B.Sc. Nursing Syllabus

Semester II

Subjects

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Curriculum sources

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Applied Biochemistry

40 hours theory | 2 credits

Course description

The course is designed to assist the students to acquire knowledge of the normal biochemical composition and functioning of human body, its alterations in disease conditions and to apply this knowledge in the practice of nursing.

Learning outcomes

- Describe the metabolism of carbohydrates and its alterations.
- Explain the metabolism of lipids and its alterations.
- Explain the metabolism of proteins and amino acids and its alterations.
- Explain clinical enzymology in various disease conditions.
- Explain acid base balance, imbalance and its clinical significance.
- Describe the metabolism of hemoglobin and its clinical significance.
- Explain different function tests and interpret the findings.
- Illustrate the immunochemistry.

Theory

Unit I

- Carbohydrates
- Digestion, absorption and metabolism of carbohydrates and related disorders
- Regulation of blood glucose
- Diabetes Mellitus - type 1 and type 2, symptoms, complications & management in brief
- Investigations of Diabetes Mellitus
  - OGTT - Indications, Procedure, Interpretation and types of GTT curve
  - Mini GTT, extended GTT, GCT, IV GTT
  - HbA1c (Only definition)
- Hypoglycemia - Definition & causes

Unit II

- Lipids
- Fatty acids - Definition, classification
- Definition & Clinical significance of MUFA & PUFA, Essential fatty acids, Trans fatty acids
- Digestion, absorption & metabolism of lipids & related disorders
- Compounds formed from cholesterol
- Ketone bodies (name, types & significance only)
- Lipoproteins - types & functions (metabolism not required)

- Lipid profile
- Atherosclerosis (in brief)

Unit III

- Proteins
- Classification of amino acids based on nutrition, metabolic rate with examples
- Digestion, absorption & metabolism of protein & related disorders
- Biologically important compounds synthesized from various amino acids (only names)
- In born errors of amino acid metabolism
- only aromatic amino acids (in brief)
- Plasma protein - types, function & normal values
- Causes of proteinuria, hypoproteinemia, hyper-gamma globinemia
- Principle of electrophoresis, normal & abnormal electrophoretic patterns (in
- brief)

Unit IV

- Clinical Enzymology
- Isoenzymes - Definition & properties
- Enzymes of diagnostic importance in
  - Liver Diseases - ALT, AST, ALP, GGT
  - Myocardial infarction - CK, cardiac troponins, AST, LDH
  - Muscle diseases - CK, Aldolase
  - Bone diseases - ALP
  - Prostate cancer - PSA, ACP

Unit V

- Acid base maintenance
- pH - definition, normal value
- Regulation of blood pH - blood buffer, respiratory & renal
- ABG - normal values
- Acid base disorders - types, definition & causes

Unit VI

- Heme catabolism
- Heme degradation pathway
- Jaundice - type, causes, urine & blood investigations (van den berg test)

Unit VII

- Organ function tests (biochemical parameters & normal values only)
- Renal
- Liver

- Thyroid

Unit VIII

- Immunochemistry
- Structure & functions of immunoglobulin
- Investigations & interpretation - ELISA

Note: Few lab hours can be planned for observation and visits (Less than 1 credit, lab hours are not specified separately).

Curriculum Update

- The INC corrigendum places Biochemistry in Section A of the combined university paper for 25 marks and Nutrition and Dietetics in Section B for 50 marks.

Applied Nutrition and Dietetics

45 hours theory | 15 hours lab | 3 credits

Lab : 15 hours

Course description

The course is designed to assist the students to acquire basic knowledge and understanding of the principles of Nutrition and Dietetics and apply this knowledge in the practice of Nursing.

Learning outcomes

- Identify the importance of nutrition in health and wellness.
- Apply nutrient and dietary modifications in caring patients.
- Explain the principles and practices of Nutrition and Dietetics.
- Identify nutritional needs of different age groups and plan a balanced diet for them.
- Identify the dietary principles for different diseases.
- Plan therapeutic diet for patients suffering from various disease conditions.
- Prepare meals using different methods and cookery rules.

Theory

Unit I

- Introduction to Nutrition
- Concepts
- Definition of Nutrition & Health
- Malnutrition - Under Nutrition & Over Nutrition
- Role of Nutrition in maintaining health
- Factors affecting food and nutrition
- Nutrients
- Classification
- Macro & Micronutrients
- Organic & Inorganic
- Energy Yielding & Non-Energy Yielding
- Food
- Classification - Food groups
- Origin

Unit II

- Carbohydrates
- Composition - Starches, sugar and cellulose
- Recommended Daily Allowance (RDA)

- Dietary sources
- Functions
- Energy
- Unit of energy - Kcal
- Basal Metabolic Rate (BMR)
- Factors affecting BMR

Unit III

- Proteins
- Composition
- Eight essential amino acids
- Functions
- Dietary sources
- Protein requirements - RDA

Unit IV

- Fats
- Classification - Saturated & unsaturated
- Calorie value
- Functions
- Dietary sources of fats and fatty acids
- Fat requirements - RDA

Unit V

- Vitamins
- Classification - fat soluble & water soluble
- Fat soluble - Vitamins A, D, E, and K
- Water soluble - Thiamine (vitamin B1), Riboflavin (vitamin B2), Nicotinic acid, Pyridoxine (vitamin B6), Pantothenic acid, Folic acid, Vitamin B12, Ascorbic acid (vitamin C)
- Functions, Dietary Sources & Requirements - RDA of every vitamin

Unit VI

- Minerals
- Classification - Major minerals (Calcium, phosphorus, sodium, potassium and magnesium) and Trace elements
- Functions
- Dietary Sources
- Requirements - RDA

Unit VII

- Balanced diet

- Definition, principles, steps
- Food guides - Basic Four Food Groups
- RDA - Definition, limitations, uses
- Food Exchange System
- Calculation of nutritive value of foods
- Dietary fibre
- Nutrition across life cycle
- Meal planning/Menu planning - Definition, principles, steps
- Infant and Young Child Feeding (IYCF) guidelines - breast feeding, infant foods
- Diet plan for different age groups -
- Children, adolescents and elderly
- Diet in pregnancy - nutritional requirements and balanced diet plan
- Anemia in pregnancy - diagnosis, diet for anemic pregnant women, iron & folic acid supplementation and counseling
- Nutrition in lactation - nutritional requirements, diet for lactating mothers, complementary feeding/ weaning

Unit VIII

- Nutritional deficiency disorders
- Protein energy malnutrition - magnitude of the problem, causes, classification, signs & symptoms, Severe acute malnutrition (SAM), management & prevention and nurses' role
- Childhood obesity - signs & symptoms, assessment, management & prevention and nurses' role
- Vitamin deficiency disorders - vitamin A, B, C & D deficiency disorders -causes, signs & symptoms, management & prevention and nurses' role
- Mineral deficiency diseases - iron, iodine and calcium deficiencies -causes, signs & symptoms, management & prevention and nurses' role

Unit IX

- Therapeutic diets
- Definition, Objectives, Principles
- Modifications - Consistency, Nutrients,
- Feeding techniques.
- Diet in Diseases - Obesity, Diabetes Mellitus, CVD, Underweight, Renal diseases, Hepatic disorders Constipation, Diarrhea, Pre and Post-operative period

Unit X

- Cookery rules and preservation of nutrients
- Cooking - Methods, Advantages and Disadvantages
- Preservation of nutrients
- Measures to prevent loss of nutrients during preparation

- Safe food handling and Storage of foods
- Food preservation
- Food additives and food adulteration
- Prevention of Food Adulteration Act (PFA)
- Food standards

Unit XI

- Nutrition assessment and nutrition education
- Objectives of nutritional assessment
- Methods of assessment - clinical examination, anthropometry, laboratory & biochemical assessment, assessment of dietary intake including Food frequency questionnaire (FFQ) method
- Nutrition education - purposes, principles and methods

Unit XII

- National Nutritional Programs and role of nurse
- Nutritional problems in India
- National nutritional policy
- National nutritional programs - Vitamin A Supplementation, Anemia Mukt Bharat Program, Integrated Child Development Services (ICDS), Mid-day Meal Scheme (MDMS), National Iodine Deficiency Disorders Control Program (NIDDCP), Weekly Iron Folic Acid Supplementation (WIFS) and others as introduced
- Role of nurse in every program

Unit XIII

- Food safety
- Definition, Food safety considerations & measures
- Food safety regulatory measures in India
- Relevant Acts
- Five keys to safer food
- Food storage, food handling and cooking
- General principles of food storage of food items (ex. milk, meat)
- Role of food handlers in food borne diseases
- Essential steps in safe cooking practices

Food born diseases and food poisoning are dealt in Community Health Nursing I.

Curriculum Update

- The INC corrigendum places Biochemistry in Section A of the combined university paper for 25 marks and Nutrition and Dietetics in Section B for 50 marks.

Nursing Foundation II

120 hours theory | 120 hours lab | 320 hours clinical | 13 credits

Includes the Health Assessment Module.

Course description

This course is designed to help novice nursing students develop knowledge and competencies required to provide evidence-based, comprehensive basic nursing care for adult patients, using nursing process approach.

Learning outcomes

- Develop understanding about fundamentals of health assessment and perform health assessment in supervised clinical settings
- Demonstrate fundamental skills of assessment, planning, implementation and evaluation of nursing care using Nursing process approach in supervised clinical settings
- Assess the Nutritional needs of patients and provide relevant care under supervision
- Identify and meet the hygienic needs of patients
- Identify and meet the elimination needs of patient
- Interpret findings of specimen testing applying the knowledge of normal values
- Promote oxygenation based on identified oxygenation needs of patients under supervision
- Review the concept of fluid, electrolyte balance integrating the knowledge of applied physiology
- Apply the knowledge of the principles, routes, effects of administration of medications in administering medication
- Calculate conversions of drugs and dosages within and between systems of measurements
- Demonstrate knowledge and understanding in caring for patients with altered functioning of sense organs and unconsciousness
- Explain loss, death and grief
- Describe sexual development and sexuality
- Identify stressors and stress adaptation modes
- Integrate the knowledge of culture and cultural differences in meeting the spiritual needs
- Explain the introductory concepts relevant to models of health and illness in patient care
- Mandatory Module used in Teaching/Learning:

Health Assessment Module: 40 hours

Theory

Unit I

- Health Assessment
- Interview techniques
- Observation techniques

- Purposes of health assessment
- Process of Health assessment
  - Health history
  - Physical examination:
  - Methods: Inspection, Palpation, Percussion, Auscultation, Olfaction
  - Preparation for examination: patient and unit
  - General assessment
  - Assessment of each body system
  - Documenting health assessment findings

Unit II

- The Nursing Process
- Critical Thinking Competencies, Attitudes for Critical Thinking, Levels of critical thinking in Nursing
- Nursing Process Overview
  - Assessment
  - Collection of Data: Types, Sources, Methods
  - Organizing Data
  - Validating Data
  - Documenting Data
  - Nursing Diagnosis
  - Identification of client problems, risks and strengths
  - Nursing diagnosis statement - parts, Types, Formulating, Guidelines for formulating Nursing Diagnosis
  - NANDA approved diagnoses
  - Difference between medical and nursing diagnosis
  - Planning
  - Types of planning
  - Establishing Priorities
  - Establishing Goals and Expected Outcomes - Purposes, types, guidelines, Components of goals and outcome statements
  - Types of Nursing Interventions, Selecting interventions: Protocols and Standing Orders
  - Introduction to Nursing Intervention Classification and Nursing Outcome Classification
  - Guidelines for writing care plan
  - Implementation
  - Process of Implementing the plan of care
  - Types of care - Direct and Indirect
  - Evaluation
  - Evaluation Process, Documentation and Reporting

Unit III

- Nutritional needs
- Importance
- Factors affecting nutritional needs
- Assessment of nutritional status
- Review: special diets - Solid, Liquid, Soft
- Review on therapeutic diets
- Care of patient with Dysphagia,
- Anorexia, Nausea, Vomiting
- Meeting Nutritional needs: Principles, equipment, procedure, indications
  - Oral
  - Enteral: Nasogastric/ Orogastric
  - Introduction to other enteral feeds - types, indications, Gastrostomy, Jejunostomy
  - Parenteral - TPN (Total Parenteral Nutrition)

Unit IV

- Hygiene
- Factors Influencing Hygienic Practice
- Hygienic care: Indications and purposes, effects of neglected care
  - Care of the Skin - (Bath, feet and nail, Hair Care)
  - Care of pressure points
  - Assessment of Pressure Ulcers using Braden Scale and Norton Scale
  - Pressure ulcers - causes, stages and manifestations, care and prevention
  - Perineal care/Meatal care
  - Oral care, Care of Eyes, Ears and Nose including assistive devices (eye glasses, contact lens, dentures, hearing aid)

Unit V

- Elimination needs
- Urinary Elimination
  - Review of Physiology of Urine Elimination, Composition and characteristics of urine
  - Factors Influencing Urination
  - Alteration in Urinary Elimination
  - Facilitating urine elimination: assessment, types, equipment, procedures and special considerations
  - Providing urinal/bed pan
  - Care of patients with
  - Condom drainage
  - Intermittent Catheterization

  - Indwelling Urinary catheter and urinary drainage
  - Urinary diversions
  - Bladder irrigation
- Bowel Elimination
  - Review of Physiology of Bowel Elimination, Composition and characteristics of feces
  - Factors affecting Bowel elimination
  - Alteration in Bowel Elimination
  - Facilitating bowel elimination: Assessment, equipment, procedures
  - Enemas
  - Suppository
  - Bowel wash
  - Digital Evacuation of impacted feces
  - Care of patients with Ostomies (Bowel Diversion Procedures)

Unit VI

- Diagnostic testing
- Phases of diagnostic testing (pre-test, intra-test & post-test) in Common investigations and clinical implications
  - Complete Blood Count
  - Serum Electrolytes
  - LFT
  - Lipid/Lipoprotein profile
  - Serum Glucose - AC, PC, HbA1c
  - Monitoring Capillary Blood Glucose (Glucometer Random Blood Sugar - GRBS)
  - Stool Routine Examination
  - Urine Testing - Albumin, Acetone, pH, Specific Gravity
  - Urine Culture, Routine, Timed Urine Specimen
  - Sputum culture
  - Overview of Radiologic & Endoscopic Procedures

Unit VII

- Oxygenation needs
- Review of Cardiovascular and Respiratory Physiology
- Factors affecting respiratory functioning
- Alterations in Respiratory Functioning
- Conditions affecting
  - Airway
  - Movement of air

  - Diffusion
  - Oxygen transport
- Alterations in oxygenation
- Nursing interventions to promote oxygenation: assessment, types, equipment used & procedure
  - Maintenance of patent airway
  - Oxygen administration
  - Suctioning - oral, tracheal
  - Chest physiotherapy - Percussion, Vibration & Postural drainage
  - Care of Chest drainage - principles & purposes
  - Pulse Oximetry - Factors affecting measurement of oxygen saturation using pulse oximeter, Interpretation
- Restorative & continuing care
  - Hydration
  - Humidification
  - Coughing techniques
  - Breathing exercises
  - Incentive spirometry

Unit VIII

- Fluid, Electrolyte, and Acid - Base Balances
- Review of Physiological Regulation of Fluid, Electrolyte and Acid-Base Balances
- Factors Affecting Fluid, Electrolyte and Acid-Base Balances
- Disturbances in fluid volume:
  - Deficit
  - Hypovolemia
  - Dehydration
  - Excess
  - Fluid overload
  - Edema
- Electrolyte imbalances (hypo and hyper)
  - Acid-base imbalances
  - Metabolic - acidosis & alkalosis
  - Respiratory - acidosis & alkalosis
  - Intravenous therapy
  - Peripheral venipuncture sites
  - Types of IV fluids
  - Calculation for making IV fluid plan

- Complications of IV fluid therapy
- Measuring fluid intake and output
- Administering Blood and Blood components
- Restricting fluid intake
- Enhancing Fluid intake

Unit IX

- Administration of Medications
- Introduction - Definition of Medication, Administration of Medication, Drug Nomenclature, Effects of Drugs, Forms of Medications, Purposes, Pharmacodynamics and Pharmacokinetics
- Factors influencing Medication Action
- Medication orders and Prescriptions
- Systems of measurement
- Medication dose calculation
- Principles, 10 rights of Medication Administration
- Errors in Medication administration
- Routes of administration
- Storage and maintenance of drugs and Nurses responsibility
- Terminologies and abbreviations used in prescriptions and medications orders
- Developmental considerations
- Oral, Sublingual and Buccal routes: Equipment, procedure
- Introduction to Parenteral Administration of Drugs - Intramuscular, Intravenous, Subcutaneous, Intradermal: Location of site, Advantages and disadvantages of the specific sites, Indication and contraindications for the different routes and sites.
- Equipment - Syringes & needles, cannulas, Infusion sets - parts, types, sizes
- Types of vials and ampoules, Preparing Injectable medicines from vials and ampoules
  - Care of equipment: decontamination and disposal of syringes, needles,
- infusion sets
  - Prevention of Needle-Stick Injuries
- Topical Administration: Types, purposes, site, equipment, procedure
  - Application to skin & mucous membrane
  - Direct application of liquids, Gargle and swabbing the throat
  - Insertion of Drug into body cavity: Suppository/ medicated packing in rectum/vagina
  - Instillations: Ear, Eye, Nasal, Bladder, and Rectal
  - Irrigations: Eye, Ear, Bladder, Vaginal and Rectal
  - Spraying: Nose and throat
- Inhalation: Nasal, oral, endotracheal/tracheal (steam, oxygen and medications) - purposes, types, equipment, procedure, recording and reporting of medications administered

- Other Parenteral Routes: Meaning of epidural, intrathecal, intraosseous, intraperitoneal, intra-pleural, intra-arterial

Unit X

- Sensory needs
- Introduction
- Components of sensory experience - Reception, Perception & Reaction
- Arousal Mechanism
- Factors affecting sensory function
- Assessment of Sensory alterations - sensory deficit, deprivation, overload & sensory poverty
- Management
  - Promoting meaningful communication (patients with Aphasia, artificial airway & Visual and Hearing impairment)
- Care of Unconscious Patients
- Unconsciousness: Definition, causes & risk factors, pathophysiology, stages of Unconsciousness, Clinical Manifestations
- Assessment and nursing management of patient with unconsciousness, complications

Unit XI

- Care of Terminally ill, death and dying
- Loss - Types
- Grief, Bereavement & Mourning
- Types of Grief responses
- Manifestations of Grief
- Factors influencing Loss & Grief Responses
- Theories of Grief & Loss - Kubler Ross
- 5 Stages of Dying
- The R Process model (Rando's)
- Death - Definition, Meaning, Types (Brain & Circulatory Deaths)
- Signs of Impending Death
- Dying patient's Bill of Rights
- Care of Dying Patient
- Physiological changes occurring after Death
- Death Declaration, Certification
- Autopsy
- Embalming
- Last office/Death Care
- Counseling & supporting grieving relatives

- Placing body in the Mortuary
- Releasing body from Mortuary
- Overview - Medico-legal Cases, Advance directives, DNI/DNR, Organ Donation, Euthanasia
- PSYCHOSOCIAL NEEDS (A-D)

Unit XII

- A. Self-concept
- Introduction
- Components (Personal Identity, Body Image, Role Performance, Self Esteem)
- Factors affecting Self Concept
- Nursing Management

Unit XIII

- B. Sexuality
- Sexual development throughout life
- Sexual health
- Sexual orientation
- Factors affecting sexuality
- Prevention of STIs, unwanted pregnancy, avoiding sexual harassment and abuse
- Dealing with inappropriate sexual behavior

Unit XIV

- C. Stress and Adaptation - Introductory concepts
- Introduction
- Sources, Effects, Indicators & Types of Stress
- Types of stressors
- Stress Adaptation - General Adaptation Syndrome (GAS), Local Adaptation Syndrome (LAS)
- Manifestation of stress - Physical & psychological
- Coping strategies/ Mechanisms
- Stress Management
  - Assist with coping and adaptation
  - Creating therapeutic environment
- Recreational and diversion therapies

Unit XV

- D. Concepts of Cultural Diversity and Spirituality
- Cultural diversity
  - Cultural Concepts - Culture, Subculture, Multicultural, Diversity, Race, Acculturation, Assimilation
  - Transcultural Nursing
  - Cultural Competence

  - Providing Culturally Responsive Care
- Spirituality
  - Concepts - Faith, Hope, Religion, Spirituality, Spiritual Wellbeing
  - Factors affecting Spirituality
  - Spiritual Problems in Acute, Chronic, Terminal illnesses & Near-Death Experience
  - Dealing with Spiritual Distress/Problems

Unit XVI

- Nursing Theories: Introduction
- Meaning &Definition, Purposes, Types of theories with examples, Overview of selected nursing theories - Nightingale, Orem, Roy
- Use of theories in nursing practice

Clinical practicum

PRACT|ICE COMPETENCIES: On completion of the course, the student will be able to

- Perform health assessment of each body system
- Develop skills in assessment, planning, implementation and evaluation of nursing care using Nursing process approach
- Identify and meet the Nutritional needs of patients
- Implement basic nursing techniques in meeting hygienic needs of patients
- Plan and Implement care to meet the elimination needs of patient
- Develop skills in instructing and collecting samples for investigation.
- Perform simple lab tests and analyze & interpret common diagnostic values
- Identify patients with impaired oxygenation and demonstrate skill in caring for patients with impaired oxygenation
- Identify and demonstrate skill in caring for patients with fluid, electrolyte and acid - base imbalances
- Assess, plan, implement & evaluate the basic care needs of patients with altered functioning of sense organs and unconsciousness
- Care for terminally ill and dying patients

Skill lab

Use of Mannequins and Simulators

Skill lab

- Health Assessment
- Nutritional Assessment
- Sponge bath, oral hygiene, perineal care
- Nasogastric tube feeding
- Providing bed pan & urinal
- Catheter care

- Bowel wash, enema, insertion of suppository
- Oxygen administration - face mask, venture mask, nasal prongs
- Administration of medication through Parenteral route - IM, SC, ID, IV
- Last Office

CLINICAL POSTINGS - General Medical/Surgical Wards

(16 weeks × 20 hours per week = 320 hours)

Practical and clinical

General Medical/ Surgical wards (3 weeks)

- Health Assessment
- Nursing/Health history taking
- Perform physical examination:
  - General

Clinical requirements

- History Taking - 2
- Physical examination - 2
  - Body systems
- Use various methods of physical examination - Inspection, Palpation, Percussion, Auscultation, Olfaction
- Identification of system wise deviations
- Documentation of findings
- The Nursing Process
- Prepare Nursing care plan for the patient based on the given case scenario

Clinical requirements

- Nursing process - 1
- Nutritional needs, Elimination needs& Diagnostic testing
- Nutritional needs
- Nutritional Assessment
- Preparation of Nasogastric tube feed
- Nasogastric tube feeding
- Hygiene
- Care of Skin & Hair:
- Sponge Bath/ Bed bath
- Care of pressure points & back massage
- Pressure sore risk assessment using Braden/Norton scale
- Hair wash
- Pediculosis treatment
- Oral Hygiene

- Perineal Hygiene
- Catheter care

Clinical requirements

- Nutritional Assessment and Clinical Presentation - 1
- Pressure sore assessment - 1
- Elimination needs
- Providing
- Urinal
- Bedpan
- Insertion of Suppository
- Enema
- Urinary Catheter care
- Care of urinary drainage
- Diagnostic testing

Clinical requirements

- Clinical Presentation on Care of patient with Constipation - 1
- Lab values - inter-pretation
- Specimen Collection
  - Urine routine and culture
  - Stool routine
  - Sputum Culture
- Perform simple Lab Tests using reagent strips
  - Urine - Glucose, Albumin, Acetone, pH, Specific gravity
- Blood - GRBS Monitoring
- Oxygenation needs, Fluid, Electrolyte, and Acid - Base Balances
- Oxygenation needs
- Oxygen administration methods
  - Nasal Prongs
  - Face Mask/Venturi Mask
- Steam inhalation
- Chest Physiotherapy
- Deep Breathing & Coughing Exercises
- Oral Suctioning
- Fluid, Electrolyte, and Acid - Base Balances
- Maintaining intake output chart
- Identify & report complications of IV therapy

- Observe Blood & Blood Component therapy
- Identify & Report Complications of Blood & Blood Component therapy
- Administration of Medications
- Calculate Drug Dosages
- Preparation of lotions & solutions
- Administer Medications
  - Oral
  - Topical
  - Inhalations
  - Parenteral
  - Intradermal
  - Subcutaneous
  - -Intramuscular
  - Instillations
  - Eye, Ear, Nose -instillation of medicated drops, nasal sprays, irrigations
- Sensory Needs and Care of Unconscious patients, Care of Terminally ill, death and dying
- Sensory Needs and Care of Unconscious patients
- Assessment of Level of Consciousness using Glasgow Coma Scale
- Terminally ill, death and dying
- Death Care

Clinical requirements

- Nursing rounds on care of patient with altered sensorium

Clinical skills logbook

II SEMESTER

XI Hygiene

Sponge bath/Bed bath

Pressure Injury Assessment

Skin care and care of pressure points

Oral hygiene

Hair wash

Pediculosis treatment

Perineal Care/Meatal care

Urinary Catheter care

XII Nursing Process-Basic level

Assessment and formulating nursing diagnosis

Planning the nursing Care

Implementation of Care

Evaluation of Care (Reassessment & Modification)

XIII Nutrition & Fluid Balance

24 Hours Dietary Recall

Planning Well balanced diet

Making fluid plan

Preparation of nasogastric tube feed

Nasogastric tube feeding

Maintaining intake & output chart

Intra Venous Infusion Plan

XIV Elimination

- Providing Bedpan
- Providing Urinal
- Enema
- Bowel Wash
- Diagnostic Tests-Specimen collection
- Urine Specimen for Routine Analysis
- Urine Specimen for Culture
- Timed urine specimen collection
- Feces specimen for routine
- Sputum Culture
- Urine Testing
- Ketone
- Albumin
- Reaction
- Specific Gravity
- Oxygenation Needs/Promoting Respiration
- Deep Breathing & Coughing Exercises
- Steam inhalation
- Oxygen administration using face mask
- Oxygen administration using nasal prongs
- Medication Administration
- Oral Medications
- Intramuscular
- Subcutaneous
- Rectal Suppositories

- Death and Dying
- Death care/Last Office
- First Aid and Emergencies
- Bandages & Binders
- Circular
- Spiral
- Reverse Spiral
- Recurrent
- Spica
- Figure of eight
- Eye
- Ear
- Caplin
- Jaw
- Arm Sling
- Abdominal Binder
- Basic CPR (first aid module)

Clinical requirements

CLINICAL REQUIREMENTS

- NURSING FOUNDATION I & II
- History Taking - 2
- 1.
- 2.
- Physical Examination - 2
- 1.
- 1.
- 2.
- Fall risk assessment - 2
- 1.
- 2.
- Pressure Sore Assessment - 2
- 1.
- 2.
- Nursing Process - 2
- 1.

- 2.
- Completion of first aid module
- Completion of Health assessment module

Curriculum Update

- See the INC corrigendum for the Semester II logbook update on source page 422.

Health and Nursing Informatics and Technology

40 hours theory | 40 hours lab | 3 credits

Course description

This course is designed to equip novice nursing students with knowledge and skills necessary to deliver efficient informatics-led health care services.

Learning outcomes

- Develop a basic understanding of computer application in patient care and nursing practice.
- Apply the knowledge of computer and information technology in patient care and nursing education, practice, administration and research.
- Describe the principles of health informatics and its use in developing efficient healthcare.
- Demonstrate the use of information system in healthcare for patient care and utilization of nursing data.
- Demonstrate the knowledge of using Electronic Health Records (EHR) system in clinical practice.
- Apply the knowledge of interoperability standards in clinical setting.
- Apply the knowledge of information and communication technology in public health promotion.
- Utilize the functionalities of Nursing Information System (NIS) system in nursing.
- Demonstrate the skills of using data in management of health care.
- Apply the knowledge of the principles of digital ethical and legal issues in clinical practice.
- Utilize evidence-based practices in informatics and technology for providing quality patient care.
- Update and utilize evidence-based practices in nursing education, administration, and practice.

Theory

Unit I

- Introduction to computer applications for patient care delivery system and nursing practice
- Use of computers in teaching, learning, research and nursing practice
- Windows, MS office: Word, Excel, Power Point
- Internet
- Literature search
- Statistical packages
- Hospital management information system

Unit II

- Principles of Health Informatics
- Health informatics - needs, objectives and limitations
- Use of data, information and knowledge for more effective healthcare and better health

Unit III

- Information Systems in Healthcare

- Introduction to the role and architecture of information systems in modern healthcare environments
- Clinical Information System (CIS)/Hospital information System (HIS)

Unit IV

- Shared Care & Electronic Health Records
- Challenges of capturing rich patient histories in a computable form
- Latest global developments and standards to enable lifelong electronic health records to be integrated from disparate systems.

Unit V

- Patient Safety & Clinical Risk
- Relationship between patient safety and informatics
- Function and application of the risk management process

Unit VI

- Clinical Knowledge & Decision Making
- Role of knowledge management in improving decision-making in both the clinical and policy contexts
- Systematized Nomenclature of Medicine, Clinical Terms, SNOMED CT to ICD-10-CM Map, standardized nursing terminologies (NANDA, NOC), Omaha system.

Unit VII

- eHealth: Patients and the Internet
- Use of information and communication technology to improve or enable personal and public healthcare
- Introduction to public health informatics and role of nurses

Unit VIII

- Using Information in Healthcare Management
- Components of Nursing Information system(NIS)
- Evaluation, analysis and presentation of healthcare data to inform decisions in the management of health-care organizations

Unit IX

- Information Law & Governance in Clinical Practice
- Ethical-legal issues pertaining to healthcare information in contemporary clinical practice
- Ethical-legal issues related to
- digital health applied to nursing

Unit X

- Healthcare Quality & Evidence Based Practice
- Use of scientific evidence in improving the quality of healthcare and technical and professional informatics standards

SKILLS

- Utilize computer in improving various aspects of nursing practice.
- Use technology in patient care and professional advancement.

- Use data in professional development and efficient patient care.
- Use information system in providing quality patient care.
- Use the information system to extract nursing data.
- Develop skill in conducting literature review.

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