

Template for Course Plan (physiology)

I. Course Description:

The course concerns on the development of student's skills and practices needed in hospital setting, such as the nursing process, urinary elimination, bowel elimination, oxygenation, nutritional needs, diagnostic testing, fluid, electrolyte, and acid – base balances, care of terminally ill patient, and stress & adaptation & coping.

I. Course Content:

A – Theoretical Aspect:

Order	Units/Topics List	Sub Topics List	No of Weeks	Lecture hours
1	The Nursing Process	The Nursing Process - Critical Thinking Competencies, Attitudes for Critical Thinking, Levels of critical thinking in Nursing Nursing Process Overview Assessment - Collection of Data: Types, Sources, Methods - Organizing Data - Validating Data - Documenting Data Nursing Diagnosis - Identification of client problems, risks and strengths - Nursing diagnosis statement- parts, Types, Formulating, Guidelines for formulating Nursing Diagnosis - NANDA approved diagnoses - Difference between medical and nursing	1-3 rd weeks	12

		diagnosis ○ Planning ▪ Types of planning ▪ Establishing Priorities ▪ Establishing Goals and Expected Outcomes- Purposes, types, guidelines, Components of goals and outcome statements ▪ Types of Nursing Interventions, Selecting interventions: Protocols and Standing Orders ▪ Introduction to Nursing Intervention Classification and Nursing Outcome Classification ▪ Guidelines for writing care plan ○ Implementation ▪ Process of Implementing the plan of care ▪ Types of care - Direct and Indirect ○ Evaluation ▪ Evaluation Process, Documentation and Reporting		
		Nursing Theories: Introduction ▪ Meaning & Definition, Purposes, Types of theories with examples, Overview of selected nursing theories- Nightingale, Orem, Roy		

		Use of theories in nursing practice		
2	Elimination needs	Elimination needs Urinary Elimination - Review of Physiology of Urine Elimination, Composition and characteristics of urine - Factors Influencing Urination - Alteration in Urinary Elimination - Facilitating urine elimination: assessment, types, equipment, procedures and special considerations - Providing urinal/bed pan Care of patients with - Condom drainage - Intermittent Catheterization - Indwelling Urinary catheter and urinary drainage - Urinary diversions - Bladder irrigation Bowel Elimination - Review of Physiology of Bowel Elimination, Composition and characteristics of feces - Factors affecting Bowel elimination - Alteration in Bowel Elimination - Facilitating bowel elimination: Assessment, equipment, procedures - Enemas - Suppository - Bowel wash - Digital Evacuation of impacted feces	4 th - 5 th week	8

		Care of patients with Ostomies (Bowel Diversion Procedures)		
3	Oxygenation & nutritional needs	Oxygenation needs - Review of Cardiovascular and Respiratory Physiology - Factors affecting respiratory functioning - Alterations in Respiratory Functioning - Conditions affecting - airway - movement of air - diffusion - Oxygen transport - Alterations in oxygenation - Nursing interventions to promote oxygenation: assessment, types, equipment used & procedure - Maintenance of patent airway - Oxygen administration - Suctioning- oral, tracheal - Chest physiotherapy Percussion, Vibration & Postural drainage - Care of Chest drainage- principles & purposes - Pulse Oximetry- Factors affecting measurement of oxygen saturation using pulse oximeter, Interpretation - Restorative & continuing care - Hydration	6 th – 7 th week	8

		▪ Humidification ▪ Coughing techniques ▪ Breathing exercises ▪ Incentive spirometry ▪		
		Nutritional needs ▪ Importance ▪ Factors affecting nutritional needs ▪ Assessment of nutritional status ▪ Review: special diets- Solid, Liquid, Soft ▪ Review on therapeutic diets ▪ Care of patient with Dysphagia, Anorexia, Nausea, Vomiting ▪ Meeting Nutritional needs: principles, equipment, procedure, indications Oral ▪ Enteral: Nasogastric/ Orogastric, ▪ Introduction to other enteral feedstypes, indications, Gastrostomy, Jejunostomy ▪ Parenteral- TPN		
		Midterm exam	8th week	2
4	Diagnostic testing	Diagnostic testing Phases of diagnostic testing (pre-test, intra-test & post-test) in common investigations & clinical implications ○ Complete Blood Count ○ Serum Electrolytes ○ LFT ○ Lipid/Lipoprotein profile	9 th week	8

		○ Serum Glucose- AC, PC, HbA1c ○ Monitoring Capillary Blood glucose (Glucometer Random Blood Sugar GRBS) ○ Stool Routine Examination ○ Urine Testing- Albumin, Acetone, pH, Specific Gravity ○ Urine Culture, Routine, Timed Urine Specimen ○ Sputum culture ○ Overview of Radiologic & Endoscopic Procedures		
5	Fluid, Electrolyte, and Acid – Base Balances	Fluid, Electrolyte, and Acid – Base Balances ● Review of Physiological Regulation of Fluid, Electrolyte, and Acid – Base Balances ● Factors Affecting Fluid, Electrolyte, and Acid – Base Balances ● Disturbances in fluid volume: ○ Deficit- ▪ Hypovolemia ▪ Dehydration ○ Excess- ▪ Fluid overload ▪ Edema ○ Electrolyte imbalances (hypo and hyper) ○ Acid-base imbalances ▪ Metabolic- acidosis & alkalosis ▪ Respiratory- acidosis & alkalosis ▪ Intravenous therapy ▪ Peripheral	10 th -11 th week	8

		- venipuncture sites ▪ Types of IV fluids ▪ Calculation for making IV fluid plan ▪ Complications of IV fluid therapy ▪ Measuring fluid intake and output ▪ Administering Blood and Blood components ▪ Restricting fluid intake ▪ Enhancing Fluid intake		
6	Care of Terminally ill, Stress & Adaptation & Coping	Care of Terminally ill, death and dying Loss- Types Grief, Bereavement & Mourning ○ Types of Grief responses ○ Manifestations of Grief ○ Factors influencing Loss & Grief Responses ○ Theories of Grief & Loss-Kubler Ross 5 Stages of Dying ○ The R Process model (Rando's) Death- Definition, Meaning, Types (Brain & Circulatory Deaths) ○ Signs of Impending Death ○ Dying patient's Bill of Rights ○ Care of Dying Patient ○ Physiological changes occurring after Death ○ Death Declaration, Certification, Autopsy, Embalming	12 th -14 th weeks	12

		○ Last office/Death Care ○ Counseling & supporting grieving relatives ○ Placing body in the Mortuary ○ Releasing body from Mortuary ○ Overview- Medico-legal Cases, dvance directives, DNI/DNR, Organ Donation, Euthanasia		
		Stress and Adaptation-Introductory concepts ▪ Introduction ▪ Sources, Effects, Indicators & Types of Stress ▪ Types of stressors ▪ Stress Adaptation- General adaptation Syndrome (GAS), Local Adaptation Syndrome (LAS) ▪ Manifestation of stress- Physical & psychological		
		Coping strategies/ Mechanisms ▪ Stress Management ▪ Assist with coping and adaptation ▪ Creating therapeutic environment ▪ Recreational and diversion therapies		
		Final exam	15 th week	2
Number of Weeks /and Units Per Semester			16	60

B – Practical Aspect: (if any)

Order	Topics List	Week Due	Contact Hours
1	Sponge bath, oral hygiene, perineal care	1 st – 2 nd week	8
2	Nutritional Assessment	3 rd week	8
3	Nasogastric tube feeding	4 th week	8
4	Providing bed pan & urinal Catheter care	5 th week	8
6	Bowel wash, enema, insertion of suppository	6 th week	8
7	Midterm exam	8 th week	2
8	Perform diagnostic test	13 th week	4
9	Oxygen administration- face mask, venture mask, nasal prongs	8 th week	4
10	Administration of medication through Parenteral route IM, SC, ID, IV fluid infusion, canula,	9 th – 12 th weeks	8
11	Final examination	14 th week	2
Number of Weeks /and Units Per Semester		16	60