Course Plan of (Critical care nursing1)

Course Description:
Critical care nursing is a specialized field of nursing focused on providing care to patients who are critically ill or at high risk for life-threatening conditions. These patients typically require close monitoring, advanced medical interventions, and continuous support. Critical care nurses, often referred to as ICU (Intensive Care Unit) nurses, play a vital role in maintaining the health and stability of patients in critical condition. Below is a detailed description of critical care nursing

Course Content:

A – Theoretical Aspect:

	Contact hours	No. of Weeks	Sub Topics List	Units/Topics List	Order
	4	1	• Overview of critical care environments (ICU, CCU, trauma units, etc.) • Roles and responsibilities of critical care nurses • Ethical and legal issues in critical care (e.g., informed consent, end-of-life care) • Communication with families and interdisciplinary teams ▪	*1. Introduction to Critical Care Nursing*	1
	4	1	• **Physical Assessment**: Systematic head-to-toe assessment techniques for critically ill patients • **Vital Signs Monitoring**: Interpretation of blood pressure, heart rate, respiratory rate, and oxygen saturation • **Hemodynamic Monitoring**: Central venous pressure, pulmonary artery pressure, and cardiac output monitoring • **Neurological Monitoring**: Glasgow Coma Scale, intracranial pressure	*, 2. Advanced Patient Assessment and Monitoring*	2

			monitoring ▪		
	4	1	• Acute coronary syndrome, myocardial infarction, and heart failure • Electrocardiogram (ECG) interpretation and arrhythmia management • Advanced cardiac life support (ACLS) protocols • Use of pacemakers, defibrillators, and other cardiac devices ▪	*3. Management of Cardiac Conditions*	3
	4	1	• Management of patients on mechanical ventilation • Non-invasive ventilation techniques (e.g., CPAP, BiPAP) • Care for patients with respiratory failure, ARDS, COPD, and pneumonia • Interpretation of arterial blood gases (ABGs) ▪	*4. Respiratory Care in Critical Care*	4
	4	1	• Fluid and electrolyte balance in critically ill patients • Renal replacement therapies, including dialysis in the ICU • Management of acute kidney injury and chronic renal failure ▪		5
	4	1	• Care for patients with traumatic brain injury (TBI), stroke, and seizures • Neurological assessments and intracranial pressure monitoring • Care of unconscious or comatose patient ▪	*6. Management of Neurological Conditions*	6
	2	1	Midterm exam		7
	8	2	• Management of sepsis and septic shock • Prevention and management of	*7. Infectious Diseases and Sepsis*	8

			hospital-acquired infections (e.g., ventilator-associated pneumonia, central line infections) • Use of antibiotics and antimicrobial stewardship in critical care ▪		
	4	1	Initial assessment and management of trauma patients ▪ Airway management, chest injuries, burns, and hemorrhage control ▪ Emergency response protocols, triage, and mass casualty managemen ▪	**8. Trauma and Emergency Care**	9
	4	1	• Critical care pharmacology, including vasoactive drugs, sedatives, and analgesics • Safe administration and monitoring of high-alert medications • Drug-drug interactions and adverse reactions in critically ill patients ▪	*9. Pharmacology in Critical Care*	10
	4	1	• Enteral and parenteral nutrition in the critically ill • Managing metabolic disorders (e.g., diabetic ketoacidosis, hyperglycemia) • Nutritional support for patients with organ failure ▪	*10. Nutrition and Metabolic Support*	11
	4	1	Palliative care and ethical decision-making in critical care settings ▪ Management of comfort care and withdrawal of life support ▪ Communicating with families about prognosis and end-of-life decisions ▪	**11. End-of-Life Care in the ICU** ▪	
	4	2	Strategies for coping with the emotional and psychological challenges of critical care nursing ▪ Importance of teamwork and collaboration in the ICU ▪ Continuous professional development and certifications in critical care ▪	**12. Professional Development and Self-Care** ▪	

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	2	1	Final exam		12
	60	16	**Number of Weeks /and Units Per Semester**		

B - Practical Aspect:				
Learning Outcomes	**contact hours**	**Number of Weeks**	**Tasks/ Experiments**	**Order**
-	4	1	Introduction to Critical Care Nursing	
	4	2	2. Advanced Patient Assessment and Monitoring	
	4	2	*3. Management of Cardiac Conditions*	
	4	2	. Respiratory Care in Critical Care	
	4	2	*6. Management of Neurological Conditions*	
	4	2	*7. Infectious Diseases and Sepsis*	
	8	4	**8. Trauma and Emergency** *9. Pharmacology in Critical Care* *10. Nutrition and Metabolic Support* **11. End-of-Life Care in the ICU** ▪ **1. End-of-Life Care in the ICU**	
	32	16		
			Number of Weeks /and Units Per Semester	