APPLIED MICROBIOLOGY AND INFECTION CONTROL INCLUDING SAFETY

PLACEMENT: III SEMESTER

THEORY: 2 Credits (40 hours)

PRACTICAL: 1 Credit (40 hours) (Lab/Experiential Learning – L/E)

SECTION A: APPLIED MICROBIOLOGY

THEORY: 20 hours

PRACTICAL: 20 hours (Lab/Experiential Learning – L/E)

DESCRIPTION: This course is designed to enable students to acquire understanding of fundamentals of Microbiology, compare and contrast different microbes and comprehend the means of transmission and control of spread by various microorganisms. It also provides opportunities for practicing infection control measures in hospital and community settings.

COMPETENCIES: On completion of the course, the students will be able to:

1. Identify the ubiquity and diversity of microorganisms in the human body and the environment.
2. Classify and explain the morphology and growth of microbes.
3. Identify various types of microorganisms.
4. Explore mechanisms by which microorganisms cause disease.
5. Develop understanding of how the human immune system counteracts infection by specific and non-specific mechanisms.
6. Apply the principles of preparation and use of vaccines in immunization.
7. Identify the contribution of the microbiologist and the microbiology laboratory to the diagnosis of infection.

COURSE OUTLINE

T – Theory, L/E – Lab/Experiential Learning

Unit	Time (Hrs)		Learning Outcomes	Content	Teaching/ Learning Activities	Assessment Methods
	T	P				
I	3		Explain concepts and principles of microbiology and its importance in nursing	**Introduction:** • Importance and relevance to nursing • Historical perspective • Concepts and terminology • Principles of microbiology	• Lecture cum Discussion	• Short answer • Objective type
II	10	10 (L/E)	Describe structure, classification morphology and growth of bacteria Identify Microorganisms	**General characteristics of Microbes:** • Structure and classification of Microbes • Morphological types • Size and form of bacteria • Motility • Colonization • Growth and nutrition of microbes • Temperature • Moisture • Blood and body fluids • Laboratory methods for Identification of Microorganisms • Types of Staining – simple, differential (Gram's, AFB), special – capsular staining (negative), spore, LPCB, KOH mount. • Culture and media preparation – solid and liquid. Types of media – semi synthetic, synthetic, enriched, enrichment, selective and differential media. Pure culture techniques – tube dilution, pour, spread, streak plate. Anaerobic cultivation of bacteria	• Lecture cum Discussion • Demonstration • Experiential Learning through visual	• Short answer • Objective type
III	4	6 (L/E)	Describe the different disease producing organisms	**Pathogenic organisms** • Micro-organisms: Cocci – gram positive and gram negative; Bacilli – gram positive and gram negative • Viruses • Fungi: Superficial and Deep mycoses • Parasites • Rodents & Vectors o Characteristics, Source, portal of entry, transmission of infection, Identification of disease producing micro-organisms	• Lecture cum Discussion • Demonstration • Experiential learning through visual	• Short answer • Objective type
IV	3	4 (L/E)	Explain the concepts of	**Immunity**	• Lecture	• Short answer • Objective

Unit	Time (Hrs)		Learning Outcomes	Content	Teaching/ Learning Activities	Assessment Methods
	T	P				
			immunity, hyper sensitivity and immunization	• Immunity: Types, classification • Antigen and antibody reaction • Hypersensitivity reactions • Serological tests • Immunoglobulins: Structure, types & properties • Vaccines: Types & classification, storage and handling, cold chain, Immunization for various diseases • Immunization Schedule	• Discussion • Demonstration • Visit to observe vaccine storage • Clinical practice	type • Visit report

SECTION B: INFECTION CONTROL & SAFETY

THEORY: 20 hours

PRACTICAL/LAB: 20 hours (Lab/Experiential Learning – L/E)

DESCRIPTION: This course is designed to help students to acquire knowledge and develop competencies required for fundamental patient safety and infection control in delivering patient care. It also focuses on identifying patient safety indicators, preventing and managing hospital acquired infections, and in following universal precautions.

COMPETENCIES: The students will be able to:

1. Develop knowledge and understanding of Hospital acquired Infections (HAI) and effective practices for prevention.
2. Integrate the knowledge of isolation (Barrier and reverse barrier) techniques in implementing various precautions.
3. Demonstrate and practice steps in Hand washing and appropriate use of different types of PPE.
4. Illustrate various disinfection and sterilization methods and techniques.
5. Demonstrate knowledge and skill in specimen collection, handling and transport to optimize the diagnosis for treatment.
6. Incorporate the principles and guidelines of Bio Medical waste management.
7. Apply the principles of Antibiotic stewardship in performing the nurses' role.
8. Identify patient safety indicators and perform the role of nurse in the patient safety audit process.
9. Apply the knowledge of International Patient Safety Goals (IPSG) in the patient care settings.
10. Identify employee safety indicators and risk of occupational hazards.
11. Develop understanding of the various safety protocols and adhere to those protocols.

COURSE OUTLINE

T – Theory, L/E – Lab/Experiential Learning

Unit	Time (Hrs)		Learning Outcomes	Content	Teaching/ Learning Activities	Assessment Methods
	T	P				
I	2	2 (E)	Summarize the evidence based and effective patient care practices for the prevention of common healthcare associated infections in the healthcare	**HAI (Hospital acquired Infection)** • Hospital acquired infection • Bundle approach - Prevention of Urinary Tract Infection (UTI) - Prevention of Surgical Site Infection (SSI) - Prevention of Ventilator	• Lecture & Discussion • Experiential learning	• Knowledge assessment • MCQ • Short answer

Unit	Time (Hrs)		Learning Outcomes	Content	Teaching/ Learning Activities	Assessment Methods
	T	P				
			setting	Associated events (VAE) - Prevention of Central Line Associated Blood Stream Infection (CLABSI) • Surveillance of HAI – Infection control team & Infection control committee		
II	3	4 (L)	Demonstrate appropriate use of different types of PPEs and the critical use of risk assessment	**Isolation Precautions and use of Personal Protective Equipment (PPE)** • Types of isolation system, standard precaution and transmission-based precautions (Direct Contact, Droplet, Indirect) • Epidemiology & Infection prevention – CDC guidelines • Effective use of PPE	• Lecture • Demonstration & Re-demonstration	• Performance assessment • OSCE
III	1	2 (L)	Demonstrate the hand hygiene practice and its effectiveness on infection control	**Hand Hygiene** • Types of Hand hygiene. • Hand washing and use of alcohol hand rub • Moments of Hand Hygiene • WHO hand hygiene promotion	• Lecture • Demonstration & Re-demonstration	• Performance assessment
IV	1	2 (E)	Illustrates disinfection and sterilization in the healthcare setting	**Disinfection and sterilization** • Definitions • Types of disinfection and sterilization • Environment cleaning • Equipment Cleaning • Guides on use of disinfectants • Spaulding‘s principle	• Lecture • Discussion • Experiential learning through visit	• Short answer • Objective type
V	1		Illustrate on what, when, how, why specimens are collected to optimize the diagnosis for treatment and management.	**Specimen Collection (Review)** • Principle of specimen collection • Types of specimens • Collection techniques and special considerations • Appropriate containers • Transportation of the sample • Staff precautions in handling specimens	• Discussion	• Knowledge evaluation • Quiz • Performance assessment • Checklist
VI	2	2 (E)	Explain on Bio Medical waste management & laundry management	**BMW (Bio Medical Waste Management)** *Laundry management process and infection control and prevention*	• Discussion • Demonstration • Experiential learning through	• Knowledge assessment by short answers, objective type • Performance

Unit	Time (Hrs)		Learning Outcomes	Content	Teaching/ Learning Activities	Assessment Methods
	T	P				
				• Waste management process and infection prevention • Staff precautions • Laundry management • Country ordinance and BMW National guidelines 2017: Segregation of wastes, Colour coded waste containers, waste collection & storage, Packaging & labeling, Transportation	visit	assessment
VII	2		Explain in detail about Antibiotic stewardship, AMR Describe MRSA/ MDRO and its prevention	**Antibiotic stewardship** • Importance of Antibiotic Stewardship • Anti-Microbial Resistance • Prevention of MRSA, MDRO in healthcare setting	• Lecture • Discussion • Written assignment –Recent AMR (Antimicrobial resistance) guidelines	• Short answer • Objective type • Assessment of assignment
VIII	3	5 (L/E)	Enlist the patient safety indicators followed in a health care organization and the role of nurse in the patient safety audit process Captures and analyzes incidents and events for quality improvement	**Patient Safety Indicators** • Care of Vulnerable patients • Prevention of Iatrogenic injury • Care of lines, drains and tubing's • Restrain policy and care – Physical and Chemical • Blood & blood transfusion policy • Prevention of IV Complication • Prevention of Fall • Prevention of DVT • Shifting and transporting of patients • Surgical safety • Care coordination event related to medication reconciliation and administration • Prevention of communication errors • Prevention of HAI • Documentation **Incidents and adverse Events** • Capturing of incidents • RCA (Root Cause Analysis) • CAPA (Corrective and Preventive Action) • Report writing	• Lecture • Demonstration • Experiential learning • Lecture	• Knowledge assessment • Performance assessment • Checklist/ OSCE • Knowledge assessment • Short answer

Unit	Time (Hrs)		Learning Outcomes	Content	Teaching/ Learning Activities	Assessment Methods
	T	P				
					• Role play • Inquiry Based Learning	• Objective type
IX	1		Enumerate IPSG and application of the goals in the patient care settings.	**IPSG (International Patient safety Goals)** • Identify patient correctly • Improve effective communication • Improve safety of High Alert medication • Ensure safe surgery • Reduce the risk of health care associated infection • Reduce the risk of patient harm resulting from falls • Reduce the harm associated with clinical alarm system	• Lecture • Role play	• Objective type
X	2	3 (L/E)	Enumerate the various safety protocols and its applications	**Safety protocol** • 5S (Sort, Set in order, Shine, Standardize, Sustain) • Radiation safety • Laser safety • Fire safety - Types and classification of fire - Fire alarms - Firefighting equipment • HAZMAT (Hazardous Materials) safety - Types of spill - Spillage management - MSDS (Material Safety Data Sheets) • Environmental safety - Risk assessment - Aspect impact analysis - Maintenance of Temp and Humidity (Department wise) - Audits • Emergency Codes • Role of Nurse in times of disaster	• Lecture • Demonstration/ Experiential learning	• Mock drills • Post tests • Checklist
XI	2		Explain importance of employee safety	**Employee Safety Indicators** • Vaccination • Needle stick injuries (NSI)	• Lecture • Discussion	• Knowledge assessment by short answers,

Unit	Time (Hrs)		Learning Outcomes	Content	Teaching/ Learning Activities	Assessment Methods
	T	P				
			indicators Identify risk of occupational hazards, prevention and post exposure prophylaxis.	prevention • Fall prevention • Radiation safety • Annual health check **Healthcare Worker Immunization Program and management of occupational exposure** • Occupational health ordinance • Vaccination program for healthcare staff • Needle stick injuries and prevention and post exposure prophylaxis	• Lecture method • Journal review	objective type • Short answer

***Experiential Learning:**

Experiential learning is the process by which knowledge is created through the process of experience in the clinical field. Knowledge results from the combination of grasping transforming experience. (Kolb, 1984). The experiential learning cycle begins with an experience that the student has had, followed by an opportunity to reflect on that experience. Then students may conceptualize and draw conclusions about what they experienced and observed, leading to future actions in which the students experiment with different behaviors. This begins the new cycle as the students have new experiences based on their experimentation. These steps may occur in nearly and order as the learning progresses. As the need of the learner, the concrete components and conceptual components can be in different order as they may require a variety of cognitive and affective behaviors.

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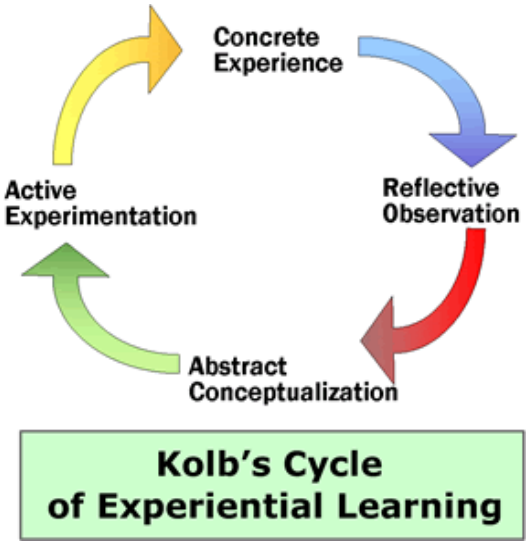

Kolb's Cycle of Experiential Learning

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PHARMACOLOGY - I

PLACEMENT: III SEMESTER

THEORY: 1 Credit (20 hours)

DESCRIPTION: This course is designed to enable students to acquire understanding of Pharmacodynamics, Pharmacokinetics, principles of therapeutics and nursing implications.

COMPETENCIES: On completion of the course, the students will be able to

1. Describe pharmacodynamics and pharmacokinetics.
2. Review the principles of drug calculation and administration.
3. Explain the commonly used antiseptics and disinfectants.
4. Describe the pharmacology of drugs acting on the GI system.
5. Describe the pharmacology of drugs acting on the respiratory system.
6. Describe drugs used in the treatment of cardiovascular and blood disorders.
7. Explain the drugs used in the treatment of endocrine system disorders.
8. Describe the drugs acting on skin and drugs used to treat communicable diseases.

COURSE OUTLINE

T – Theory

Unit	Time (Hrs)	Learning Outcomes	Content	Teaching/Learning Activities	Assessment Methods
I	3 (T)	Describe Pharmacodynamics, Pharmacokinetics, Classification, principles of administration of drugs	**Introduction to Pharmacology** • Definitions & Branches • Nature & Sources of drugs • Dosage Forms and Routes of drug administration • Terminology used • Classification, Abbreviations, Prescription, Drug Calculation, Weights and Measures • *Pharmacodynamics:* Actions, Drug Antagonism, Synergism, Tolerance, Receptors, Therapeutic, adverse, toxic effects, pharmacovigilance • *Pharmacokinetics:* Absorption, Bioavailability, Distribution, Metabolism, Interaction, Excretion • Review: Principles of drug administration and treatment individualization o Factors affecting dose, route etc. • Indian Pharmacopoeia: Legal Issues, Drug Laws, Schedule Drugs • Rational Use of Drugs • Principles of Therapeutics	• Lecture cum Discussion • Guided reading and written assignment on schedule K drugs	• Short answer • Objective type • Assessment of assignments
II	1 (T)	Describe antiseptics, and disinfectant & nurse‘s responsibilities	**Pharmacology of commonly used antiseptics and disinfectants** • Antiseptics and Disinfectants • Composition, action, dosage, route, indications, contraindications, Drug interactions, side effects, adverse effects, toxicity and role of nurse	• Lecture cum Discussion • Drug study/ presentation	• Short answer • Objective type
III	2 (T)	Describe drugs acting on gastro-intestinal system & nurse‘s responsibilities	**Drugs acting on G.I. system** • Pharmacology of commonly used drugs o Emetics and Antiemetics o Laxatives and Purgatives o Antacids and antipeptic ulcer drugs o Anti-diarrhoeals – Fluid and electrolyte therapy, Furazolidone, dicyclomine • Composition, action, dosage, route, indications, contraindications, drug interactions, side effects, adverse effects, toxicity and role of nurse	• Lecture cum Discussion • Drug study/ presentation	• Short answer • Objective type

Unit	Time (Hrs)	Learning Outcomes	Content	Teaching/Learning Activities	Assessment Methods
IV	2 (T)	Describe drugs acting on respiratory system & nurse's responsibilities	**Drugs acting on respiratory system** • Pharmacology of commonly used ○ Antiasthmatics – Bronchodilators (Salbutamol inhalers) ○ Decongestants ○ Expectorants, Antitussives and Mucolytics ○ Broncho-constrictors and Antihistamines • Composition, action, dosage, route, indications, contraindications, drug interactions, side effects, adverse effects toxicity and role of nurse	• Lecture cum Discussion • Drug study/ presentation	• Short answer • Objective type
V	4 (T)	Describe drugs used on cardio-vascular system & nurse's responsibilities	**Drugs used in treatment of Cardiovascular system and blood disorders** • Haematinics, & treatment of anemia and antiadrenergics • Cholinergic and anticholinergic • Adrenergic Drugs for CHF & vasodilators • Antianginals • Antiarrhythmics • Antihypertensives • Coagulants & Anticoagulants • Antiplatelets & thrombolytics • Hypolipidemics • Plasma expanders & treatment of shock • Drugs used to treat blood disorders • Composition, action, dosage, route, indications, contraindications, drug interactions, side effects, adverse effects, toxicity and role of nurse	• Lecture cum Discussion • Drug study/ presentation	• Short answer • Objective type
VI	2 (T)	Describe the drugs used in treatment of endocrine system disorders	**Drugs used in treatment of endocrine system disorders** • Insulin & oral hypoglycemics • Thyroid and anti-thyroid drugs • Steroids ○ Corticosteroids ○ Anabolic steroids • Calcitonin, parathormone, vitamin D3, calcium metabolism ○ Calcium salts	• Lecture cum Discussion • Drug study/ presentation	• Short answer • Objective type

Unit	Time (Hrs)	Learning Outcomes	Content	Teaching/Learning Activities	Assessment Methods
VII	1 (T)	Describe drugs used in skin diseases & nurse's responsibilities	**Drugs used in treatment of integumentary system** • Antihistaminics and antipruritics • Topical applications for skin- Benzylbenzoate, Gamma BHC, Clotrimazole, Miconazole, Silver Sulphadiazine (burns) • Composition, action, dosage, route, indications, contraindications, drug interactions, side effects, adverse effects toxicity and role of nurse	• Lecture cum Discussion • Drug study/ presentation	• Short answer • Objective type
VIII	5 (T)	Explain drug therapy/ chemotherapy of specific infections & infestations & nurse's responsibilities	**Drugs used in treatment of communicable diseases (common infections, infestations)** • General Principles for use of Antimicrobials • Pharmacology of commonly used drugs: o Penicillin, Cephalosporin's, Aminoglycosides, Macrolide & broad spectrum antibiotics, Sulfonamides, quinolones, Misc. antimicrobials • Anaerobic infections • Antitubercular drugs, • Antileprosy drugs • Antimalarials • Antiretroviral drugs • Antiviral agents • Antihelminthics, Antiscabies agents • Antifungal agents • Composition, action, dosage, route, indications, contraindications, Drug interactions, side effects, adverse effects, toxicity and role of nurse	• Lecture cum Discussion • Drug study/ presentation	• Short answer • Objective type

PATHOLOGY - I

PLACEMENT: III SEMESTER

THEORY: 1 Credit (20 hours) (includes lab hours also)

DESCRIPTION: This course is designed to enable students to acquire knowledge of pathology of various disease conditions, understanding of genetics, its role in causation and management of defects and diseases and to apply this knowledge in practice of nursing.

COMPETENCIES: On completion of the course, the students will be able to

1. Apply the knowledge of pathology in understanding the deviations from normal to abnormal pathology.
2. Rationalize the various laboratory investigations in diagnosing pathological disorders.
3. Demonstrate the understanding of the methods of collection of blood, body cavity fluids, urine and feces for various tests.

4. Apply the knowledge of genetics in understanding the various pathological disorders.
5. Appreciate the various manifestations in patients with diagnosed genetic abnormalities.
6. Rationalize the specific diagnostic tests in the detection of genetic abnormalities.
7. Demonstrate the understanding of various services related to genetics.

COURSE OUTLINE

T – Theory

Unit	Time (Hrs)	Learning Outcomes	Content	Teaching/ Learning Activities	Assessment Methods
I	8 (T)	Define the common terms used in pathology Identify the deviations from normal to abnormal structure and functions of body system	**Introduction** • Importance of the study of pathology • Definition of terms in pathology • Cell injury: Etiology, pathogenesis of reversible and irreversible cell injury, Necrosis, Gangrene • Cellular adaptations: Atrophy, Hypertrophy, Hyperplasia, Metaplasia, Dysplasia, Apoptosis • Inflammation: o Acute inflammation (Vascular and Cellular events, systemic effects of acute inflammation) o Chronic inflammation (Granulomatous inflammation, systemic effects of chronic inflammation) • Wound healing • Neoplasia**:** Nomenclature, Normal and Cancer cell, Benign and malignant tumors, Carcinoma in situ, Tumor metastasis: general mechanism, routes of spread and examples of each route • Circulatory disturbances: Thrombosis, embolism, shock • Disturbance of body fluids and electrolytes: Edema, Transudates and Exudates	• Lecture • Discussion • Explain using slides • Explain with clinical scenarios	• Short answer • Objective type
II	5 (T)	Explain pathological changes in disease conditions of various systems	**Special Pathology** **Pathological changes in disease conditions of selected systems:** **1. Respiratory system** • Pulmonary infections: Pneumonia, Lung abscess, pulmonary tuberculosis • Chronic Obstructive Pulmonary Disease: Chronic bronchitis, Emphysema, Bronchial Asthma, Bronchiectasis • Tumors of Lungs **2. Cardio-vascular system** • Atherosclerosis • Ischemia and Infarction. • Rheumatic Heart Disease	• Lecture • Discussion • Explain using slides, X-rays and scans • Visit to pathology lab, endoscopy unit and OT	• Short answer • Objective type

Unit	Time (Hrs)	Learning Outcomes	Content	Teaching/ Learning Activities	Assessment Methods
			• Infective endocarditis **3. Gastrointestinal tract** • Peptic ulcer disease (Gastric and Duodenal ulcer) • Gastritis-H Pylori infection • Oral mucosa: Oral Leukoplakia, Squamous cell carcinoma • Esophageal cancer • Gastric cancer • Intestinal: Typhoid ulcer, Inflammatory Bowel Disease (Crohn's disease and Ulcerative colitis), Colorectal cancer **4. Liver, Gall Bladder and Pancreas** • Liver: Hepatitis, Amoebic Liver abscess, Cirrhosis of Liver • Gall bladder: Cholecystitis. • Pancreas: Pancreatitis • Tumors of liver, Gall bladder and Pancreas **5. Skeletal system** • Bone: Bone healing, Osteoporosis, Osteomyelitis, Tumors • Joints: Arthritis - Rheumatoid arthritis and Osteoarthritis **6. Endocrine system** • Diabetes Mellitus • Goitre • Carcinoma thyroid		
III	7 (T)	Describe various laboratory tests in assessment and monitoring of disease conditions	**Hematological tests for the diagnosis of blood disorders** • Blood tests: Hemoglobin, White cell and platelet counts, PCV, ESR • Coagulation tests: Bleeding time (BT), Prothrombin time (PT), Activated Partial Prothrombin Time (APTT) • Blood chemistry • Blood bank: ○ Blood grouping and cross matching ○ Blood components ○ Plasmapheresis ○ Transfusion reactions **Note:** Few lab hours can be planned for observation and visits (Less than 1 credit, lab hours are not specified separately)	• Lecture • Discussion • Visit to clinical lab, biochemistry lab and blood bank	• Short answer • Objective type

ADULT HEALTH NURSING - I WITH INTEGRATED PATHOPHYSIOLOGY (including BCLS module)

PLACEMENT: III SEMESTER

THEORY: 7 Credits (140 hours)

PRACTICUM: Lab/Skill Lab (SL) – 1 Credit (40 hours) Clinical – 6 Credits (480 hours)

DESCRIPTION: This course is designed to equip the students to review and apply their knowledge of Anatomy, Physiology, Biochemistry and Behavioral sciences in caring for adult patients with Medical/Surgical disorders using nursing process approach and critical thinking. It also intends to develop competencies required for assessment, diagnosis, treatment, nursing management, and supportive/palliative care to patients with various Medical Surgical disorders.

COMPETENCIES: On completion of Medical Surgical Nursing I course, students will be able to

1. Explain the etiology, pathophysiology, manifestations, diagnostic studies, treatments and complications of common medical and surgical disorders.
2. Perform complete health assessment to establish a data base for providing quality patient care and integrate the knowledge of anatomy, physiology and diagnostic tests in the process of data collection.
3. Identify nursing diagnoses, list them according to priority and formulate nursing care plan.
4. Perform nursing procedures skillfully and apply scientific principles while giving comprehensive nursing care to patients.
5. Integrate knowledge of pathology, nutrition and pharmacology in caring for patients experiencing various medical and surgical disorders.
6. Identify common diagnostic measures related to the health problems with emphasis on nursing assessment and responsibilities.
7. Demonstrate skill in assisting/performing diagnostic and therapeutic procedures.
8. Demonstrate competencies/skills to patients undergoing treatment for medical surgical disorders.
9. Identify the drugs used in treating patients with medical surgical conditions.
10. Plan and give relevant individual and group education on significant medical surgical topics.
11. Maintain safe environment for patients and the health care personnel in the hospital.
12. Integrate evidence-based information while giving nursing care to patients.

COURSE CONTENT

T – Theory, L/SL – Lab/Skill Lab

Unit	Time (Hrs)	Learning Outcomes	Content	Teaching/ Learning Activities	Assessment Methods
I	6 (T) 4 (L/SL)	Narrate the evolution of medical surgical nursing Apply nursing process in caring for patients with medical surgical problems Execute the role of a nurse in various medical surgical setting Develop skills in assessment and care of wound	**Introduction** • Evolution and trends of medical and surgical nursing • International classification of diseases • Roles and responsibility of a nurse in medical and surgical settings o Outpatient department o In-patient unit o Intensive care unit • Introduction to medical and surgical asepsis o Inflammation, infection o Wound healing – stages, influencing factors	• Lecture cum discussion • Demonstration & Practice session • Role play • Visit to outpatient department, in patient and intensive care unit	• Short Answer • OSCE

Unit	Time (Hrs)	Learning Outcomes	Content	Teaching/ Learning Activities	Assessment Methods
		Develop competency in providing pre and postoperative care	○ Wound care and dressing technique • Care of surgical patient ○ pre-operative ○ post-operative • Alternative therapies used in caring for patients with Medical Surgical Disorders		
II	15 (T) 4 (L/SL)	Explain organizational set up of the operating theatre Differentiate the role of scrub nurse and circulating nurse Describe the different positioning for various surgeries Apply principles of asepsis in handling the sterile equipment Demonstrate skill in scrubbing procedures Demonstrate skill in assessing the patient and document accurately the surgical safety checklist Develop skill in assisting with selected surgeries Explain the types, functions, and nursing considerations for different types of anaesthesia	**Intraoperative Care** • Organization and physical set up of the operation theatre ○ Classification ○ O.T Design ○ Staffing ○ Members of the OT team ○ Duties and responsibilities of the nurse in OT • Position and draping for common surgical procedures • Instruments, sutures and suture materials, equipment for common surgical procedures • Disinfection and sterilization of equipment • Preparation of sets for common surgical procedures • Scrubbing procedures – Gowning, masking and gloving • Monitoring the patient during the procedures • Maintenance of the therapeutic environment in OT • Assisting in major and minor operation, handling specimen • Prevention of accidents and hazards in OT • Anaesthesia – types, methods of administration, effects and stages, equipment & drugs • Legal aspects	• Lecture cum Discussion • Demonstration, Practice session, and Case Discussion • Visit to receiving bay	• Caring for patient intra operatively • Submit a list of disinfectants used for instruments with the action and precaution
III	6 (T) 4 (L/SL)	Identify the signs and symptoms of shock and electrolyte imbalances Develop skills in managing fluid and electrolyte imbalances	**Nursing care of patients with common signs and symptoms and management** • Fluid and electrolyte imbalance • Shock • Pain	• Lecture, discussion, demonstration • Case discussion	• Short answer • MCQ • Case report

Unit	Time (Hrs)	Learning Outcomes	Content	Teaching/ Learning Activities	Assessment Methods
		Perform pain assessment and plans for the nursing management			
IV	18 (T) 4 (L)	Demonstrate skill in respiratory assessment Differentiates different breath sounds and lists the indications Explain the etiology, pathophysiology, clinical manifestations, diagnostic tests, and medical, surgical, nutritional, and nursing management of common respiratory problems Describe the health behaviour to be adopted in preventing respiratory illnesses	**Nursing Management of patients with respiratory problems** • Review of anatomy and physiology of respiratory system • Nursing Assessment – history taking, physical assessment and diagnostic tests • Common respiratory problems: o Upper respiratory tract infections o Chronic obstructive pulmonary diseases o Pleural effusion, Empyema o Bronchiectasis o Pneumonia o Lung abscess o Cyst and tumors o Chest Injuries o Acute respiratory distress syndrome o Pulmonary embolism • Health behaviours to prevent respiratory illness	• Lecture, discussion, • Demonstration • Practice session • Case presentation • Visit to PFT Lab	• Essay • Short answer • OSCE
V	16 (T) 5 (L)	Explain the etiology, pathophysiology, clinical manifestations, diagnostic tests, and medical, surgical, nutritional, and nursing management of gastrointestinal disorders Demonstrate skill in gastrointestinal assessment Prepare patient for upper and lower gastrointestinal investigations Demonstrate skill in gastric decompression, gavage, and stoma care	**Nursing Management of patients with disorders of digestive system** • Review of anatomy and physiology of GI system • Nursing assessment –History and physical assessment • GI investigations • Common GI disorders: o Oral cavity: lips, gums and teeth o GI: Bleeding, Infections, Inflammation, tumors, Obstruction, Perforation & Peritonitis o Peptic & duodenal ulcer, o Mal-absorption, Appendicitis, Hernias o Hemorrhoids, fissures, Fistulas o Pancreas: inflammation, cysts, and tumors	• Lecture, Discussion • Demonstration, • Role play • Problem Based Learning • Visit to stoma clinic	• Short answer • Quiz • OSCE

Unit	Time (Hrs)	Learning Outcomes	Content	Teaching/ Learning Activities	Assessment Methods
		Demonstrate skill in different feeding techniques	○ Liver: inflammation, cysts, abscess, cirrhosis, portal hypertension, hepatic failure, tumors ○ Gall bladder: inflammation, Cholelithiasis, tumors • Gastric decompression, gavage and stoma care, different feeding techniques • Alternative therapies, drugs used in treatment of disorders of digestive system		
VI	20 (T) 5 (L)	Explain the etiology, pathophysiology, clinical manifestations, diagnostic tests, and medical, surgical, nutritional, and nursing management of cardiovascular disorders Demonstrate skill in cardiovascular assessment Prepare patient for invasive and non-invasive cardiac procedures Demonstrate skill in monitoring and interpreting clinical signs related to cardiac disorders Complete BLS/BCLS module	**Nursing Management of patients with cardiovascular problems** • Review of anatomy and physiology of cardio-vascular system • Nursing Assessment: History and Physical assessment • Invasive & non-invasive cardiac procedures • Disorders of vascular system- Hypertension, arteriosclerosis, Raynaud's disease, aneurysm and peripheral vascular disorders • Coronary artery diseases: coronary atherosclerosis, Angina pectoris, myocardial infarction • Valvular disorders: congenital and acquired • Rheumatic heart disease: pericarditis, myocarditis, endocarditis, cardiomyopathies • Cardiac dysrhythmias, heart block • Congestive heart failure, corpulmonale, pulmonary edema, cardiogenic shock, cardiac tamponade • Cardiopulmonary arrest	• Lecture, discussion • Demonstration • Practice session • Case Discussion • Health education • Drug Book/ presentation • **Completion of BCLS Module**	• Care plan • Drug record • BLS/ BCLS evaluation
VII	7 (T) 3 (L)	Explain the etiology, pathophysiology, clinical manifestations, diagnostic tests, and medical, surgical, nutritional, and nursing management of hematological disorders Interpret blood reports	**Nursing Management of patients with disorders of blood** • Review of Anatomy and Physiology of blood • Nursing assessment: history, physical assessment & Diagnostic tests • Anemia, Polycythemia • Bleeding Disorders: clotting factor defects and platelets defects, thalassemia, leukemia, leukopenia,	• Field visit to blood bank • Counseling	• Interpretation of blood reports • Visit report

Unit	Time (Hrs)	Learning Outcomes	Content	Teaching/ Learning Activities	Assessment Methods
		Prepare and provides health education on blood donation	agranulocytosis • Lymphomas, myelomas		
VIII	8 (T) 2 (L)	Explain the etiology, pathophysiology, clinical manifestations, diagnostic tests, and medical, surgical, nutritional, and nursing management of endocrine disorders Demonstrate skill in assessment of endocrine organ dysfunction Prepare and provides health education on diabetic diet Demonstrate skill in insulin administration	**Nursing management of patients with disorders of endocrine system** • Review of anatomy and physiology of endocrine system • Nursing Assessment –History and Physical assessment • Disorders of thyroid and Parathyroid, Adrenal and Pituitary (Hyper, Hypo, tumors) • Diabetes mellitus	• Lecture, discussion, demonstration • Practice session • Case Discussion • Health education	• Prepare health education on self-administration of insulin • Submits a diabetic diet plan
IX	8 (T) 2 (L)	Explain the etiology, pathophysiology, clinical manifestations, diagnostic tests, and medical, surgical, nutritional, and nursing management of disorders of integumentary system Demonstrate skill in integumentary assessment Demonstrate skill in medicated bath Prepare and provide health education on skin care	**Nursing management of patients with disorders of Integumentary system** • Review of anatomy and physiology of skin • Nursing Assessment: History and Physical assessment • Infection and infestations; Dermatitis • Dermatoses; infectious and Non infectious • Acne, Allergies, Eczema & Pemphigus • Psoriasis, Malignant melanoma, Alopecia • Special therapies, alternative therapies • Drugs used in treatment of disorders of integumentary system	• Lecture, discussion • Demonstration • Practice session • Case Discussion	• Drug report • Preparation of Home care plan
X	16 (T) 4 (L)	Explain the etiology, pathophysiology, clinical manifestations, diagnostic tests, and medical, surgical, nutritional, and nursing management of musculoskeletal disorders	**Nursing management of patients with musculoskeletal problems** • Review of Anatomy and physiology of the musculoskeletal system • Nursing Assessment: History and physical assessment, diagnostic tests • Musculoskeletal trauma: Dislocation, fracture, sprain, strain,	• Lecture/ • Discussion • Demonstration • Case Discussion • Health education	• Nursing care plan • Prepare health teaching on care of patient with cast

Unit	Time (Hrs)	Learning Outcomes	Content	Teaching/ Learning Activities	Assessment Methods
		Demonstrate skill in musculoskeletal assessment Prepare patient for radiological and non-radiological investigations of musculoskeletal system Demonstrate skill in crutch walking and splinting Demonstrate skill in care of patient with replacement surgeries Prepare and provide health education on bone healing	contusion, amputation • Musculoskeletal infections and tumors: Osteomyelitis, benign and malignant tumour • Orthopedic modalities: Cast, splint, traction, crutch walking • Musculoskeletal inflammation: Bursitis, synovitis, arthritis • Special therapies, alternative therapies • Metabolic bone disorder: Osteoporosis, osteomalacia and Paget's disease • Spinal column defects and deformities – tumor, prolapsed intervertebral disc, Pott's spine • Rehabilitation, prosthesis • Replacement surgeries		
XI	20 (T) 3 (L)	Explain the etiology, pathophysiology, clinical manifestations, diagnostic tests, and medical, surgical, nutritional, and nursing management of patients with communicable diseases Demonstrate skill in barrier and reverse barrier techniques Demonstrate skill in execution of different isolation protocols	**Nursing management of patients with Communicable diseases** • Overview of infectious diseases, the infectious process • Nursing Assessment: History and Physical assessment, Diagnostic tests • Tuberculosis • Diarrhoeal diseases, hepatitis A-E, Typhoid • Herpes, chickenpox, Smallpox, Measles, Mumps, Influenza • Meningitis • Gas gangrene • Leprosy • Dengue, Plague, Malaria, Chikungunya, swine flu, Filariasis • Diphtheria, Pertussis, Tetanus, Poliomyelitis • COVID-19 • Special infection control measures: Notification, Isolation, Quarantine, Immunization	• Lecture, discussion, demonstration • Practice session • Case Discussion/ seminar • Health education • Drug Book/ presentation • **Refer TB Control & Management module**	• Prepares and submits protocol on various isolation techniques

CLINICAL PRACTICUM

CLINICAL PRACTICUM: 6 Credits (480 hours) - 18 weeks × 27 hours

PRACTICE COMPETENCIES: On completion of the clinical practicum, the students will be able to apply nursing process and critical thinking in delivering holistic nursing care including rehabilitation to the adult patients undergoing surgery, with shock and fluid and electrolyte imbalance and with selected medical & surgical conditions i.e., Gastrointestinal, Respiratory, Endocrine, Orthopedic, Dermatology and Cardiovascular disorders.

The students will be competent to:

1. Utilize the nursing process in providing care to the sick adults in the hospital:
    a. Perform complete health assessment to establish a data base for providing quality patient care.
    b. Integrate the knowledge of diagnostic tests in the process of data collection.
    c. Identify nursing diagnoses and list them according to priority.
    d. Formulate nursing care plan, using problem solving approach.
    e. Apply scientific principles while giving nursing care to patients.
    f. Perform nursing procedures skillfully on patients.
    g. Establish/develop interpersonal relationship with patients and family members.
    h. Evaluate the expected outcomes and modify the plan according to the patient needs.
2. Provide comfort and safety to adult patients in the hospital.
3. Maintain safe environment for patients during hospitalization.
4. Explain nursing actions appropriately to the patients and family members.
5. Ensure patient safety while providing nursing procedures.
6. Assess the educational needs of the patient and their family related to medical and surgical disorders and provide appropriate health education to patients.
7. Provide pre, intra and post-operative care to patients undergoing surgery.
8. Integrate knowledge of pathology, nutrition and pharmacology for patients experiencing various medical and surgical disorders.
9. Integrate evidence-based information while giving nursing care to patients.
10. Demonstrate the awareness of legal and ethical issues in nursing practice.

I. NURSING MANAGEMENT OF PATIENTS WITH MEDICAL CONDITIONS

A. Skill Lab

Use of manikins and simulators

- Intravenous therapy
- Oxygen through mask
- Oxygen through nasal prongs
- Venturi mask
- Nebulization
- Chest physiotherapy

B. Clinical Postings

Clinical area/unit	Duration (weeks)	Learning Outcomes	Procedural Competencies/ Clinical Skills	Clinical Requirements	Assessment Methods
General medical	4	Develop skill in intravenous injection administration and IV therapy	• Intravenous therapy o IV cannulation o IV maintenance and monitoring o Administration of IV medication	• Care Study – 1 • Health education • Clinical presentation/ Care	• Clinical evaluation • OSCE • Care Study

		Assist with diagnostic procedures Develop skill in the management of patients with Respiratory problems Develop skill in managing patients with metabolic abnormality	• Care of patient with Central line • Preparation and assisting and monitoring of patients undergoing diagnostic procedures such as thoracentesis, Abdominal paracentesis *Management patients with respiratory problems* • Administration of oxygen through mask, nasal prongs, venturi mask • Pulse oximetry • Nebulization • Chest physiotherapy • Postural drainage • Oropharyngeal suctioning • Care of patient with chest drainage • Diet Planning ○ High Protein diet ○ Diabetic diet • Insulin administration • Monitoring GRBS	note) – 1	evaluation • Care Note/ Clinical presentation

II. NURSING MANAGEMENT OF PATIENTS WITH SURGICAL CONDITIONS

A. Skill Lab

Use of manikins and simulators

- Nasogastric aspiration
- Surgical dressing
- Suture removal
- Colostomy care/ileostomy care
- Enteral feeding

B. Clinical Postings

Clinical area/unit	Duration (Weeks)	Learning Outcomes	Procedural Competencies/ Clinical Skills	Clinical Requirements	Assessment Methods
General surgical wards	4	Develop skill in caring for patients during pre- and post- operative period Assist with diagnostic procedures Develop skill in managing patient with Gastro-intestinal Problems	• Pre-Operative care • Immediate Post-operative care • Post-operative exercise • Pain assessment • Pain Management • Assisting diagnostic procedure and after care of patients undergoing ○ Colonoscopy ○ ERCP ○ Endoscopy ○ Liver Biopsy	• Care study – 1 • Health teaching	• Clinical evaluation, OSCE • Care study • Care note/ Clinical presentation

		Develop skill in wound management	• Nasogastric aspiration • Gastrostomy/Jejunostomy feeds • Ileostomy/Colostomy care • Surgical dressing • Suture removal • Surgical soak • Sitz bath • Care of drain		

III. NURSING MANAGEMENT OF PATIENTS WITH CARDIAC CONDITIONS

A. Skill Lab

Use of manikins and simulators

- Cardiovascular assessment
- Interpreting ECG
- BLS/BCLS
- CPR
- ABG analysis
- Taking blood sample
- Arterial blood gas analysis – interpretation

B. Clinical Postings

Clinical area/unit	Duration (Weeks)	Learning Outcomes	Procedural Competencies/ Clinical Skills	Clinical Requirements	Assessment Methods
Cardiology wards	2	Develop skill in management of patients with cardiac problems Develop skill in management of patients with disorders of Blood	• Cardiac monitoring • Recording and interpreting ECG • Arterial blood gas analysis – interpretation • Administer cardiac drugs • Preparation and after care of patients for cardiac catheterization • CPR • Collection of blood sample for: o Blood grouping/cross matching o Blood sugar o Serum electrolytes • Assisting with blood transfusion • Assisting for bone marrow aspiration • Application of anti-embolism stockings (TED hose) • Application/maintenance of sequential Compression device	• Cardiac assessment – 1 • Drug presentation – 1	• Clinical evaluation • Drug presentation

IV. NURSING MANAGEMENT OF PATIENTS WITH DISORDERS OF INTEGUMENTARY SYSTEM

A. Skill Lab

Use of manikins and simulators

Application of topical medication

B. Clinical Postings

Clinical area/unit	Duration (Weeks)	Learning Outcomes	Procedural Competencies/ Clinical Skills	Clinical Requirements	Assessment Methods
Dermatology wards	1	Develop skill in management of patients with disorders of integumentary system	• Intradermal injection-Skin allergy testing • Application of topical medication • Medicated bath		• Clinical evaluation

V. NURSING MANAGEMENT OF PATIENTS WITH COMMUNICABLE DISEASES

A. Skill Lab

- Barrier Nursing
- Reverse Barrier Nursing
- Standard precautions

B. Clinical Postings

Clinical area/unit	Duration (Weeks)	Learning Outcomes	Procedural Competencies/ Clinical Skills	Clinical Requirements	Assessment Methods
Isolation ward	1	Develop skill in the management of patients requiring isolation	• Barrier Nursing • Reverse barrier nursing • Standard precautions (Universal precaution), use of PPE, needle stick and sharp injury prevention, Cleaning and disinfection, Respiratory hygiene, waste disposal and safe injection practices)	• Care Note – 1	• Clinical evaluation • Care note

VI. NURSING MANAGEMENT OF PATIENTS WITH MUSCULOSKELETAL PROBLEMS

A. Skill Lab

Use of manikins and simulators

- Range of motion exercises
- Muscle strengthening exercises
- Crutch walking

B. Clinical Postings

Clinical area/unit	Duration (Weeks)	Learning Outcomes	Procedural Competencies/ Clinical Skills	Clinical Requirements	Assessment Methods
Orthopedic wards	2	Develop skill in management of patients with musculoskeletal problems	• Preparation of patient with Myelogram/CT/MRI • Assisting with application & removal of POP/Cast • Preparation, assisting and after care of patient with Skin	• Care Note – 1	• Clinical evaluation, • Care note

			traction/skeletal traction • Care of orthotics • Muscle strengthening exercises • Crutch walking • Rehabilitation		

VII. NURSING MANAGEMENT OF PATIENTS IN THE OPERATING ROOMS

A. Skill Lab

Use of manikins and simulators

- Scrubbing, gowning and gloving
- Orient to instruments for common surgeries
- Orient to suture materials
- Positioning

B. Clinical Postings

Clinical area/unit	Duration (Weeks)	Learning Outcomes	Procedural Competencies/ Clinical Skills	Clinical Requirements	Assessment Methods
Operation theatre	4	Develop skill in caring for intraoperative patients	• Position and draping • Preparation of operation table • Set up of trolley with instrument • Assisting in major and minor operation • Disinfection and sterilization of equipment • Scrubbing procedures – Gowning, masking and gloving • Intra operative monitoring	• Assist as circulatory nurse – 4 • Positioning & draping – 5 • Assist as scrub nurse in major surgeries – 4 • Assist as scrub nurse in minor surgeries – 4	• Clinical evaluation • OSCE

PHARMACOLOGY - II

including Fundamentals of Prescribing Module

PLACEMENT: IV SEMESTER

THEORY: 3 Credits (60 hours)

DESCRIPTION: This course is designed to enable students to acquire understanding of Pharmacodynamics, Pharmacokinetics, principles of therapeutics & nursing implications. Further it develops understanding of fundamental principles of prescribing in students.

COMPETENCIES: On completion of the course, the students will be able to

1. Explain the drugs used in the treatment of ear, nose, throat and eye disorders.
2. Explain the drugs used in the treatment of urinary system disorders.
3. Describe the drugs used in the treatment of nervous system disorders.
4. Explain the drugs used for hormonal replacement and for the pregnant women during antenatal, intra natal and postnatal period.
5. Explain the drugs used to treat emergency conditions and immune disorders.
6. Discuss the role and responsibilities of nurses towards safe administration of drugs used to treat disorders of various systems with basic understanding of pharmacology.
7. Demonstrate understanding about the drugs used in alternative system of medicine.
8. Demonstrate understanding about the fundamental principles of prescribing.

COURSE OUTLINE

T – Theory

Unit	Time (Hrs)	Learning Outcomes	Content	Teaching/ Learning Activities	Assessment Methods
I	4 (T)	Describe drugs used in disorders of ear, nose, throat and eye and nurses' responsibilities	**Drugs used in disorders of ear, nose, throat & Eye** • Antihistamines • Topical applications for eye (Chloramphenicol, Gentamycin eye drops), ear (Soda glycerin, boric spirit ear drops), nose and buccal cavity-chlorhexidine mouthwash • Composition, action, dosage, route, indications, contraindications, drug interactions, side effects, adverse effects, toxicity and role of nurse	• Lecture cum Discussion • Drug study/ presentation	• Short answer • Objective type
II	4 (T)	Describe drugs acting on urinary system & nurse's responsibilities	**Drugs used on urinary system** • Pharmacology of commonly used drugs ○ Renin angiotensin system ○ Diuretics and antidiuretics ○ Drugs toxic to kidney ○ Urinary antiseptics ○ Treatment of UTI – acidifiers and alkalinizers • Composition, action, dosage, route, indications, contraindications, Drug interactions, side effects, adverse effects toxicity and role of nurse	• Lecture cum Discussion • Drug study/ presentation	• Short answer • Objective type
III	10 (T)	Describe drugs used on nervous system & nurse's responsibilities	**Drugs acting on nervous system** • Basis & applied pharmacology of commonly used drugs • Analgesics and anaesthetics ○ Analgesics: Non-steroidal anti-inflammatory (NSAID) drugs ○ Antipyretics ○ Opioids & other central analgesics ✓ General (techniques of GA, pre anesthetic medication) & local anesthetics ✓ Gases: oxygen, nitrous, oxide, carbon-dioxide & others • Hypnotics and sedatives • Skeletal muscle relaxants • Antipsychotics ○ Mood stabilizers	• Lecture cum Discussion • Drug study/ presentation	• Short answer • Objective type

Unit	Time (Hrs)	Learning Outcomes	Content	Teaching/ Learning Activities	Assessment Methods
			• Antidepressants • Antianxiety Drugs • Anticonvulsants • Drugs for neurodegenerative disorders & miscellaneous drugs • Stimulants, ethyl alcohol and treatment of methyl alcohol poisoning • Composition, action, dosage, route, indications, contraindications, drug interactions, side effects, adverse effects toxicity and role of nurse		
IV	5 (T)	Describe drugs used for hormonal disorder & supplementation, contraception & medical termination of pregnancy & nurse's responsibilities	**Drugs used for hormonal, disorders and supplementation, contraception and medical termination of pregnancy** • Estrogens and progesterones ○ Oral contraceptives and hormone replacement therapy • Vaginal contraceptives • Drugs for infertility and medical termination of pregnancy ○ Uterine stimulants and relaxants • Composition, actions dosage route indications contraindications, drugs interactions, side effects, adverse effects, toxicity and role of nurse	• Lecture cum Discussion • Drug study/ presentation	• Short answer • Objective type
V	3 (T)	Develop understanding about important drugs used for women before, during and after labour	**Drugs used for pregnant women during antenatal, labour and postnatal period** • Tetanus prophylaxis • Iron and Vit K1 supplementation • Oxytocin, Misoprostol • Ergometrine • Methyl prostaglandin F2-alpha • Magnesium sulphate • Calcium gluconate	• Lecture cum Discussion • Drug study/ presentation	• Short answer • Objective type
VI	10 (T)	Describe drugs used in deaddiction, emergency, poisoning, vitamins & minerals supplementation, drugs used for immunization & immune-suppression & nurse's responsibilities	**Miscellaneous** • Drugs used for deaddiction • Drugs used in CPR and emergency- adrenaline, Chlorpheniramine, hydrocortisone, Dexamethasone • IV fluids & electrolytes replacement • Common poisons, drugs used for treatment of poisoning ○ Activated charcoal	• Lecture cum Discussion • Drug study/ presentation	• Short answer • Objective type

Unit	Time (Hrs)	Learning Outcomes	Content	Teaching/ Learning Activities	Assessment Methods
			○ Ipecac ○ Antidotes, ○ Anti-snake venom (ASV) • Vitamins and minerals supplementation • Vaccines & sera (Universal immunization program schedules) • Anticancer drugs: Chemotherapeutic drugs commonly used • Immuno-suppressants and Immunostimulants		
VII	4 (T)	Demonstrate awareness of common drugs used in alternative system of medicine	**Introduction to drugs used in alternative systems of medicine** • Ayurveda, Homeopathy, Unani and Siddha etc. • Drugs used for common ailments	• Lecture cum Discussion • Observational visit	• Short answer • Objective type
VIII	20 (T)	Demonstrate understanding about fundamental principles of prescribing	**Fundamental principles of prescribing** • Prescriptive role of nurse practitioners: Introduction • Legal and ethical issues related to prescribing • Principles of prescribing • Steps of prescribing • Prescribing competencies	• Completion of module on Fundamental principles of prescribing	• Short answer • Assignments evaluation

PATHOLOGY - II AND GENETICS

PLACEMENT: IV SEMESTER

THEORY: 1 Credit (20 hours) (Includes lab hours also)

DESCRIPTION: This course is designed to enable students to acquire knowledge of pathology of various disease conditions, understanding of genetics, its role in causation and management of defects and diseases and to apply this knowledge in practice of nursing.

COMPETENCIES: On completion of the course, the students will be able to

1. Apply the knowledge of pathology in understanding the deviations from normal to abnormal pathology
2. Rationalize the various laboratory investigations in diagnosing pathological disorders
3. Demonstrate the understanding of the methods of collection of blood, body cavity fluids, urine and feces for various tests
4. Apply the knowledge of genetics in understanding the various pathological disorders
5. Appreciate the various manifestations in patients with diagnosed genetic abnormalities
6. Rationalize the specific diagnostic tests in the detection of genetic abnormalities.
7. Demonstrate the understanding of various services related to genetics.

COURSE OUTLINE

T – Theory

Unit	Time (Hrs)	Learning Outcomes	Content	Teaching/ Learning Activities	Assessment Methods
I	5 (T)	Explain pathological changes in disease conditions of various systems	**Special Pathology:** **Pathological changes in disease conditions of selected systems** **1. Kidneys and Urinary tract** • Glomerulonephritis • Pyelonephritis • Renal calculi • Cystitis • Renal Cell Carcinoma • Renal Failure (Acute and Chronic) **2. Male genital systems** • Cryptorchidism • Testicular atrophy • Prostatic hyperplasia • Carcinoma penis and Prostate. **3. Female genital system** • Carcinoma cervix • Carcinoma of endometrium • Uterine fibroids • Vesicular mole and Choriocarcinoma • Ovarian cyst and tumors **4. Breast** • Fibrocystic changes • Fibroadenoma • Carcinoma of the Breast **5. Central nervous system** • Meningitis. • Encephalitis • Stroke • Tumors of CNS	• Lecture • Discussion • Explain using slides, X-rays and scans • Visit to pathology lab, endoscopy unit and OT	• Short answer • Objective type
II	5 (T)	Describe the laboratory tests for examination of body cavity fluids, urine and faeces	**Clinical Pathology** • Examination of body cavity fluids: o Methods of collection and examination of CSF and other body cavity fluids (sputum, wound discharge) specimen for various clinical pathology, biochemistry and microbiology tests	• Lecture • Discussion • Visit to clinical lab and biochemistry lab	• Short answer • Objective type

Unit	Time (Hrs)	Learning Outcomes	Content	Teaching/ Learning Activities	Assessment Methods

			• Analysis of semen:
			  ○ Sperm count, motility and morphology and their importance in infertility
			• Urine:
			  ○ Physical characteristics, Analysis, Culture and Sensitivity
			• Faeces:
			  ○ Characteristics
			  ○ Stool examination: Occult blood, Ova, Parasite and Cyst, Reducing substance etc.
			  ○ Methods and collection of urine and faeces for various tests		

GENETICS

COURSE OUTLINE

T – Theory

Unit	Time (Hrs)	Learning Outcomes	Content	Teaching/ Learning Activities	Assessment Methods
I	2 (T)	Explain nature, principles and perspectives of heredity	**Introduction:** • Practical application of genetics in nursing • Impact of genetic condition on families • Review of cellular division: mitosis and meiosis • Characteristics and structure of genes • Chromosomes: sex determination • Chromosomal aberrations • Patterns of inheritance • Mendelian theory of inheritance • Multiple allots and blood groups • Sex linked inheritance • Mechanism of inheritance • Errors in transmission (mutation)	• Lecture • Discussion • Explain using slides	• Short answer • Objective type
II	2 (T)	Explain maternal, prenatal and genetic influences on development of defects and diseases	**Maternal, prenatal and genetic influences on development of defects and diseases** • Conditions affecting the mother: genetic and infections • Consanguinity atopy • Prenatal nutrition and food allergies • Maternal age	• Lecture • Discussion • Explain using slides	• Short answer • Objective type

Unit	Time (Hrs)	Learning Outcomes	Content	Teaching/ Learning Activities	Assessment Methods
			• Maternal drug therapy • Prenatal testing and diagnosis • Effect of Radiation, drugs and chemicals • Infertility • Spontaneous abortion • Neural Tube Defects and the role of folic acid in lowering the risks • Down syndrome (Trisomy 21)		
III	2 (T)	Explain the screening methods for genetic defects and diseases in neonates and children	**Genetic testing in the neonates and children** • Screening for o Congenital abnormalities o Developmental delay o Dysmorphism	• Lecture • Discussion • Explain using slides	• Short answer • Objective type
IV	2 (T)	Identify genetic disorders in adolescents and adults	**Genetic conditions of adolescents and adults** • Cancer genetics: Familial cancer • Inborn errors of metabolism • Blood group alleles and hematological disorder • Genetic haemochromatosis • Huntington‘s disease • Mental illness	• Lecture • Discussion • Explain using slides	• Short answer • Objective type
V	2 (T)	Describe the role of nurse in genetic services and counselling	**Services related to genetics** • Genetic testing • Gene therapy • Genetic counseling • Legal and Ethical issues • Role of nurse	• Lecture • Discussion	• Short answer • Objective type

ADULT HEALTH NURSING - II WITH INTEGRATED PATHOPHYSIOLOGY including Geriatric Nursing AND PALLIATIVE CARE MODULE

PLACEMENT: IV SEMESTER

THEORY: 7 Credits (140 hours)

PRACTICUM: Lab/Skill Lab (SL): 1 Credit (40 hours) Clinical: 6 Credits (480 hours)

DESCRIPTION: This course is designed to equip the students to review and apply their knowledge of Anatomy, Physiology, Biochemistry and Behavioral sciences in caring for adult patients with Medical/Surgical disorders using nursing process approach. It also intends to develop competencies required for assessment, diagnosis, treatment, nursing management, and supportive/palliative and rehabilitative care to adult patients with various Medical Surgical disorders.

COMPETENCIES: On completion of the course the students will apply nursing process and critical thinking in delivering holistic nursing care with selected Medical and Surgical conditions.

At the completion of Adult Health Nursing II course, students will

1. Explain the etiology, pathophysiology, manifestations, diagnostic studies, treatments and complications of selected common medical and surgical disorders.
2. Perform complete health assessment to establish a data base for providing quality patient care and integrate the knowledge of diagnostic tests in the process of data collection.
3. Identify diagnoses, list them according to priority and formulate nursing care plan.
4. Perform nursing procedures skillfully and apply scientific principles while giving comprehensive nursing care to patients.
5. Integrate knowledge of anatomy, physiology, pathology, nutrition and pharmacology in caring for patients experiencing various medical and surgical disorders.
6. Identify common diagnostic measures related to the health problems with emphasis on nursing assessment and responsibilities.
7. Demonstrate skill in assisting/performing diagnostic and therapeutic procedures.
8. Demonstrate competencies/skills to patients undergoing treatment for medical surgical disorders.
9. Identify the drugs used in treating patients with selected medical surgical conditions.
10. Plan and provide relevant individual and group education on significant medical surgical topics.
11. Maintain safe environment for patients and the health care personnel in the hospital.

COURSE OUTLINE

T – Theory, L/SL – Lab/Skill Lab

Unit	Time (Hrs)	Learning Outcomes	Content	Teaching/ Learning Activities	Assessment Methods
I	12 (T) 4 (SL)	Explain the etiology, pathophysiology, clinical manifestations, diagnostic measures and medical, surgical, nutritional and nursing management of patients with ENT disorders	**Nursing management of patient with disorders of Ear, Nose and Throat** (Includes etiology, pathophysiology, clinical manifestations, diagnostic measures and medical, surgical, nutritional and nursing management) • Review of anatomy and physiology of the ear, nose and throat • History, physical assessment, and diagnostic tests • **Ear** o External ear: deformities otalgia, foreign bodies and tumors o Middle ear: impacted wax, tympanic, membrane perforation, otitis media, and tumors o Inner ear: Meniere‘s disease, labyrinthitis, ototoxicity tumors • Upper respiratory airway infections: Rhinitis, sinusitis, tonsillitis, laryngitis • Epistaxis, Nasal obstruction, laryngeal obstruction • Deafness and its management	• Lecture and discussion • Demonstration of hearing aids, nasal packing, medication administration • Visit to audiology and speech clinic	• MCQ • Short answer • Essay • OSCE • Assessment of skill (using checklist) • Quiz • Drug book

Unit	Time (Hrs)	Learning Outcomes	Content	Teaching/ Learning Activities	Assessment Methods
II	12 (T) 4 (SL)	Explain the etiology, pathophysiology, clinical manifestations, diagnostic measures and management of patients with disorders of eye Describe eye donation, banking and transplantation	**Nursing management of patient with disorder of eye** • Review of anatomy and physiology of the eye • History, physical assessment, diagnostic assessment **Eye Disorders** • Refractive errors • Eyelids: infection, deformities • Conjunctiva: inflammation and infection bleeding • Cornea: inflammation and infection • Lens: cataract • Glaucoma • Retinal detachment • Blindness • Eye donation, banking and transplantation	• Lecture and discussion • Demonstration of visual aids, lens, medication administration • Visit to eye bank	• MCQ • Short Essay • OSCE • Drug book
III	15 (T) 4 (L/SL)	Explain the etiology, pathophysiology, clinical manifestations, diagnostic tests, and medical, surgical, nutritional, and nursing management of Kidney and urinary system disorders Demonstrate skill in genitourinary assessment Prepare patient for genitourinary investigations Prepare and provide health education on prevention of renal calculi	**Nursing management of patient with Kidney and Urinary problems** • Review of Anatomy and physiology of the genitourinary system • History, physical assessment, diagnostic tests • Urinary tract infections: acute, chronic, lower, upper • Nephritis, nephrotic syndrome • Renal calculi • Acute and chronic renal failure • Disorders of ureter, urinary bladder and Urethra • Disorders of prostate: inflammation, infection, stricture, obstruction, and Benign Prostate Hypertrophy	• Lecture cum Discussion • Demonstration • Case Discussion • Health education • Drug book • Field visit – Visits hemodialysis unit	• MCQ • Short Note • Long essay • Case report • Submits health teaching on prevention of urinary calculi
IV	6 (T)	Explain the etiology, pathophysiology, clinical manifestations, diagnostic tests, and medical, surgical, nutritional, and nursing management of male reproductive disorders	**Nursing management of disorders of male reproductive system** • Review of Anatomy and physiology of the male reproductive system • History, Physical Assessment, Diagnostic tests • Infections of testis, penis and adjacent structures: Phimosis, Epididymitis, and	• Lecture, Discussion • Case Discussion • Health education	• Short essay

Unit	Time (Hrs)	Learning Outcomes	Content	Teaching/ Learning Activities	Assessment Methods
			Orchitis • Sexual dysfunction, infertility, contraception • Male Breast Disorders: gynecomastia, tumor, climacteric changes		
V	10 (T) 4 (SL)	Explain the etiology, pathophysiology, clinical manifestations, types, diagnostic measures and management of patients with disorders of burns/cosmetic surgeries and its significance	**Nursing management of patient with burns, reconstructive and cosmetic surgery** • Review of anatomy and physiology of the skin and connective tissues • History, physical assessment, assessment of burns and fluid & electrolyte loss • Burns • Reconstructive and cosmetic surgery for burns, congenital deformities, injuries and cosmetic purposes, gender reassignment • Legal and ethical aspects • Special therapies: LAD, vacuumed dressing. Laser, liposuction, skin health rejuvenation, use of derma filters	• Lecture and discussion • Demonstration of burn wound assessment, vacuum dressing and fluid calculations • Visit to burn rehabilitation centers	• OSCE • Short notes
VI	16 (T) 4 (L/SL)	Explain the etiology, pathophysiology, clinical manifestations, diagnostic measures and management of patients with neurological disorders	**Nursing management of patient with neurological disorders** • Review of anatomy and physiology of the neurological system • History, physical and neurological assessment, diagnostic tests • Headache, Head injuries • Spinal injuries: Paraplegia, Hemiplegia, Quadriplegia • Spinal cord compression: herniation of in vertebral disc • Intra cranial and cerebral aneurysms • Meningitis, encephalitis, brain, abscess, neuro-cysticercosis • Movement disorders: Chorea, Seizures & Epilepsies • Cerebrovascular disorders: CVA • Cranial, spinal neuropathies: Bell‘s palsy, trigeminal neuralgia • Peripheral Neuropathies • Degenerative diseases: Alzheimer‘s disease, Parkinson‘s disease • *Guillain-Barré syndrome*, Myasthenia gravis & Multiple sclerosis	• Lecture and discussion • Demonstration of physiotherapy, neuro assessment, tracheostomy care • Visit to rehabilitation center, long term care clinics, EEG, NCV study unit,	• OSCE • Short notes • Essay • Drug book

Unit	Time (Hrs)	Learning Outcomes	Content	Teaching/ Learning Activities	Assessment Methods
			• Rehabilitation of patient with neurological deficit		
VII	12 (T) 4 (L/SL)	Explain the etiology, pathophysiology, clinical manifestations, diagnostic tests, and medical, surgical, nutritional, and nursing management of immunological disorders Prepare and provides health education on prevention of HIV infection and rehabilitation Describe the national infection control programs	**Nursing management of patients with Immunological problems** • Review of Immune system • Nursing Assessment: History and Physical assessment • HIV & AIDS: Epidemiology, Transmission, Prevention of Transmission and management of HIV/AIDS • Role of Nurse; Counseling, Health education and home care consideration and rehabilitation • National AIDS Control Program – NACO, various national and international agencies for infection control	• Lecture, discussion • Case Discussion/ seminar • Refer Module on HIV/AIDS	
VIII	12 (T) 4 (L/SL)	Explain the etiology, pathophysiology, types, clinical manifestations, staging, diagnostic measures and management of patients with different cancer, treatment modalities including newer treatments	**Nursing management of patient with Oncological conditions** • Structure and characteristics of normal and cancer cells • History, physically assessment, diagnostic tests • Prevention screening early detections warning sign of cancer • Epidemiology, etiology classification, Pathophysiology, staging clinical manifestations, diagnosis, treatment modalities and medical and surgical nursing management of Oncological condition • Common malignancies of various body system eye, ear, nose, larynx, breast, cervix, ovary, uterus, sarcoma, renal, bladder, kidney, prostate Brain, Spinal cord. • Oncological emergencies • Modalities of treatment: Chemotherapy, Radiotherapy: Radiation safety, AERB regulations, Surgical intervention, Stem cell and bone marrow transplant, Immunotherapy, Gene therapy • Psychological aspects of cancer: anxiety, depression, insomnia, anger • Supportive care • Hospice care	• Lecture and discussion • Demonstration of chemotherapy preparation and administration • Visit to BMT, radiotherapy units (linear accelerator, brachytherapy, etc.), nuclear medicine unit • Completion of palliative care	• OSCE • Essay • Quiz • Drug book • Counseling, health teaching

Unit	Time (Hrs)	Learning Outcomes	Content	Teaching/ Learning Activities	Assessment Methods
				module during clinical hours (20 hours)	
IX	15 (T) 4 (L/SL)	Explain the types, policies, guidelines, prevention and management of disaster and the etiology, pathophysiology, clinical manifestations, diagnostic measures and management of patients with acute emergencies	**Nursing management of patient in Emergency and Disaster situations** **Disaster Nursing** • Concept and principles of disaster nursing, Related Policies • Types of disaster: Natural and manmade • Disaster preparedness: Team, guidelines, protocols, equipment, resources • Etiology, classification, Pathophysiology, staging, clinical manifestation, diagnosis, treatment modalities and medical and surgical nursing management of patient with medical and surgical emergencies – Poly trauma, Bites, Poisoning and Thermal emergencies • Principles of emergency management • Medico legal aspects	• Lecture and discussion • Demonstration of disaster preparedness (Mock drill) and triaging • Filed visit to local disaster management centers or demo by fire extinguishers • Group presentation (role play, skit, concept mapping) on different emergency care • **Refer Trauma care management/ ATCN module** • Guided reading on National Disaster Management Authority (NDMA) guidelines	• OSCE • Case presentations and case study
X	10 (T)	Explain the Concept, physiological changes, and psychosocial problems of ageing Describe the nursing management of the elderly	**Nursing care of the elderly** • History and physical assessment • Aging process and age-related body changes and psychosocial aspects • Stress and coping in elder patient • Psychosocial and sexual abuse of elderly • Role of family and formal and non-formal caregivers • Use of aids and prosthesis (hearing aids, dentures) • Legal and ethical issues • National programs for elderly, privileges, community programs and health services • Home and institutional care	• Lecture and discussion • Demonstration of communication with visual and hearing impaired • Field visit to old age homes	• OSCE • Case presentations • Assignment on family systems of India focusing on geriatric population
XI	15 (T) 8 (L/SL)	Explain the etiology, pathophysiology, clinical manifestations, diagnostic measures and management of patients in critical care units	**Nursing management of patients in critical Care units** • Principles of critical care nursing • Organization: physical set-up, policies, staffing norms • Protocols, equipment and supplies	• Lecture and discussion • Demonstration on the use of mechanical ventilators, cardiac monitors etc. • Clinical practice in	• Objective type • Short notes • Case presentations • Assessment of skill on monitoring of

Unit	Time (Hrs)	Learning Outcomes	Content	Teaching/ Learning Activities	Assessment Methods
			• Use and application of critical care biomedical equipment: ventilators, cardiac monitors, defibrillators, infusion pump, Resuscitation equipment and any other • Advanced Cardiac Life support • Nursing management of critically ill patient • Transitional care • Ethical and Legal Aspects • Breaking Bad News to Patients and/or their families: Communication with patient and family • End of life care	different ICUs	patients in ICU. • Written assignment on ethical and legal issues in critical care
XII	5 (T)	Describe the etiology, pathophysiology, clinical manifestations, diagnostic measures and management of patients with occupational/ industrial health disorders	**Nursing management of patients occupational and industrial disorders** • History, physical examination, Diagnostic tests • Occupational diseases and management	• Lecture and discussion • Industrial visit	• Assignment on industrial health hazards

CLINICAL PRACTICUM

CLINICAL PRACTICUM: 6 Credits (480 Hours) – **20 weeks × 24 hours**

PRACTICE COMPETENCIES: On completion of the clinical practicum, the students will develop proficiency in applying nursing process and critical thinking in rendering holistic nursing care including rehabilitation to the adult/geriatric patients admitted in Critical Care Units, undergoing cosmetic and reconstructive surgery and with selected medical & surgical disorders of ear, nose, throat, eye, Genitourinary, reproductive, immunologic, nervous systems and in emergency/disaster conditions.

The students will be competent to

1. Utilize the nursing process in providing care to the sick adults in the hospital
    a. Perform complete health assessment to establish a data base for providing quality patient care.
    b. Integrate the knowledge of diagnostic tests in patient assignment.
    c. Identify nursing diagnoses and list them according to priority.
    d. Formulate nursing care plan, using problem solving approach.
    e. Apply scientific principles while giving nursing care to patients.
    f. Develop skill in performing nursing procedures applying scientific principle.
    g. Establish/develop interpersonal relationship with patients and family members.
    h. Evaluate the expected outcomes and modify the plan according to the patient needs.
2. Provide comfort and safety to adult patients in the hospital.
3. Maintain safe environment for patients during hospitalization.
4. Explain nursing actions appropriately to the patients and family members.
5. Ensure patient safety while providing nursing procedures.
6. Assess the educational needs of the patient and their family related to medical and surgical disorders and provide appropriate health education to patients.

7. Provide pre, intra and post-operative care to patients undergoing surgery.
8. Integrate knowledge of pathology, nutrition and pharmacology for patients experiencing selected medical and surgical disorders.
9. Integrate evidence-based information while giving nursing care to patients.
10. Demonstrate the awareness of legal and ethical issues in nursing practice.

I. Nursing Management of Patients with ENT Disorders

A. Skill Lab

Use of manikins and simulators

- Tracheostomy care
- Instilling Ear and Nasal medications
- Bandage application

B. Clinical Postings

Clinical area/unit	Duration (weeks)	Learning Outcomes	Procedural Competencies/ Clinical Skills	Clinical Requirements	Assessment Methods
ENT Ward and OPD	2	Provide care to patients with ENT disorders Educate the patients and their families	• Examination of ear, nose, throat and History taking • Applying bandages to Ear, Nose • Tracheostomy care • Preparation of patient, assisting and monitoring of patients undergoing diagnostic procedures ○ Auditory screening tests ○ **Audiometric tests** • Preparing the patient and assisting in special procedures like Anterior/ posterior nasal packing, Ear Packing and Syringing • Preparation and after care of patients undergoing ENT surgical procedures • Instillation of drops/medication	• ENT assessment –1 • Case study/ Clinical presentation – 1	• Clinical evaluation • OSCE • Case report study/ Clinical presentation

II. Nursing Management of Patients with Eye Conditions

A. Skill Lab

Use of manikins and simulators

- Instilling Eye medications
- Eye irrigation
- Eye bandage

B. Clinical Postings

Clinical area/unit	Duration (weeks)	Learning Outcomes	Procedural Competencies/ Clinical Skills	Clinical Requirements	Assessment Methods
Ophthalmology unit	2	Develop skill in providing care to patients with Eye disorders Educate the patients and	• History taking, Examination of eyes and interpretation • Assisting procedures ○ Visual acuity ○ Fundoscopy, retinoscopy, ophthalmoscopy, tonometry, ○ Refraction tests	• Eye assessment – 1 • Health teaching • Case study/ Clinical Presentation– 1	• Clinical evaluation • OSCE • Clinical presentation

		their families	• Pre and post-operative care • Instillation of drops/ medication • Eye irrigation • Application of eye bandage • Assisting with foreign body removal		

III. Nursing Management of Patients with Kidney and Urinary System Disorders

A. Skill Lab

Use of manikins and simulators

- Assessment: kidney & urinary system
- Preparation: dialysis
- Catheterization and care

B. Clinical Postings

Clinical area/unit	Duration (weeks)	Learning Outcomes	Procedural Competencies/ Clinical Skills	Clinical Requirements	Assessment Methods
Renal ward/ nephrology ward including Dialysis unit	2	Develop skill in Management of patients with urinary, male reproductive problems	• Assessment of kidney and urinary system o History taking o Physical examination o Testicular self-examination o digital rectal exam • Preparation and assisting with diagnostic and therapeutic procedures o Cystoscopy, Cystometrogram, o Contrast studies: IVP etc. o Peritoneal dialysis o Hemodialysis, o Lithotripsy o Specific tests: Semen analysis, gonorreoea test, Renal/ Prostate Biopsy etc. • Catheterization: care • Bladder irrigation • I/O recording and monitoring • Ambulation and exercise	• Assessment – 1 • Drug presentation – 1 • Care study/ Clinical presentation – 1 • Preparing and assisting in hemodialysis	• Clinical evaluation • Care plan • OSCE • Quiz • Drug presentation

IV. Nursing Management of Patients with Burns and Reconstructive Surgery

A. Skill Lab

Use of manikins and simulators

- Assessment of burns wound
- Wound dressing

B. Clinical Postings

Clinical area/unit	Duration (weeks)	Learning Outcomes	Procedural Competencies/ Clinical Skills	Clinical Requirements	Assessment Methods
Burns unit/ reconstructive surgical unit	2	Develop skill in burns assessment and providing care to patients with different types of burns Develop skill in providing care to patients with different types of cosmetic and reconstructive surgeries	• Assessment of burns • First aid of burns • Fluid & electrolyte replacement therapy • Skin care • Care of Burn wounds – Bathing – Dressing • Pre-operative and post-operative care of patients • Caring of skin graft and post cosmetic surgery • Rehabilitation	• burn wound assessment – 1 • care study/case presentation – 1	• Clinical evaluation, • Care study/case report

V. Nursing Management of Patients with neurological disorders

A. Skill Lab

Use of manikins and simulators

- Range of motion exercises
- Muscle strengthening exercises
- Crutch walking

B. Clinical Postings

Clinical area/unit	Duration (weeks)	Learning Outcomes	Procedural Competencies/ Clinical Skills	Clinical Requirements	Assessment Methods
Neurology-medical/ Surgery wards	3	Develop skill in Management of patients with Neurological problems	• History taking; Neurological Examination • Patient monitoring • Prepare and assist for various invasive and non-invasive diagnostic procedures • Range of motion exercises, muscle strengthening • Care of medical, surgical and rehabilitative patients	• euro- assessment –1 • Case study/ case presentation – 1 • Drug presentation – 1	• Clinical evaluation • Neuro assessment • OSCE • Case report/ presentations

VI. Nursing Management of Patients with Immunological Disorders

A. Skill Lab

- Barrier Nursing
- Reverse Barrier Nursing

B. Clinical Postings

Clinical area/unit	Duration (weeks)	Learning Outcomes	Procedural Competencies/ Clinical Skills	Clinical Requirements	Assessment Methods
Isolation ward/ Medical ward	1	Develop skill in the Management of patients with immunological disorders	• History taking • Immunological status assessment (e.g. HIV) and Interpretation of specific tests • Caring of patients with low immunity • Practicing of standard safety measures, precautions/barrier nursing/reverse barrier/isolation skills	• Assessment of immune status • Teaching of isolation to patient and family care givers • Nutritional management • Care Note – 1	• Care note • Quiz • Health Teaching

VII. Nursing Management of Patients with disorders of Oncological conditions

A. Skill Lab

Use of manikins and simulators

- Application of topical medication
- Administration of chemotherapy

B. Clinical Postings

Clinical area/unit	Duration (weeks)	Learning Outcomes	Procedural Competencies/ Clinical Skills	Clinical Requirements	Assessment Methods
Oncology wards (including day care radiotherapy unit)	3	Develop skill in providing care to patients with oncological disorders	• History taking & physical examination of cancer patients • Screening for common cancers: TNM classification • Preparation, assisting and after care patients undergoing diagnostic procedures – Biopsies/FNAC – Pap smear – Bone-marrow aspiration • Various modalities of treatment – Chemotherapy – Radiotherapy – Pain management – Stoma therapy – Hormonal therapy – Immuno therapy – Gene therapy – Alternative therapy • Stoma care and feeding • Caring of patients treated with nuclear medicine • Rehabilitation	• Assessment – 1 • Care study/ clinical presentation – 1 • Pre and post-operative care of patient with various modes of cancer treatment • Teaching on BSE to family members • Visit to palliative care unit	• Clinical evaluation • Care study • Quiz • Drug book

VIII. Nursing Management of Patients in emergency conditions

A. Skill Lab

Use of manikins and simulators

- Assessment: primary and secondary survey
- Trauma care: bandaging, wound care, splinting, positions

B. Clinical Postings

Clinical area/unit	Duration (weeks)	Learning Outcomes	Procedural Competencies/ Clinical Skills	Clinical Requirements	Assessment Methods
Emergency room/ Emergency unit	2	Develop skill in providing care to patients with emergency health problems	• Practicing ‗triage' • Primary and secondary survey in emergency • Examination, investigations & their interpretations, in emergency & disaster situations • Emergency care of medical and traumatic injury patients • Documentations, assisting in legal procedures in emergency unit • Managing crowd • Counseling the patient and family in dealing with grieving & bereavement	• Triage • Immediate care • Use of emergency trolley	• Clinical evaluation • Quiz

IX. Nursing Management of geriatric patients

A. Skill Lab

Use of manikins and simulators

- **Use of assistive safety devices**

B. Clinical Postings

Clinical area/unit	Duration (weeks)	Learning Outcomes	Procedural Competencies/ Clinical Skills	Clinical Requirements	Assessment Methods
Geriatric ward	1	Develops skill in geriatric assessment and providing care to patients with geriatric illness	• History taking and assessment of Geriatric patient	• Geriatric assessment – 1 • Care of normal and geriatric patient with illness • Fall risk assessment – 1 • Functional status assessment – 1	• Clinical evaluation • Care plan

X. Nursing Management of Patients in critical care units

A. Skill Lab

Use of manikins and simulators

- Assessment critically ill
- ET tube set up –suction
- TT suction
- Ventilator set up
- Chest drainage
- Bag mask ventilation

- Central & Peripheral line
- Pacemaker

B. Clinical Postings

Clinical area/unit	Duration (weeks)	Learning Outcomes	Procedural Competencies/ Clinical Skills	Clinical Requirements	Assessment Methods
Critical Care Unit	2	Develop skill in assessment of critically ill and providing care to patients with critical health conditions	• Assessment of critically ill patients • Assisting in arterial puncture, ET tube intubation & extubation • ABG analysis & interpretation - respiratory acidosis, respiratory alkalosis, metabolic acidosis, metabolic alkalosis • Setting up of Ventilator modes and settings and care of patient on a ventilator • Set up of trolley with instruments • Monitoring and maintenance of Chest drainage system • Bag and mask ventilation • Assisting and maintenance of Central and peripheral lines invasive • Setting up of infusion pump, defibrillator, • Drug administration-infusion, intracardic, intrathecal, epidural, • Monitoring pacemaker • ICU care bundle • Management of the dying patient in the ICU	• Hemodynamic monitoring • Different scales used in ICU • Communicating with critically ill patients	• Clinical evaluation • OSCE • RASS scale assessment • Use of VAE bundle VAP, CAUTI, BSI • Case Presentation

PROFESSIONALISM, PROFESSIONAL VALUES & ETHICS INCLUDING BIOETHICS

PLACEMENT: IV SEMESTER

THEORY: 1 Credit (20 hours)

DESCRIPTION: This course is designed to help students to develop an understanding of professionalism and demonstrate professional behavior in their workplace with ethics and professional values. Further the students will be able to identify ethical issues in nursing practice and participate effectively in ethical decision making along with health team members.

COMPETENCIES: On completion of this course, the students will be able to

1. Describe profession and professionalism.
2. Identify the challenges of professionalism.
3. Maintain respectful communication and relationship with other health team members, patients and society.
4. Demonstrate professional conduct.
5. Describe various regulatory bodies and professional organizations related to nursing.
6. Discuss the importance of professional values in patient care.
7. Explain the professional values and demonstrate appropriate professional values in nursing practice.
8. Demonstrate and reflect on the role and responsibilities in providing compassionate care in the healthcare setting.
9. Demonstrate respect, human dignity and privacy and confidentiality to self, patients and their caregivers and other health team members.
10. Advocate for patients‘ wellbeing, professional growth and advancing the profession.
11. Identify ethical and bioethical concerns, issues and dilemmas in nursing and healthcare.
12. Apply knowledge of ethics and bioethics in ethical decision making along with health team members.
13. Protect and respect patient‘s rights.

COURSE OUTLINE

T – Theory

Unit	Time (Hrs)	Learning Outcomes	Content	Teaching/ Learning Activities	Assessment Methods
I	5 (T)	Discuss nursing as a profession Describe the concepts and attributes of professionalism Identify the challenges of professionalism Maintain respectful communication and relationship with other health team members, patients and society Demonstrate professional conduct Respect and maintain professional boundaries between patients, colleagues and society Describe the roles and responsibilities of regulatory bodies and professional organizations	**PROFESSIONALISM** **Profession** • Definition of profession • Criteria of a profession • Nursing as a profession **Professionalism** • Definition and characteristics of professionalism • Concepts, attributes and indicators of professionalism • *Challenges of professionalism* ○ Personal identity vs professional identity ○ Preservation of self-integrity: threat to integrity, Deceiving patient: withholding information and falsifying records ○ Communication & Relationship with team members: Respectful and open communication and relationship pertaining to relevant interests for ethical decision making ○ Relationship with patients and society **Professional Conduct** • Following ethical principles • Adhering to policies, rules and regulation of the institutions • Professional etiquettes and behaviours • Professional grooming: Uniform, Dress code • Professional boundaries: Professional relationship with the patients, caregivers and team members **Regulatory Bodies & Professional Organizations: Roles & Responsibilities** • *Regulatory bodies***:** Indian Nursing Council, State Nursing Council • *Professional Organizations:* Trained Nurses Association of India (TNAI), Student Nurses Association (SNA), Nurses League of Christian Medical Association of India, International Council of Nurses (ICN) and International Confederation of Midwives	• Lecture cum Discussion • Debate • Role play • Case based discussion • Lecture cum Discussion • Visit to INC, SNC, TNAI	• Short answer • Essay • Objective type • Visit reports

Unit	Time (Hrs)	Learning Outcomes	Content	Teaching/ Learning Activities	Assessment Methods
II	5 (T)	Discuss the importance of professional values Distinguish between personal values and professional values Demonstrate appropriate professional values in nursing practice	**PROFESSIONAL VALUES** • Values: Definition and characteristics of values • Value clarification • Personal and professional values • Professional socialization: Integration of professional values with personal values **Professional values in nursing** • Importance of professional values in nursing and health care • Caring: definition, and process • Compassion: Sympathy Vs empathy, Altruism • Conscientiousness • Dedication/devotion to work • Respect for the person- Human dignity • Privacy and confidentiality: Incidental disclosure • Honesty and integrity: Truth telling • Trust and credibility: Fidelity, Loyalty • Advocacy: Advocacy for patients, work environment, nursing education and practice, and for advancing the profession	• Lecture cum Discussion • Value clarification exercise • Interactive learning • Story telling • Sharing experiences • Scenario based discussion	• Short answer • Essay • Assessment of student's behavior with patients and families
III	10 (T)	Define ethics & bioethics Explain ethical principles Identify ethical concerns Ethical issues and dilemmas in health care	**ETHICS & BIOETHICS** **Definitions: Ethics, Bioethics and Ethical Principles** • Beneficence • Non-maleficence: Patient safety, protecting patient from harm, Reporting errors • Justice: Treating each person as equal • Care without discrimination, equitable access to care and safety of the public • Autonomy: Respects patients' autonomy, Self-determination, Freedom of choice **Ethical issues and ethical dilemma**: **Common ethical problems** • Conflict of interest • Paternalism • Deception • Privacy and confidentiality	• Lecture cum discussion • Group discussion with examples • Flipping/ self-directed learning • Role play • Story telling • Sharing experiences • Case based Clinical discussion • Role modeling • Group exercise on ethical decision-making following steps on a given scenario • Assignment	• Short answer • Essay • Quiz • Reflective diary • Case report • Attitude test • Assessment of assignment

Unit	Time (Hrs)	Learning Outcomes	Content	Teaching/ Learning Activities	Assessment Methods
			• Valid consent and refusal • Allocation of scarce nursing resources • Conflicts concerning new technologies • Whistle-blowing • *Beginning of life issues* o Abortion o Substance abuse o Fetal therapy o Selective deduction o Intrauterine treatment of fetal conditions o Mandated contraception o Fetal injury o Infertility treatment • *End of life issues* o End of life o Euthanasia o Do Not Resuscitate (DNR) • *Issues related to psychiatric care* o Non compliance o Restrain and seclusion o Refuse to take food		
		Explain process of ethical decision making and apply knowledge of ethics and bioethics in making ethical decisions			
		Explain code of ethics stipulated by ICN and INC			

Unit	Time (Hrs)	Learning Outcomes	Content	Teaching/ Learning Activities	Assessment Methods
		Discuss the rights of the patients and families to make decisions about health care Protect and respect patients‘ rights	**Process of ethical decision making** • Assess the situation (collect information) • Identify the ethical problem • Identify the alternative decisions • Choose the solution to the ethical decision • Implement the decision • Evaluate the decision **Ethics committee: Roles and responsibilities** • Clinical decision making • Research **Code of Ethics** • International Council of Nurses (ICN) • Indian Nursing Council **Patients' Bill of Rights-17 patients' rights (MoH&FW, GoI)** 1. Right to emergency medical care 2. Right to safety and quality care according to standards 3. Right to preserve dignity 4. Right to nondiscrimination 5. Right to privacy and confidentiality 6. Right to information 7. Right to records and reports 8. Right to informed consent 9. Right to second opinion 10. Right to patient education 11. Right to choose alternative treatment options if available 12. Right to choose source for obtaining medicines or tests 13. Right to proper referral and transfer, which is free from perverse commercial influences 14. Right to take discharge of patient or receive body of deceased from hospital 15. Right to information on the rates to be charged by the hospital for each type of service provided and facilities available on a prominent display board and a brochure 16. Right to protection for patients involved in clinical trials, biomedical and health research 17. Right to be heard and seek redressal		