

Subject Code: N-AHN(I)215	Subject Title: - Adult Health Nursing-I with Integrated Pathophysiology including BCLS module
Pre-requisite	-----NA-----

Teaching Scheme (Total Hours)				ASSESSMENT (Marks)					
Theory Credit	Theory lab /credit hours	Lab/clinical skill credit hours	Clinical Total hours credit	Total	Internal	End semester college exam	End semester University exam	Hours	Total Marks
7	140/1	40/6	480	660	25		75	3	100

**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 a 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 Develop competency in providing pre and postoperative care	• Introduction • Evolution and trends of medical and surgical nursing • International classification of diseases • Roles and responsibility of a nurse in medical and surgical settings ○ Outpatient department ○ In-patient unit ○ Intensive care unit • Introduction to medical and surgical asepsis ○ Inflammation, infection • Wound healing – stages, influencing factors, Wound care and dressing technique • Care of surgical patient • pre-operative • post-operative ○ Alternative therapies used in caring for patients with Medical Surgical Disorders.	• Lecture cum discussion • Demonstration & Practice session • Roleplay • Visit to outpatient department, in patient and intensive care unit	• Short Answer • OSCE
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	• 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	• Lecture cum Discussion • Demonstration, Practice session, and Case Discussion • Visit to receiving bay	• Caring for patient intra operatively • Submittal list of disinfectants used for instruments with the action and precaution

		Demonstrates skill in scrubbing procedures Demonstrates 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	- 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		
III	6 (T) 4 (L/SL)	Identify the signs and symptoms of shock and electrolyte imbalances. Develop skills in managing fluid and electrolyte imbalances Perform pain assessment and plans for the nursing management	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
IV	18 (T) 4 (L)	Demonstrate skill in respiratory assessment Differentiate different breath sounds and list the indications Explain the etiology, pathophysiology, clinical manifestations, diagnostic tests, and medical, surgical, nutritional, and nursing management of common respiratory problems	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: - Upper respiratory tract infections - Chronic obstructive pulmonary diseases - Pleural effusion, Empyema - Bronchiectasis - Pneumonia - Lung abscess	- Lecture, discussion, - Demonstration - Practical session - Case presentation - Visit to PFT Lab	- Essay - Short answer - OSCE

		Describe the health behaviour to be adopted in preventing respiratory illnesses	○ Cyst and tumors ○ Chest Injuries ○ Acute respiratory distress syndrome ○ Pulmonary embolism • Health behaviour to prevent respiratory illness		
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 Demonstrate skill in different feeding techniques	• 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: ○ Oral cavity: lips, gums and teeth ○ GI: Bleeding, Infections, Inflammation, tumors, Obstruction, Perforation & Peritonitis ○ Peptic & duodenal ulcer, ○ Mal-absorption, Appendicitis, • Hernias ○ Hemorrhoids, fissures, Fistulas ○ Pancreas: inflammation, cysts, and tumors ○ Liver: inflammation, cysts, abscess, cirrhosis, portal hypertension, hepatic failure, tumors • Gallbladder: inflammation, Cholelithiasis, tumors • Gastric decompression, gavage and stoma care, different feeding techniques ○ Alternative therapies, drugs used in treatment of disorder of digestive system	• Lecture, Discussion • Demonstration, • Roleplay • Problem Based Learning • Visit to stoma clinic	• Short answer • Quiz • OSCE
VI	20 (T) 5 (L)	Explain the etiology, pathophysiology, clinical manifestations, diagnostic tests, and medical, surgical, nutritional, and nursing management of cardiovascular disorders	• Nursing Management of patients with cardiovascular problems • Review of anatomy and physiology of cardio-vascular system • Nursing Assessment: History and Physical assessment	• Lecture, discussion • Demonstration • Practice session • Case Discussion • Health education • Drug Book/ presentation	• Care plan • Drug record

		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	- 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, cor pulmonale, pulmonary edema, cardiogenic shock, cardiac tamponade - Cardiopulmonary arrest	Completion of BCLS Module	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 Prepare and provide health education on blood donation	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, leucopenia , agranulocytosis - Lymphomas, myelomas	- Field visit to blood bank - Counseling	- Interpretation of blood reports - Visit report
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	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

		assessment of endocrine organ dysfunction Prepare and provide health education on diabetic diet Demonstrate skill in insulin administration			
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 skincare	• 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 Noninfectious • Acne, Allergies, Eczema & Psoriasis • 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. Demonstrate skill in musculoskeletal assessment Prepare patient for radiological and non-radiological	• 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, contusion, amputation • Musculoskeletal infections and tumors: Osteomyelitis, benign and malignant tumour • Orthopedic modalities: Cast, splint, traction, crutch walking	• Lecture/ • Discussion • Demonstration • Case Discussion • Health education	• Nursing care plan • Prepare health teaching on care of patient with cast

		investigation of musculoskeletal system Demonstrates skill in crutch walking and splinting Demonstrates skill in care of patient with replacement surgeries Prepare and provide health education on bone healing	• 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 Demonstrates skill in barrier and reverse barrier techniques Demonstrates 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

Teaching Scheme (Total Hours)				ASSESSMENT (Marks)					
Theory Credit	Theory lab /credit hours	Lab/clinical skill credit hours	Clinical Total hours credit	Total	Internal	Endsemester college exam	Endsemester University exam	Hours	Total Marks
			480	480	50		50		100

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:

- Utilize the nursing process in providing care to the sick adults in the hospital:
 - Perform complete health assessment to establish a database for providing quality patient care.
 - Integrate the knowledge of diagnostic tests in the process of data collection.
 - Identify nursing diagnoses and list them according to priority.
 - Formulate nursing care plan, using problem-solving approach.
 - Apply scientific principles while giving nursing care to patients.
 - Perform nursing procedures skillfully on patients.
 - Establish/develop interpersonal relationship with patients and family members.
 - Evaluate the expected outcomes and modify the plan according to the patient needs.
- Provide comfort and safety to adult patients in the hospital.
- Maintain a safe environment for patients during hospitalization.
- Explain nursing actions appropriately to the patients and family members.
- Ensure patient safety while providing nursing procedures.
- Assess the educational needs of the patient and their family related to medical and surgical disorders and provide appropriate health education to patients.
- Provide pre, intra and post-operative care to patients undergoing surgery.
- Integrate knowledge of pathology, nutrition and pharmacology for patients experiencing various medical and surgical disorders.
- Integrate evidence-based information while giving nursing care to patients.
- 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 Assist with diagnostic procedures Develop skill in the management of patients with Respiratory problems Develop skill in managing patients with metabolic abnormality	• Intravenous therapy ○ IV cannulation ○ IV maintenance and monitoring ○ Administration of IV medication • Care of patient with Centralline • Preparation and assisting and monitoring of patients undergoing diagnostic procedures such as thoracentesis, Abdominal paracentesis <i>Management of patients with respiratory problems</i> • 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	• Care Study-1 • Health education • Clinical presentation/] • Care note)-1	• Clinical evaluation • OSCE • Care Study 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 Develop the skill in wound management	• 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 • Nasogastric aspiration • Gastrostomy/Jejunostomy feeds • Ileostomy/Colostomy care • Surgical dressing • Suture removal • Surgical soak • Sitz bath - Care of drain	• Care study-1 • Health teaching	• Clinical evaluation, OSCE • Care study • Care note/ Clinical presentation

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: ○ Blood grouping/cross matching ○ Blood sugar ○ 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 aftercare of patient with Skin traction/skeletal traction - Care of orthotics - Muscle strengthening exercises - Crutch walking - Rehabilitation	Care Note – 1	- Clinical evaluation, - Care note

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 - Setup of trolley with instrument - Assisting in major and minor operation - Disinfection and sterilization of equipment - Scrubbing procedures – Gowning, masking and gloving - Intraoperative 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

VIII. NURSING MANAGEMENT OF PATIENTS IN THE OPERATING ROOMS

C. Skill Lab

Use of manikins and simulators

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

D. 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 • Setup of trolley with instrument • Assisting in major and minor operation • Disinfection and sterilization of equipment • Scrubbing procedures – Gowning, masking and gloving • Intraoperative 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