

# BIO-SCIENCE

Placement- FIRST YEAR

Time: Theory- 120 hours

Anatomy and Physiology-90 hours

Microbiology- 30 hours

## ANATOMY AND PHYSIOLOGY

### Course Description

This course is designed to help students gain knowledge of the structure and function of the human body and recognize any deviation from normal health in order to render effective nursing services.

### General Objective

Upon completion of the course, the student shall be able to:

1. Describe in general the structure and functions of the human body.
2. Describe in detail the structure and functions of the different organs and systems in the human body.
3. Apply the anatomical and physiological principles in the practice of nursing.

Total Hours – 90

Unit No.	Learning Objectives	Content	Hr.	Teaching learning activities	Assessment methods
I	Define and spell various anatomical terms.	<b>Introduction to anatomical terms organization of the human body</b> a) Anatomical terms b) Systems and cavities of the human body	4	Lecture cum Discussions. Explain using charts Record book	Short answer questions Objective type
II.	Describe different organs of the body, systemic function and their inter-relationship.	<b>Introduction to the detailed structure of the body</b> a) The cell: Structure, reproduction and function b) Tissues including membranes and glands : types, structure and functions c) Body cavities and their contents	6	Lecture cum Discussions. Explain using microscopic slides, Skeleton and torso	Short answer questions Objective type
III	Describe the composition of blood and its functions.	<b>Blood</b> a) Composition and formation of blood b) Functions of blood c) Blood clotting, blood grouping and cross matching d) Blood products and their use.	6	Lecture cum Discussions. Explain using microscopic slides	Short answer questions Objective type Essay type

Unit No.	Learning Objectives	Content	Hr.	Teaching learning activities	Assessment methods
				Demonstration of blood grouping and cross-matching, Hb estimation	
IV.	Describe the structure and functions of heart and blood vessels	<b>The Circulatory System</b> a) Heart : Structure, functions including conduction system and cardiac cycle b) Blood vessels : Types, Structure and position c) Circulation of blood d) Blood pressure and pulse	6	Lecture cum discussions.  Explain using charts, models and specimen	Short answer questions  Objective type  Essay type
V.	Describe structure and functions of lymphatic system	<b>The Lymphatic system</b> - Structure and function of lymph vessels, Lymph nodes and lymph circulation, lymphatic tissue - spleen and thymus	6	Lecture cum discussions.  Explain using charts and models	Short answer  Objective type  Essay type
VI.	Describe the structure and functions of respiratory system	<b>The Respiratory system</b> a) The structure and functions of respiratory organs b) The physiology of respiration c) Characteristics of normal respiration and deviation.	6	Lecture cum discussions.  Explain using charts and models, specimens  Demonstration of spirometry	Short answer  Objective type  Essay type
VII.	Describe the structure and function of digestive system	<b>The Digestive system</b> a) Structure and functions of the alimentary tract and its accessory organs. b) The process of digestion, absorption and metabolism of food constituents.	6	Lecture cum discussions.  Explain using charts, models and videos	Short answer  Objective type  Essay type
VIII.	Describe the structure and functions of organs of Excretory system.	<b>The Excretory system</b> a) Structure and functions of the kidney, ureters, urinary bladder, and urethra b) Formation and composition of urine. c) Fluid and electrolyte balance d) Structure and functions of the skin. e) Regulation of the body temperature.	6	Lecture cum discussions.  Explain using charts, slides models and videos	Short answer  Objective type  Essay type



Unit No.	Learning Objectives	Content	Hr.	Teaching learning activities	Assessment methods
IX.	Describe the structure and functions of endocrine glands.	<b>The Endocrine system</b> - The structure and functions of the pituitary, thyroid, parathyroid and adrenal glands, pancreas (islets of Langerhans), ovaries and testes	6	Lecture cum discussions.  Explain using charts and models	Short answer  Objective type  Essay type
X.	Describe the structure and functions of male and female reproductive system and accessory organs	<b>The Reproductive system</b> a) Structure and functions of the female reproductive system b) Process of menstrual cycle, reproduction and menopause c) Structure and functions of breasts d) Structure and functions of the male reproductive system e) Reproductive health	8	Lecture cum discussions.  Explain using charts, videos, models and specimens	Short answer  Objective type  Essay type
XI.	Describe the structure and functions of Nervous system.	<b>The nervous system</b> a) Types of nerves- structure and functions b) Brain and cranial nerves. c) Spinal cord and motor and sensory pathways of the spinal cord, autonomic nervous system.	10	Lecture cum discussions.  Explain using charts and models	Short answer  Objective type  Essay type
XII.	Describe the structure and function of sensory organs	<b>The sense organs</b> a) Skin, eye, ear, nose and tongue b) Physiology of vision, hearing, smell, touch, taste and equilibrium.	6	Lecture cum discussions.  Explain using charts, videos and models	Short answer  Objective type  Essay type
XIII.	Describe the structure and functions of skeletal system.	<b>The Skeleton</b> a) Formation and growth of bones b) Tendons, ligaments and cartilages c) Classification of bones, joints d) Joint movement e) Axial and appendicular skeleton	8	Lecture cum discussions.  Explain using charts, models and skeleton	Short answer  Objective type  Essay type
XIV	Describe structure and functions of Muscular system.	<b>The Muscular System</b> a) Type, structure and functions of muscle b) Origin, Insertion, and action of muscles	6	Lecture cum discussions.  Explain using charts, slides and models	Short answer  Objective type  Essay type

# MICROBIOLOGY

## Course Description

This course is designed to help students gain knowledge and understanding of the characteristics and activities of micro-organisms, how they react under different conditions and how they cause different disorders and diseases. Knowledge of these principles will enable student to understand and adopt practices associated with preventive and promotive health care.

## General Objectives

Upon completion of the course, the students shall be able to:

1. Describe the classifications and characteristics of micro-organisms
2. List the common disease producing micro-organisms
3. Explain the activities of micro-organism in relation to the environment and the human body.
4. Enumerate the basic principles of control and destruction of micro-organisms.
5. Apply the principles of microbiology in nursing practice.

**Total Hours – 30**

Unit. No.	Learning Objectives	Content	Hr.	Teaching learning activities	Assessment methods
I	Describe evolution of microbiology and its relevance in nursing.	<b>Introduction</b> a) History of bacteriology and microbiology. b) Scope of microbiology in Nursing	3	Lecture cum discussions.	Objective type Short answers
II	Classify the different types of micro organism. Describe the normal flora and the common diseases caused by pathogens Explain the methods to study microbes	<b>Micro Organisms</b> a) Classification, characteristics, (Structure, size, method and rate of reproduction) b) Normal flora of the body. c) Pathogenesis & common diseases. d) Methods for study of microbes, culture & isolation of microbes.	8	Lecture cum discussions.  Explain using slides, films, videos, exhibits, models Staining and fixation of slides.	Short answer Objective type Essay type
III	Describe the sources of infection and growth of microbes. Explain the transmission of infection and the principles in collecting specimens	<b>Infection and its transmission</b> a) Sources and types of infection, nosocomial infection. b) Factors affecting growth of microbes. c) Cycle of transmission of infection portals of entry, exit, modes of transfer. d) Reaction of body to infection, mechanism of resistance. e) Collection of specimens.	4	Lecture  Demonstrations Specimens  Explain using charts	Short answer Objective type Essay type



IV	Describe various types of immunity, hypersensitivity autoimmunity and immunizing agents	<b>Immunity</b> a) Types of immunity – innate and acquired. b) Immunization schedule. Immunoprophylaxis (vaccines, sera etc.) c) Hypersensitivity and autoimmunity. d) Principles and uses of serological tests	5	Lecture cum discussions.  Demonstration Exhibits	Short answer  Objective type  Essay type
V	Describe the various methods of control and destruction of microbes	<b>Control and destruction of Microbes</b> a) Principles and methods of microbial control -Sterilization -Disinfection -Chemotherapy and antibiotics -Pasteurization b) Medical and surgical asepsis c) Bio-safety and waste management	5	Lecture,  Demonstration Videos Visit to the CSSD	Short answer  Objective type  Essay type
VI.	Demonstrate skill in handling & care of microscopes Identify common microbes under the microscope	<b>Practical Microbiology</b> a) Microscope – Parts, uses, handling and care of microscope b) Observation of staining procedure, preparation and examination of slides and smears c) Identification of common microbes under the microscope for morphology of different microbes.	5	Lecture,  Demonstrations Specimens Slides	

# BEHAVIOURAL SCIENCES

Placement- FISRT YEAR

Time- 60 Hours

Psychology- 40 hours

Sociology- 20 hours

## PSYCHOLOGY

### Course Description

This course is designed to help students understand the dynamics of human behavior and concept of mental health. This shall enable them to develop positive attitude and good inter – personal relationships in the practice of nursing in all health care settings.

### General Objectives

Upon completion of the course, the students shall be able to:

1. Describe the concept of mental health and psychology.
2. Explain the dynamics of human behavior, personality and learning.
3. Discuss the role of adjustment mechanisms and emotions in health and illness.
4. Demonstrate skills in the application of principle of psychology in nursing practice in all kind of health care settings.

Total Hours – 40

Unit. No.	Learning Objectives	Content	Hr.	Teaching learning activities	Assessment methods
I	State the concept, scope and importance of psychology.	<b>Introduction</b> a) Definition, nature and scope of psychology b) Importance of psychology for Nurses	2	Lecture cum discussion.	Short answer Objective type
II.	Describe the structure of the mind.	<b>Structure of the mind</b> a) Conscious, pre-conscious b) Id, ego and super ego	2	Lecture cum discussions.	Short answer Objective type
III.	Illustrate the dynamics of human behavior. Describe the concept of mental health	<b>Psychology of Human Behavior</b> a) Basic human needs, dynamics of behavior, motivation drives b) Body mind relationship, mental health, characteristics of mentally healthy person, emotional control, psychological problems of patients and relatives.	12	Lecture cum discussions.  Role play	Short answer Objective type Essay type



Unit. No.	Learning Objectives	Content	Hr.	Teaching learning activities	Assessment methods
		c) Stress and conflicts, natural sources and types of stress and conflicts, dealing with stress and conflict, frustration – sources and overcoming frustration d) Mental mechanism their uses and importance e) Attitudes - meaning, development changes in attitude, effects of attitudes on behavior, importance of positive attitude for the nurse. f) Habits-meaning and formation. g) Breaking of bad habits, importance of good habit formation for the nurse.			
IV	Describe and apply the process of learning, thinking, reasoning, observation and perception	<b>Learning</b> a) Nature, types and laws of learning, b) Factors affecting learning, memory and forgetting. <b>Thinking and Reasoning</b> - Nature and types of thinking, reasoning, problem solving, importance of creative thinking for nurse. <b>Observation and Perception</b> - Attention, perception, laws of perception, factors affecting attention and perception, and errors in perception	13	Lecture cum discussions.  Roleplay	Short answer  Objective type  Essay type
V.	Discuss the concept and development of personality.	<b>Personality</b> a) Meaning, nature and development, types of personality b) Assessment of personality importance of knowledge of personality for the nurse. c) Characteristics of various age groups – child adolescent, adult and aged d) Will and character.	6	Lecture cum discussions.  Role play  Psychometric assessment	Short answer  Objective type  Essay type
VI.	Discuss the nature and measurement of intelligence.	<b>Intelligence</b> a) Definition, Meaning, individual differences in intelligence b) Mental ability, nature of intelligence and development c) Assessment of intelligence	5	Lecture cum discussions.  Demonstration  Role play  IQ testing	Short answer  Objective type  Essay type

# SOCIOLOGY

## Course Description

This course is designed to help student gain an understanding of sociology in the context of its relevance to nursing practice.

## General Objectives

Upon completion of the course, the students shall be able to:

1. Describe the concept of the family as a social unit and the status of the individual in the family.
2. Explain the dynamics of society and identify common social problems.
3. Demonstrate ability to understand the socio – cultural and economic aspects of the community in the light of their effects on health and illness.
4. Utilize the knowledge and understanding of sociology in nursing practice.

**Total Hours - 20**

Unit No.	Learning Objectives	Content	Hr.	Teaching learning activities	Method of assessment
I	Describe the nature, scope & content of sociology and its importance in nursing	<b>Introduction</b> a) Definition and scope of sociology b) Its relationship with other social sciences c) Uses of sociology for nurses.	2	Lecture cum discussions	Short answer  Objective type
II	Describe the influence of the environment on individual development and the rights and responsibilities of the individual in the society	<b>Individual</b> a) Review of human growth and development b) The socialization process c) Effect of environment on human growth and development d) Rights and responsibilities of the individual in a democratic society.	2	Lecture cum discussions	Short answer  Objective type  Essay type
III	Describe the concept of family as a social unit	<b>The Family</b> a) Definition, characteristics and types of family. b) Family cycle and basic needs of family c) Importance of interdependence of family members. d) Important functions of family and their problems. e) Types of Marriage, medical and sociology aspects of marriage.	4	Lecture cum discussions	Short answer  Objective type  Essay type



Unit No.	Learning Objectives	Content	Hr.	Teaching learning activities	Method of assessment
IV	Describe about social groups, social change, control, stratification and social problems	<b>Society</b> a) Definition and meaning. b) Social groups - Types, Structure, intergroup relationship group cycle, group behavior and group morale. c) Social change -Meaning, factors affecting and effect on society and institution leading to social problems. d) Social control e) Social stratification f) Social problems-Prostitution, crime divorce, dowry system, juvenile delinquency, drug addiction alcoholism, handicapped, over population and slum g) Social agencies and remedial measures	8	Lecture cum discussions  Visits to social institutions	Short answer  Objective type  Essay type
V	Describe the culture and characteristics of community	<b>The Community</b> a) Community – Definition and types – Rural and urban b) Culture and characteristics	4	Lecture cum discussions	Short answer  Objective type  Essay type

# NURSING FOUNDATIONS

Placement- FIRST YEAR

Time- 210 hours

Fundamentals of Nursing- 190 hours

First- Aid- 20 hours

## FUNDAMENTALS OF NURSINGS

### Course Description

This course is designed to help students develop an ability to meet the basic health need of the patients with regard to nursing care and develop skill in the competencies required for rendering effective patient care.

### General Objectives

Upon completion of the course, the students shall be able to:

- 1 Describe the physical, mental and social adjustment required of a sick individual and his family.
- 2 Carry out basic nursing techniques and care with the application of sound scientific principle.
- 3 Explain the concept of comprehensive nursing care.
- 4 Develop skills in assessment, planning, implementation and evaluation of the nursing care rendered to the patients.
- 5 Communicate effectively and establish good interpersonal relationship with the patients, their relatives and other health team members.
- 6 Demonstrate skills in observation, recording and reporting.
- 7 Recognize and utilize opportunities for planning and implementing need based health teaching programme (s) for individuals, groups, families and communities.

Total Hours - 190

Unit. No.	Learning Objectives	Content	Hr.	Method of Teaching	Assessment methods
I	Define nursing and explain its nature, meaning, scope, ethics and principles in nursing.  Identify the qualities of	<b>Introduction to Nursing</b> a) Nursing – concept, meaning, definitions, scope and functions. b) History of nursing in India c) Nursing as a profession d) Nursing professional – qualities and preparation.	25	Lecture cum discussions	Short answer  Objective type  Essay type



Unit. No.	Learning Objectives	Content	Hr.	Method of Teaching	Assessment methods
	<p>a professional nurse health care agencies and its functions.</p> <p>Describe the holistic approach to nursing and the determinants of health and the effects of illness.</p>	<p>e) Ethics in Nursing-roles and responsibilities of a nurse.</p> <p>f) Health care agencies – hospital and community service – types and function of hospitals health team.</p> <p>g) Modern approaches to nursing care including holistic nursing care</p> <p>h) Health and Disease</p> <ul style="list-style-type: none"> <li>- Definition of health, determinants of health status.</li> <li>- Basic human needs</li> <li>- Illness and its effects on individual</li> </ul>			
II	<p>Describe nursing care of the patient/client in hospital using nursing process.</p> <p>Demonstrate skill in the admission and discharge process, maintenance of safe environment and records and reports</p>	<p><b>Nursing care of the patient</b></p> <p>a) Patient Environment in the hospital:</p> <p>Patients unit</p> <p>b) Therapeutic environment</p> <ul style="list-style-type: none"> <li>- Physical factors – lighting temperature, ventilation, humidity, noise, pestilence.</li> <li>- Safety needs, prevention of environmental hazard</li> <li>- Psychosocial and aesthetic factors.</li> </ul> <p>c) Patient's Adjustment to the Hospital.</p> <ul style="list-style-type: none"> <li>- Understanding the patient as a person, socio-economic, and cultural background, health status etc.</li> <li>- Effect of hospitalization on patient and family.</li> <li>- Admission, transfer, discharge procedures</li> </ul> <p>d) Basic Nursing Skills-</p> <ul style="list-style-type: none"> <li>- Communication</li> <li>- Nursing interview</li> <li>- Recording and reporting</li> </ul> <p>e) Nursing Process</p> <ul style="list-style-type: none"> <li>- Meaning and importance</li> <li>- Assessment, Nursing diagnosis</li> <li>Planning, Implementation and Evaluation</li> <li>- Nursing care plan.</li> </ul>	6	<p>Lecture cum discussions.</p> <p>Demonstration of maintaining the records and reports</p> <p>Role Play</p>	<p>Short answer</p> <p>Objective type</p> <p>Essay type</p> <p>Return demonstration</p>

Unit. No.	Learning Objectives	Content	Hr.	Method of Teaching	Assessment methods
III	Describe basic needs of the patient Demonstrate skill in meeting basic care of the patient	<b>Meeting the Basic Needs of a patient</b> a) Physical needs- - Comfort, rest, sleep and exercise –Importance and its promotion - Body mechanics –moving, lifting, transferring - Position and posture maintenance - Comfort devices - Beds and bed making – Principles of bed making, types and care of bed linen - Safety devices, restraints and splints - Exercises – Active and Passive b) Hygienic needs - Personal and environmental hygiene personal - Nurses note in maintaining personal and environmental hygiene. - Care of eyes, nose, ears, hands and feet. - Care of mouth, skin, hair and genitalia - Care of pressure areas, bed sores. c) Elimination needs - Health and sickness - Problems – constipation and diarrhea, retention and incontinence of urine. - Nurse's role in meeting elimination needs. - Offering bed-pan and urinal, - Observing and recording abnormalities. - Preparation and giving of laxative, suppositories, enemas, bowel wash, flatus tube. - Perineal care, care of patient with urinary catheter, diapers. - Maintenance of intake and output records d) Nutritional needs - Diet in health and disease - Factors affecting nutrition in illness, - Nurse's role in meeting patients nutritional needs. - Modification of diet in illness. - Diet planning and serving. - Feeding helpless patients including artificial methods of feeding. e) Psychological and spiritual needs	65	Lecture cum discussion  Demonstration	Short answer  Objective type  Essay type  Return demonstration  Assessment using checklist



Unit. No.	Learning Objectives	Content	Hr.	Method of Teaching	Assessment methods
		<ul style="list-style-type: none"> <li>- Importance</li> <li>- Nurse's role -Diversional and Recreational therapy</li> </ul> <p>f) Care of terminally ill and dying patient</p> <ul style="list-style-type: none"> <li>- Dying patient's signs and symptoms needs of dying patient and family,</li> <li>- Nursing care of dying-: special considerations; advance directives, euthanasia, will, dying declaration, organ donation etc.</li> <li>- Medico legal issues</li> <li>- Care of the dead body</li> <li>- Care of unit</li> <li>- Autopsy</li> <li>- Embalming</li> </ul>			
IV	Describe the principles of assessment demonstrate skills in assessing the patient	<p><b>Assessment of patient/client</b></p> <p>a) Physical Assessment</p> <ul style="list-style-type: none"> <li>- Importance, principles, methods of assessment</li> <li>- Height, Weight, posture</li> <li>- Head to toe examination.</li> </ul> <p>b) Physiological Assessment</p> <ul style="list-style-type: none"> <li>- Vital signs, normal, abnormal Characteristics, factors influencing the variations,</li> <li>- Observation and collection of specimens-urine, stool, vomitus and sputum.</li> </ul> <p>c) Psychological Assessment</p> <ul style="list-style-type: none"> <li>- Mood, Intelligence, Emotions Normal and Abnormal behavior.</li> </ul>	14	<p>Lecture cum discussions</p> <p>Demonstration</p>	<p>Short answer</p> <p>Objective type</p> <p>Essay type</p> <p>Return demonstration</p> <p>Assessment using checklist</p>
V	<p>Describe the infection control, methods in the clinical setting.</p> <p>Demonstrate infection control practices</p>	<p><b>Infection control</b></p> <p>a) Infection control :</p> <ul style="list-style-type: none"> <li>- Nature of infection</li> <li>- Chain of infection transmission</li> <li>- Defence against infection: natural and acquired</li> <li>- Hospital acquired infection ( nosocomial infection)</li> </ul> <p>b) Concept of asepsis:</p> <ul style="list-style-type: none"> <li>- Medical and surgical asepsis</li> <li>- Isolation precautions , barrier nursing</li> <li>- Hand washing : simple, hand asepsis, surgical asepsis (scrub)</li> <li>- Isolation – source and protection</li> <li>- Personal protective equipments types, uses and techniques of wearing and removing</li> </ul>		<p>Lecture cum discussion</p> <p>Demonstration</p> <p>Explain using manual of biomedical waste management of Government of India</p> <p>Demonstration Videos Simulation exercises</p>	<p>Short answers</p> <p>Essay type</p> <p>Objective type</p>

Unit No.	Learning Objectives	Content	Hr.	Method of Teaching	Assessment methods
		<ul style="list-style-type: none"> <li>- Decontamination of unit and equipment</li> <li>- Transportation of infected patient</li> <li>- Standard safety precaution</li> <li>- Transmission based precautions</li> </ul> c) Bio-medical waste management <ul style="list-style-type: none"> <li>- Importance</li> <li>- Types of hospital wastes</li> <li>- Hazards associated with hospital waste</li> <li>- Decontamination of hospital waste</li> <li>- Segregation and transportation</li> <li>- Disposal</li> </ul>	20		
VI	Describe therapeutic nursing care	<b>Therapeutic Nursing Care</b> <ol style="list-style-type: none"> <li>Care of patients with respiratory problems/dyspnea               <ul style="list-style-type: none"> <li>- Deep breathing and coughing exercises</li> <li>- O2 inhalation</li> <li>- Dry and moist inhalation</li> <li>- Oro nasal suctioning</li> </ul> </li> <li>Care of patient with altered body temperature-Hot and cold Applications</li> <li>Care of patients with Fluid and Electrolyte imbalance</li> <li>Care of unconscious patient</li> <li>Care of the bed-ridden patient(traction, fractures etc.)</li> <li>Care of patient with pain</li> <li>Care of patients with body elimination deviation</li> </ol>	30	Lecture cum discussions.  Demonstration	Short answer  Objective type  Essay type  Return demonstration  Assessment using checklist
VIII	Explain the principles, routes, effects of administration of medications	<b>Introduction to clinical Pharmacology</b> Administration of medication: <ol style="list-style-type: none"> <li>General Principles/Considerations               <ul style="list-style-type: none"> <li>- Purposes of medication</li> <li>- Principles: Rights, special considerations, prescriptions, safety in administering medications and medication errors</li> <li>- Drugs forms</li> <li>- Routes of administration</li> <li>- Storage and maintenance of drugs and nurses responsibility</li> <li>- Broad classification of drugs</li> <li>- Therapeutic effect, side effect, toxic effect, allergic reaction, drug tolerance, drug interactions</li> <li>- Factors influencing drug actions</li> <li>- Systems of drug measurement: metric system, household measurements.</li> </ul> </li> </ol>	30	Lecture cum discussions.  Demonstration	Short answer  Objective type  Essay type  Return demonstration  Assessment using checklist



Unit. No.	Learning Objectives	Content	Hr.	Method of Teaching	Assessment methods
		<ul style="list-style-type: none"> <li>- Converting measurements units: conversion within one system, between systems, dosage calculations.</li> <li>- Terminologies and abbreviations used in prescription of medications.</li> <li>b) Oral drug administration: oral, sublingual, buccal : equipment and procedure.</li> <li>c) Parental:               <ul style="list-style-type: none"> <li>- General principles</li> <li>- Types of parental therapies.</li> <li>- Types of syringes, needles, canulas and infusion sets,</li> <li>- Protection from needle stick injuries, giving medications with a safety syringe.</li> <li>- Routes of parental therapies:</li> <li>- Purposes, site equipment, procedure and special considerations in giving intradermal, subcutaneous, intramuscular and intravenous medications.</li> <li>- Advanced techniques : epidural, intrathecal, intraosseous, intraperitoneal, intrapleural, intra arterial</li> <li>- Role of nurse</li> </ul> </li> <li>d) Topical administration: purposes, site, equipment, procedure, special considerations for applications to skin and mucous membrane.</li> <li>e) Direct application:               <ul style="list-style-type: none"> <li>- Gargle, throat swab</li> <li>- Insertion of drug into body cavities : nasal pack, suppositories / medicated packing into rectum / vagina</li> <li>- Instillations: ear, eye, nasal, bladder and rectal.</li> <li>- Irrigations: eye, ear, bladder, vaginal and rectal. Spray: nose and throat</li> </ul> </li> <li>f) Inhalations: nasal, oral, endotracheal, tracheal (steam, oxygen and medications) – purposes, types, equipment, procedure and special considerations.</li> <li>g) Recording and reporting of medications administered.</li> </ul>			

## FIRST AID

### Course Description

This course is designed to help students develop and understanding of community emergencies and be able to render first aid services as and when need arises.

### General Objectives

Upon completion of this course, the students shall be able to:

1. Describe the rules of first aid.
2. Demonstrate skills in rendering first aid in case of emergencies.

**Total Hours - 20**

Unit	Learning Objectives	Content	Hr.	Teaching learning activities	Assessment methods
I	Describe the importance and principle of first aid	<b>Introduction</b> a) Definition, Aims and Importance of first aid b) Rules/ General principles of First Aid c) Concept of emergency	2	Lecture cum discussions	Short answer Objective type
II	Demonstrate skill in first aid techniques	<b>Procedures and Techniques in First Aid</b> a) Preparation of First Aid kit. b) Dressing, bandaging and splinting(spiral, reverse spiral, figure of 8 spica, shoulder, hip, ankle, thumb, finger, stump, single and double eye, single and double ear, breast, jaw, capelin), triangle bandage uses, abdominal binder and bandage, breast binder, T and many tail bandage, knots reef, clove. c) Transportation of the injured d) CPR : Mouth to mouth, Sylvester, Schafer, External cardiac massage	8	Lecture cum discussions  Demonstration Videos  Simulation exercises.	Short answer Objective type Return demonstration
III	Describe first aid in common emergencies	<b>First Aid in emergencies</b> a) Asphyxia, drowning, shock b) Wounds and Bleeding c) Injuries to the Bones, Joints and Muscle - fractures, sprains, strains, hanging, falls	6	Lecture cum discussions.  Videos  Demonstration	Short answer Objective type Return demonstration



Unit	Learning Objectives	Content	Hr.	Teaching learning activities	Assessment methods
		d) Burns and scalds e) Poisoning – ingestion, inhalation, bites and stings f) Foreign body in eye, ear, nose and throat.			
IV	List various community emergencies and community resources.	<b>Community Emergencies &amp; Community Resources</b> a) Fire, explosion, floods, earth-quakes, famines etc b) Role of nurses in disaster management c) Rehabilitation d) Community Resources <ul style="list-style-type: none"> <li>- Police, Ambulance services</li> <li>- Voluntary agencies-local, state national and international</li> </ul>	4	Lecture cum discussions.  Videos  Mock drill  Simulation exercise  Videos  Field visit to voluntary agencies.	Short answer  Objective type  Essay type

# COMMUNITY HEALTH NURSING

Placement- FIRST YEAR

Time- 180 hours

CHN-I – 80 hours

Environmental Hygiene- 30 hours

Health Education & Communication skills- 40 hours

Nutrition- 30hours

## COMMUNITY HEALTH NURSING – I

### Course Description

This course is designed to help students gain an understanding of the concept of community health in order to introduce them to the wider horizons of rendering nursing services in a community set – up, both in urban and rural areas.

### General Objectives

Upon completion of this course, the students shall be able to:

- 1 Describe the concept of health, community health and community health nursing.
- 2 State the principles of epidemiology and epidemiological methods in community health nursing practice.
- 3 Explain the various services provided to the community and role of the nurse.
- 4 Demonstrate skills to practice effective nursing care of the individuals and families in the clinics as well as in their homes, using scientific principles.

Total Hours – 80

Unit No.	Learning Objectives	Content	Hr	Teaching Learning activities	Method of Assessment
I	Describe the concept of health and disease and community health	<b>Introduction to Community Health</b> a) Definitions: Community, Community health, community health nursing b) Concept of Health and disease, dimensions and indicators of health, Health determinants c) History & development of Community Health in India& its present concept. d) Primary health care, Millennium Development Goals e) Promotion and maintenance of Health	10	Lecture cum discussions.	Short Answers



Unit No.	Learning Objectives	Content	Hr	Teaching Learning activities	Method of Assessment
II	Explain various aspects of Community Health Nursing. Demonstrate skills in applying nursing process in Community Health Nursing settings	<b>Community Health Nursing</b> a) Philosophy, goals, objectives & principles, concept and importance of Community Health Nursing, b) Qualities and functions of Community Health Nurse c) Steps of nursing process; community identification, population composition, health and allied resources, community assessment, planning & conducting community nursing care services.	14	Lecture cum discussions.	Short answers Essay type
III	Demonstrate skill in assessing the health status and identify deviations from normal parameters in different age groups.	<b>Health Assessment</b> a) Characteristics of a healthy individual b) Health assessment of infant, preschool, school going, adolescent, adult, antenatal woman, postnatal woman, and elderly.	10	Lecture cum discussions.  Demonstration  Role Play  Videos	Short answers  Objective type  Essay type  Return demonstration
IV	Describe the principles of epidemiology and epidemiological methods in community health nursing practice.	<b>Principles of Epidemiology and Epidemiological methods</b> a) Definition and aims of epidemiology, communicable and non-communicable diseases. b) Basic tools of measurement in epidemiology c) Uses of epidemiology d) Disease cycle e) Spectrum of disease f) Levels of prevention of disease. g) Disease transmission – direct and indirect. h) Immunizing agents, immunization and national immunization schedule. i) Control of infectious diseases. j) Disinfection.	10	Lecture cum discussions.  Non-communicable disease module of government of India.  Field visit	Short answers  Objective type  Essay type
V	Demonstrate skill in providing comprehensive nursing care to the family.	<b>Family Health Nursing Care</b> a) Family as a unit of health b) Concept, goals, objectives c) Family health care services d) Family health care plan and nursing process.	12	Lecture cum discussions.  Role play  Family visit	Short answers  Essay type

Unit No.	Learning Objectives	Content	Hr	Teaching Learning activities	Method of Assessment
		e) Family health services – Maternal, child care and family welfare services. f) Roles and function of a community health nurse in family health service. g) Family health records.			
VI.	Describe the principles and techniques of family health care services at home and in clinics.	<b>Family Health Care Settings Home Visit:</b> a) Purposes, Principles b) Planning and evaluation c) Bag technique d) Clinic: Purposes, type of clinics and their functions e) Function of Health personnel in clinics	10	Lecture cum discussions.  Demonstration  Visits – Home, health center	Short answer  Return demonstration
VII	Describe the referral system and community resources for referral	<b>Referral System</b> a) Levels of health care and health care settings. b) Referral services available c) Steps in referral. d) Role of a nurse in referral	6	Lecture cum discussions.  Mock drill	Short answer  Objective type
VIII	List the records and reports used in community health nursing practice	<b>Records and reports</b> a) Types and uses b) Essential requirements of records and reports c) Preparation & Maintenance	3	Lecture cum discussions.  Exhibit the records.	Short answer  Objective type
IX.	Explain the management of minor ailments.	<b>Minor Ailments</b> a) Principles of management b) Management as per standing instructions/orders.	5	Lecture cum discussions.	Short answer  Objective type



## NUTRITION

### Course Description

This course is designed to help students understand that nutrition is an integral component of health as nutrients play a vital role in the growth, development and maintenance of the body.

### General Objectives

Upon completion of this course, the students shall be able to:

- 1 Describe the principles of nutrition and dietetics and its relationship to the human body in health and disease.
- 2 Describe the balanced diet in promotion of health
- 3 Apply this knowledge in providing therapeutic diet in care of the sick.
- 4 Demonstrate skills in selection, preparation and preservation of food.

Total Hours – 30

Unit.	Learning Objectives	Content	Hr.	Teaching learning activities	Methods of assessment
I	Describe the relationship between nutrition and health	<b>Introduction</b> a) Meaning of food, nutrition, nutrients etc. b) Food Habits and customs c) Factors affecting nutrition d) Changing concepts in food and nutrition. e) Relation of Nutrition to Health	2	Lecture cum discussions.  Explain using charts	Short answer types  Objective type
II	Describe the classification of food.	<b>Classification of food</b> a) Classification by origin: - Food and animal origin - Food of plant origin b) Classification by chemical composition and sources - Carbohydrates - Proteins - Fats - Minerals - Vitamins - Water c) Classification by predominant functions - Body building food - Energy giving food - Protective food	2	Lecture cum discussions.  Real food items  Exhibits charts	Short answers  Objective type  Essay type

Unit.	Learning Objectives	Content	Hr.	Teaching learning activities	Methods of assessment
		d) Classification by nutritive value <ul style="list-style-type: none"> <li>- Cereals and millets</li> <li>- Pulses and legumes</li> <li>- Vegetables</li> <li>- Nuts and oil seeds</li> <li>- Fruits</li> <li>- Animal food</li> <li>- Fats and oils</li> <li>- Sugar and jiggery</li> <li>- Condiments and spices</li> <li>- Miscellaneous food.</li> </ul>			
III	Explain normal dietary requirements Demonstrate skill in calculating normal food requirements.	<b>Normal Dietary Requirements</b> <ol style="list-style-type: none"> <li>a) Energy: Calorie, Measurement, Body Mass Index, Basal Metabolic Rate – determination and factors affecting</li> <li>b) Balanced Diet – nutritive value of foods, calculation for different categories of people, normal food requirement calculation. Menu plan. Combination of food affecting and enhancing the nutritive value of the diet.</li> <li>c) Budgeting for food, low cost meals, food substitutes.</li> <li>d) Diseases and disorders caused by the imbalance of nutrients.</li> <li>e) Food allergy – causes, types, diet modifications in gluten, lactose and protein intolerance etc.</li> <li>f) Food intolerance - inborn errors of metabolism</li> </ol>	4	Lecture cum discussions.  Charts exhibits \ Real food Practical exercise	Short answer  Objective type  Essay type
IV	Describe the principles and various methods of preparation, preservation and storage of food.	<b>Food Preparation, Preservation &amp; Storage</b> <ol style="list-style-type: none"> <li>a) Principles of cooking, methods of cooking and the effect of cooking on food and various nutrients. Safe food handling, health of food handlers.</li> </ol>	2	Lecture cum discussions.  Field visit to food processing unit.	Short answer type  Objective type



Unit.	Learning Objectives	Content	Hr.	Teaching learning activities	Methods of assessment
		b) Methods of food preservation—household and commercial, precautions. c) Food storage – cooked and raw, household and commercial, ill effects of poorly stored food. d) Food adulteration and acts related to it.		Demonstration exhibits	Evaluation of exhibit preparation.
V	Describe about therapeutic diet	<b>Therapeutic Diet</b> a) Diet modification in relation to medical and surgical condition of the individual such as Protein Energy Malnutrition (PEM), Diabetes, Cardio Vascular disease, Hepatitis, Renal, Gouts, Irritable Bowel Syndrome (IBS), Obesity, cholecystectomy, partial gastrectomy, gastrostomy, bariatric surgery and colostomy etc. b) Special diet – low sodium diet, fat free diet, diabetic diet, bland diet, high protein diet, low protein diet, low calorie diet, geriatric diet, iron rich diet, liquid diet, semi-solid diet, soft diet and high fiber diet etc c) Factors affecting diet acceptance, feeding the helpless patient. d) Health education on nutrition needs and methods in diet modification .	8	Lecture cum discussions.  Practical of planning Therapeutic diet  Demonstration Charts Exhibits	Short answers  Objective type  Essay type
VI	Describe the concept of community nutrition	<b>Community Nutrition</b> a) Nutritional problems and programs in India b) Community food supply, food hygiene and commercially prepared and grown food available locally. c) National and international food agencies – Central food training research institute (CFTRI), Food and agriculture organization	4	Lecture cum discussions.  Videos Government of India nutrition manuals.	Short answer  Objective type

Unit.	Learning Objectives	Content	Hr.	Teaching learning activities	Methods of assessment
		(FAO), National Institute of Nutrition (NIN), Food Safety and Standards Authority of India (FSSAI), CARE (Cooperative for Assistance and Relief Everywhere), National Institute of Public Cooperation and Child Development (NIPCCD) etc.		Visit to the local food preparation / processing agency.	
VII	Demonstrate skill in preparation of common food items.	<b>Preparation of diet / practical</b> a) Beverages: hot and cold, juice, shakes, soups, lassi, barley water b) Egg preparation: egg flip, scramble, omlet, poached egg c) Light diet: porridges, gruel, khichari, dahlia, kanji, boiled vegetables, salads, custards. d) Low cost high nutrition diets - chikki, multigrain roti	8	Lecture cum discussions  Cookery practical	Practical evaluation



# ENGLISH

Placement- FIRST YEAR

Time- 30 hours

## Course Description

This course is designed to help students develop an ability to comprehend spoken and written English, so as to communicate effectively.

## General Objectives

Upon completion of this course, the students shall be able to:

- 1 Read and write correct English.
- 2 Communicate effectively in English.

Total Hours-30

Unit	Learning Objective	Content	Hr.	Method of Teaching	Assessment Method
I.	Speak and write correct grammatical English	<b>Grammar</b> a) Review of basic grammar b) Building Vocabulary	6	Discussion, written and oral exercises.	Objective type Paraphrasing
II	Develop ability to read, understand and write in English	<b>Composition</b> a) Sentence construction and usage. b) Reading comprehension. c) Written composition : paragraphs & essays, precise writing, story writing & comprehension, letter writing, nurses notes and reports, anecdotal records, diary writing	14	Discussion Written and oral exercises.	Dictation Exercise  Objective type Translation  Report evaluation  Essay type
III	Demonstrate conversation skills.	<b>Spoken English</b> a) Conversation – face to face and telephonic b) Oral report c) Discussion, debate d) Public speaking skills.	10	Discussion, written and oral exercises.	Extempore  Debates  Discussion

# COMPUTER EDUCATION

Placement- FIRST YEAR

Time- 15 hours

## Course Description:-

This course is designed to help students gain a basic understanding of uses of computers and its application in nursing.

## General Objective:-

Upon completion of this course, the students shall able to:

1. Describe the basic disk operating system.
2. Use computer for data processing
3. Use Micro-soft office programs.
4. Use computer in patient Management System.
5. Use E-mail and internet

Total Hours – 15

Unit	Learning Objectives	Content	Hr.	Teaching learning activities	Assessment methods
I	Describe the structure and purpose of computers and disc operating systems	<b>Introduction to computers and Disk operating system</b> a) Definition b) Classification c) Structure and parts of computer d) Disk operating system – DOS and WINDOWS all versions. e) Purposes / uses of computer is health care delivery system	5	Lecture cum discussion  Practical	Short answers  Essay type  Practical
II	Demonstrate skill in the use of MS office	<b>MS Office</b> a) MS word b) MS excel with pictorial presentation c) MS Power point d) MS access e) MS publisher document	15	Lecture cum discussion  Demonstration  Practice session	Short answer  Objective type  Practical exam
III	Demonstrateskill in using multimedia	<b>Multimedia</b> a) Types and uses b) Data base creation, retrieval and report generation c) Computer aided teaching and testing	5	Lecture cum discussion  Demonstration	Short answer  Objective type  Practical exam
IV	Demonstrate the use of internet and e-mail	<b>Use of internet and e-mail</b> a) Accessing the website b) Searching the internet for content c) Accessing the email and communicating with the help of it. d) Use of internet communication programs – skype	10	Lecture cum discussion  Demonstration	Short answer  Objective type  Practical exam