lung cancer)
- e. Pharmacology/ Methylxanthines
- f. Pharmacology/ Mast cell stabilizers
- g. Pharmacology/ Anticholinergics (inhaled)
- h. Pharmacology/ Leukotriene modifiers
- i. Pharmacology/ Beta 2-adrenergic agonists
- j. Pharmacology/ Antibiotics (penicillin, cephalosporins, tetracyclines, macrolides, flouroquinolones, monobactams)
- k. Pharmacology/ Bronchodilators
- l. Pharmacology/ Expectorants & mucolytics
- m. Pharmacology/ Antimycobacterials
- n. Pharmacology/ Adult immunizations
- o. Nutrition/ Diet for clients with nutritional deficit (high calorie, high protein diet with limitation of empty liquids)
- p. Nutrition/ Diets for clients with dyspnea (soft diet, small frequent meals)
- q. Nutrition/ Nutritional supplements (high calorie, low carbohydrate)

Alterations in Cardiac Output and Tissue Perfusion

Unit Objectives:

1. Recognize components of a focused assessment that should be included when collecting data on adults who have an alteration in cardiac output and tissue perfusion.
2. Apply knowledge of anatomy, physiology, basic pathophysiology, nutrition, and developmental variations when helping to plan care for adults who have an alteration in cardiac output and tissue perfusion.
3. Identify priority actions for adults who have an alteration in cardiac output and tissue perfusion.
4. Apply knowledge of the actions, potential side effects, and nursing implications when administering medications to adults who have an alteration in cardiac output and tissue perfusion.
5. Recognize alterations in laboratory values related to alterations in cardiac output and tissue perfusion.



6. Discuss the correct use and functioning of therapeutic devices that support cardiac output and tissue perfusion.
7. Describe the role of the nurse in providing quality care to adults who have an alteration in cardiac output and tissue perfusion.
8. Identify health care education and safety needs for adults who have an alteration in cardiac output and tissue perfusion.

Content Topics:

- a. Health Alterations/Electrical conduction disorders (dysrhythmias and electronic pacing)
- b. Health Alterations/Infectious and inflammatory disorders (rheumatic/infective endocarditis, pericarditis, arteritis)
- c. Health Alterations/Structural abnormality (Venous stasis, emboli, aneurysms, peripheral vascular disease peripheral arterial disease; valvular heart disease)
- d. Health Alterations/Arterial pressure disorders (hypertension, shock (hemodynamic, hypovolemic, septic, hypovolemic, anaphylactic)
- e. Health Alterations/Ischemic disorders (angina, coronary artery disease, myocardial infarction)
- f. Health Alterations/Decreased cardiac output disorders (heart failure, pulmonary edema)
- g. Pharmacology/ Organic nitrates
- h. Pharmacology/ Beta and alpha-adrenergic blockers
- i. Pharmacology/ Centrally acting alpha agents
- j. Pharmacology/ Calcium channel blockers
- k. Pharmacology/ Atropine
- l. Pharmacology/ Antilipemics
- m. Pharmacology/ Renin-angiotension-aldosterone system (RAAS) inhibitors (ACE inhibitors, ARBs, angiotension II receptor blockers, aldosterone antagonists)
- n. Nutrition/ Dietary Approaches to Stop Hypertension (DASH) diet
- o. Nutrition/ Therapeutic Lifestyle Changes (TLC) diet
- p. Nutrition/ Diets rich in iron, Vitamin B12, and folic acid

Alterations in Regulation and Metabolism

Unit Objectives:

1. Recognize components of a focused assessment that should be included when collecting data on adults who have an alteration in regulation and metabolism.
2. Apply knowledge of anatomy, physiology, basic pathophysiology, nutrition, and developmental variations when helping to plan care for adults who have an alteration in regulation and metabolism.
3. Identify priority actions for adults who have an alteration in regulation and metabolism.
4. Apply knowledge of the actions, potential side effects, and nursing implications when administering medications to adults who have an alteration in regulation and metabolism.
5. Recognize alterations in laboratory values related to alterations in regulation and metabolism.
6. Discuss the correct use and functioning of therapeutic devices that support regulation and metabolism.
7. Describe the role of the nurse in providing quality care to adults who have an alteration in regulation and metabolism.
8. Identify health care education and safety needs for adults who have an alteration in regulation and metabolism.

Content Topics:

- a. Health Alterations/Adrenal disorders (Addison's disease/Cushing's disease, DI/SIADH, pituitary disorders)



- b. Health Alterations/Endocrine/exocrine disorders (diabetes mellitus, thyroid & parathyroid disorders)
- c. Pharmacology/ Thyroid hormones
- d. Pharmacology/ Thyrotropin-releasing hormone
- e. Pharmacology/ Thyroid hormone synthesis inhibitor
- f. Pharmacology/ Radioactive and nonradioactive iodine
- g. Pharmacology/ Insulins
- h. Pharmacology/ Oral hypoglycemic
- i. Pharmacology/ Glucagon
- j. Pharmacology/ Antidiuretic hormone preparation
- k. Pharmacology/ Posterior pituitary hormones
- l. Pharmacology/ Anterior pituitary hormones/growth hormones
- m. Pharmacology/ Glucocorticoid and mineral corticoid hormones
- n. Nutrition/ Addison's diet (high calorie, high sodium, low potassium diet)

Alterations in Integument

Unit Objectives:

1. Recognize components of a focused assessment that should be included when collecting data on adults who have an alteration in integument.
2. Apply knowledge of anatomy, physiology, basic pathophysiology, nutrition, and developmental variations when helping to plan care for adults who have an alteration in integument.
3. Identify priority actions for adults who have an alteration in integument.
4. Apply knowledge of the actions, potential side effects, and nursing implications when administering medications to adults who have an alteration in integument.
5. Recognize alterations in laboratory values related to alterations in integument.
6. Discuss the correct use and functioning of therapeutic devices that support integument.
7. Describe the role of the nurse in providing quality care to adults who have an alteration in integument.
8. Identify health care education and safety needs for adults who have an alteration in integument.

Content Topics:

- a. Health Alterations/Tissue injury disorders (pressure ulcers, burns)
- b. Health Alterations/Infectious and inflammatory disorders (cellulitis, herpes zoster)
- c. Health Alterations/Abnormal cell proliferation disorders (actinic keratosis, basal and squamous cell cancer, melanoma, dermatitis, psoriasis, skin infections/infestations)
- d. Pharmacology/ Sulfonamide
- e. Pharmacology/ Topical antibacterial (nitrofurazone)
- f. Pharmacology/ Topical chemotherapy
- g. Pharmacology/ Interferon
- h. Nutrition/ High calorie, high protein diet
- i. Nutrition/ Enteral nutrition
- j. Nutrition/ Nutritional supplements

Pre- and Postoperative Care

Unit Objectives:

1. Differentiate between the various phases of the surgical experience (pre, peri, and postoperative) and identify the role of the nurse in each of these phases.
2. List the responsibilities of the nurse when caring for a client in the immediate pre- and postoperative period.
3. Differentiate between general and regional anesthesia and conscious sedation.



4. Describe the impact drugs used during a surgical procedure can have on drugs given in the immediate postoperative period.
5. Compare and contrast medications commonly given for postoperative pain, nausea, and vomiting.
6. Discuss the legal and ethical issues related to ensuring informed consent.
7. Discuss potential post-surgical and immobility complications and the nurses' role in preventing them (thromboemboli, pneumonia, atelectasis, wound infection, wound dehiscence and evisceration).
8. Intervene to provide a safe environment for the surgical client.

Content Topics:

- a. Health alterations/ Post-surgical and immobility complications (thromboemboli, pneumonia, atelectasis, wound infection, wound dehiscence and evisceration)
- b. Pharmacology/ Postoperative pain: Opioid agonists
- c. Pharmacology/ Postoperative pain: Agonists-antagonists opioids
- d. Pharmacology/ Postoperative pain: Opioid antagonists
- e. Pharmacology/ Postoperative nausea and vomiting: Serotonin antagonists
- f. Pharmacology/ Postoperative nausea and vomiting: Dopamine antagonists
- g. Pharmacology/ Postoperative nausea and vomiting: Anticholinergics
- h. Pharmacology/ Postoperative nausea and vomiting: Antihistamines

Intermediate/advanced Nursing Skills

Unit Objectives:

1. Review principles related to the selected skills.
2. Practice client care skills using proper techniques while ensuring client safety.

Content Topics:

- a. Theory/Lab/ Post-mortem care and tissue/organ donation (preparation of the body, tagging, shrouding, and documentation)
- b. Theory/Lab/ Glucose monitoring and screening tests (urine and blood glucose testing, and reporting, sliding scale, hemocult, dipsticks, and documentation).
- c. Theory/Lab/Integument Complications of immobility (complications of immobility precautions, thromboembolic hose, (Pressure ulcer risk assessment and documentation)
- d. Theory/Lab/ IV Maintenance (types of access devices, administration tubing, continuous, bolus and intermittent infusions, assessment for infiltration and phlebitis, determining and maintaining patency, and documentation).
- e. Theory/Lab/ Drug calculation (intermediate/advanced)
- f. Theory/Lab/ EKG (lead placement, reading normal strips, reading paced strips and documentation).
- g. Theory/Lab/ Oxygenation and airway (oxygen therapy, oxygen delivery systems, tracheostomy suctioning and care, spirometry, ventilator monitoring, chest tube monitoring and documentation).
- h. Theory/Lab/ Wound care (Sterile dressing changes, specialized wound dressings, suture and staple removal, emergency care of evisceration, wound vacuum, wound debridement and packing)
- i. Theory/Lab/ Joint replacement care (CPM machine, hip precautions and documentation)
- j. Theory/Lab/ Pre- and postoperative care (NPO status, postoperative diets, vital sign monitoring, safety measures for clients with altered LOC and documentation).

Intravenous Therapy

Unit Objectives:

1. Define intravenous fluid therapy (see definition in KAR 60-16-101)
2. Outline the scope of practice of PNs (see description in KAR 60-16-102)



3. Identify the different types of vascular access delivery devices.
4. Discuss age-related considerations.
5. Review the legal implications for intravenous fluid therapy.
6. Review the anatomy and physiology of common sites used for intravenous fluid therapy
7. Review fluid and electrolyte balance considerations that relate to intravenous fluid therapy.
8. Identify infusion equipment used in intravenous fluid therapy.
9. Review client care necessary to maintain patency of established intravenous lines.
10. Review various types of infusion therapies and selection criteria for their use.***
11. Contrast the various types of parenteral solutions and indications for each.
12. Describe infection control and safety measures to be taken to prevent infection and infiltration.
13. Describe site care and maintenance of various type of intravenous therapies.
14. Describe the process for determining vascular access device selection and placement.
15. Discuss the indications for the insertion of peripheral short catheters.
16. Differentiate between central and peripheral vascular devices and their care.
17. Discuss administration, maintenance, and monitoring of existing central intravenous fluid therapy.
18. Articulate documentation needed in relation to intravenous fluid therapy
19. Provide client education related to need for intravenous fluid therapy and client's role in maintaining patency and preventing infection.

