DIT UNIVERSITY

IMAGINE ASPIRE ACHIEVE

DIT University
Event Report
2022-23

SDG 3

PREFACE

United Nations' Sustainable Development Goals (SDG) promote the notion 'Ensure healthy lives and promote well-being for all at all ages' through SDG 3. Good Health is essential to render any service to society and humanity. It is the very basic requirement of individual and irrespective of persons at any level in society must get access to quality health care services, sufficient and necessary education to promote awareness about health. In addition to that, clean environment, purity in resources, hygienic work environment are essential for achieving this goal. DIT University is committed to achieve this goal by providing necessary education, free access of healthcare services, awareness campaign and collaborative research work with Government and Non-Government agencies.

DIT UNIVERSITY
IMAGINE ASPIRE ACHIEVE

DIT University
Event Report
2022-23

CONTENTS

DIT University
Event Report
2022-23

University access to sexual and reproductive health-care services to the students

DIT University takes a holistic approach to providing sexual and reproductive health care services, combining medical support, counseling, safety measures, and academic education. The university offers a 24/7 dedicated student counsellor, providing confidential and immediate assistance to students seeking support or guidance on mental health, sexual health, or personal issues. A 24/7 infirmary, staffed with doctors from renowned hospitals, ensures that medical concerns are addressed promptly. For more serious health needs, DIT University has a comprehensive medical scheme for emergency hospitalizations, backed by an extensive medical insurance policy. This policy covers access to more than 20 hospitals within Dehradun and over 5,000 hospitals across India, offering students broad coverage for their healthcare needs.

In addition to medical and counseling services, DIT University has implemented strong mechanisms to ensure student safety. The Internal Complaints Committee (ICC), composed of senior female faculty members, follows the UGC Regulations (Prevention, Prohibition, and Redressal of Sexual Harassment of Women Employees and Students in Higher Educational Institutions) Regulations 2015, providing a clear pathway for reporting and addressing sexual harassment issues. The University Discipline Committee further maintains campus discipline and safety, addressing any misconduct or violations.

To complement these services, DIT University also integrates scientific and technical education on health-related topics into its curriculum. Courses such as Applied Anatomy & Applied Physiology, Nursing Foundations, Human Anatomy and Physiology, and Social and Preventive Pharmacy provide students with both theoretical and practical knowledge of human anatomy, physiological processes, and preventive healthcare. These courses help students gain a deeper understanding of the human body, preparing them for informed decision-making regarding their own health and well-being.

Relevant additional details:

1. **Medical Policy for the Students of DIT University:** *Click here*
2. **List of Empaneled Hospitals:** *Click here*

DIT UNIVERSITY
IMAGINE ASPIRE ACHIEVE

DIT University
Event Report
2022-23

Annexures (Courses related to Sexual and Reproductive Healthcare)

APPLIED ANATOMY& APPLIED PHYSIOLOGY

PLACEMENT: I SEMESTER **THEORY:** 5 Credits (100 hours)

Anatomy -50 hours & Physiology -50 hours

APPLIED ANATOMY **THEORY**: 2.5 Credits (50 hours)

DESCRIPTION: The course is designed to assists student to acquire the knowledge of the normal structure of human body, identify alteration in anatomical structure with emphasis on clinical application to practice nursing.

COMPETENCIES:

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

1. Describe anatomical terms
2. Explain the general and microscopic structure of each system of the body
3. Identify relative positions of the major body organs as well as their general anatomic locations
4. Explore the effect of alterations in structure
5. Apply knowledge of anatomic structures to analyze clinical situations and therapeutic applications

COURSE OUTLINE

UNIT	TIME (HRS)	LEARNING OUTCOMES	CONTENT	TEACHING LEARNING ACTIVITIES	ASSESSMENT METHODS
I	6	Define the terms relative to the anatomical position Describe the anatomical planes Define and describe the terms used to describe movements	**Introduction to anatomical terms and organization of the human body** • Introduction to anatomical terms relative to position- anterior, ventral, Posterior dorsal, superior, inferior, median, lateral, proximal, distal, superficial, deep, prone, supine, palmar and plantar • Anatomical planes (axial/transverse/ horizontal, sagittal/vertical plane and coronal/frontal/oblique plane) • Movements (flexion, extension, abduction, adduction, medial rotation, lateral rotation, inversion, eversion, supination,	• Lecture cum Discussion • Use of models • Video demonstration • Use of microscopic slides	• Quiz • MCQ • Short Answer questions

		Organization of human body and structure of cell, tissues membranes and glands Describe the types of cartilage Compare and contrast the features of skeletal, smooth and cardiac muscle	pronation, plantar flexion, dorsal flexion and circumduction. • Cell structure, Cell division • Tissue-definition, types, characteristics, classification, location • Membrane, glands-classification and structure • Identify major surface and bony landmarks in each body region, Organization of human body • Hyaline, fibro cartilage, elastic cartilage • Features of skeletal, smooth and cardiac muscle • Application and implication in nursing	• Lecture cum discussion • Video slides • Anatomical Torso	
II	5	Describe the structure of respiratory system Identify the muscles of respiration and examine their contribution to the mechanism of breathing	**The Respiratory system** • Structure of the organs of respiration • Muscles of respiration • Application and implication in nursing	• Lecture cum discussion • Models • Video slides	• Short answer questions Objective type
III	5	Describe the structure of digestive system	**The Digestive system** • Structure of alimentary canal and accessory organs of digestion • Application and implications in nursing	• Lecture cum discussion • Video slides • Anatomical Torso	• Short answer • Objective type

IV	5	Describe the structure of circulatory and lymphatic system.	**The Circulatory and lymphatic system** • Structure of blood components, blood vessels- Arterial and Venous system • Position of heart relative to the associated structures • Chambers of heart, layers of heart • Heart valves, coronary arteries • Nerve and blood supply to heart • Lymphatic tissue • Veins used for IV injections • Application and implication in nursing	• Lecture • Models Video /slides	• Short answer • MCQ
V	4	Identify the major endocrine glands and describe the structure of endocrine Glands	**The Endocrine system** Structure of Hypothalamus, Pineal Gland, Pituitary gland, Thyroid, Parathyroid, Thymus, Pancreas and Adrenal glands	• Lecture	• Short answer questions • Objective type
VI	3	Describe the structure of various sensory organs	**The Sensory organs** • Structure of skin, eye, ear, nose and tongue • Application and implications in nursing	• Lecture • Explain with Video/models/ charts	• Short answer • MCQ
VII	8	Describe anatomical position and structure of bones and joints Identify major bones that make up the axial and appendicular skeleton Classify the joints Identify the application and implications in nursing Describe the structure of muscle	**The Musculoskeletal system:** **The skeletal system** • Anatomical positions • Bones- Types, structure, growth and ossification • Axial and Appendicular skeleton • Joints- classification, major joints and structure • Application and implications in nursing **The Muscular System** • Types and structure of Muscles • Muscle groups-muscles of the head, neck, thorax, abdomen, pelvis, upper limb and lower limbs • Principal muscles- deltoid,	Review – discussion • Lecture • Discussions • Explain using charts, skeleton and loose bones and torso	Short answer questions • Objective type

		Apply the knowledge in performing nursing procedures/skills	biceps, triceps, respiratory, abdominal, pelvic floor, pelvic floor muscles, gluteal muscles and vastus lateralis • Major muscles involved in nursing procedures		
VIII	4	Describe the structure of renal system	**The Renal System** • Structure of kidney, ureters, bladder, urethra • Application and implication in nursing	• Lecture	• MCQ • Short answer
IX	4	Describe the structure of reproductive system	**The Reproductive System** • Structure of male reproductive organs • Structure of female reproductive organs • Structure of breast	• Lecture	• MCQ • Short answer
X	6	Describe the structure of nervous system including the distribution of the nerves, nerve plexuses Describe the ventricular system	**The Nervous system** • Review Structure of neurons • CNS, ANS and PNS (Central, autonomic and peripheral) • Structure of brain, spinal cord, cranial nerves, spinal nerves, peripheral nerves, functional areas of cerebral cortex • Ventricular system, formation, circulation, and drainage Application and implication in nursing	• Lecture • Explain with models • Video slides	• MCQ • Short answer

APPLIED PHYSIOLOGY **THEORY:** 2.5 Credits (50 hours)

DESCRIPTION: The course is designed to assists student to acquire comprehensive knowledge of the normal functions of the organ systems of the human body to facilitate understanding of physiological basis of health, identify alteration in functions and provide the student with the necessary physiological knowledge to practice nursing.

COMPETENCIES

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

1. Develop understanding of the normal functioning of various organ systems of the body
2. Identify the relative contribution of each organ system towards maintenance of homeostasis
3. Describe the effect of alterations in functions
4. Apply knowledge of physiological basis to analyze clinical situations and therapeutic applications

COURSE OUTLINE

UNIT	TIME (HRS)	LEARNING OUTCOMES	CONTENT	TEACHING LEARNING ACTIVITIES	ASSESSMENT METHODS
I	3 hrs	Describe the physiology of cell, tissues, membranes and glands	**General Physiology-Basic concepts** • Cell physiology including transportation across cell membrane • Body fluid compartments, Distribution of total body fluid, intracellular and extracellular compartments, major electrolytes and maintenance of homeostasis • Cell cycle • Tissue- formation, repair • Membranes and glands- functions • Application and implication in nursing	• Review – discussion • Lecture cum discussion • Video demonstrations	• Quiz • MCQ • OSPE • Short Answer questions

II	5hrs	Describe the physiology and mechanism of respiration Identify the muscles of respiration and examine their contribution to the mechanism of breathing	**Respiratory system** • Functions of respiratory organs • Physiology of respiration • Pulmonary circulation-functional features • Pulmonary ventilation, Exchange of gases • Carriage of oxygen and Carbon- dioxide, Exchange of gases in tissue • Regulation of respiration • Hypoxia, cyanosis, dyspnoea, periodic breathing • PFT • Respiratory changes during exercise • Aging changes • Application and implication in nursing	• Lecture • Video slides	• Essay • Short answer • MCQ
III	6hrs	Describe the functions of digestive system	**Digestive system** • Functions of the organs of digestive tract • Saliva-composition, regulation of secretion and functions of saliva • Composition and function of gastric juice, mechanism and regulation of gastric secretion • Composition of pancreatic juice, function, regulation of pancreatic secretion • Functions of liver, gall bladder and pancreas • Composition of bile and function • Secretion and Function of small and large intestine • Movements of alimentary tract • Digestion in mouth, stomach, small intestine, large intestine, Absorption of food • Metabolism of CHO, fat and proteins • Application and	• Lecture cum discussion • Video slides	• Essay • Short answer • MCQ

			implications in nursing		
IV	5hrs	Explain the functions of the heart, and physiology of circulation	**Circulatory and lymphatic system** • Functions of heart, conduction system, cardiac cycle, Stroke volume and cardiac output • Blood pressure and Pulse • Circulation- principles, factors influencing blood pressure, pulse • Coronary circulation, Pulmonary and systemic circulation • Heart rate-regulation of heart rate, Normal value and variations • Cardiovascular homeostasis in exercise and posture • Aging changes • Application and implication in nursing	• Lecture • Discussion • Video/slides	• Short answer • MCQ
V	4hrs	Describe the composition and functions of blood	**Blood** • Blood-Functions, Physical characteristics, Components • Formation of blood cells • Erythropoiesis, Functions of RBC, RBC life cycle • WBC- types, functions • Platelets-Function and production of platelets • Clotting mechanism of blood, clotting time, bleeding time, PTT • Hemostasis –role of vasoconstriction, platelet plug formation in hemostasis, coagulation factors, intrinsic and extrinsic pathways of coagulation • Blood groups and types • Functions of reticulo-endothelial system, Immunity • Application in nursing	• Lecture • Discussion • Videos	• Essay • Short answer • MCQ

VI	4hrs	Identify the major endocrine glands and describe their functions	**The endocrine system** • Functions and hormones of Pineal Gland, Pituitary gland, Thyroid, Parathyroid, Thymus, Pancreas and Adrenal glands. • Other hormones • Alterations in disease • Application and implication in nursing	• Lecture • Explain using charts	• Short answer • MCQ
VII	4hrs	Describe the structure of various sensory organs	**The sensory Organs** • Functions of skin • Vision, hearing, taste and smell • Errors of refraction, aging changes • Application and implications in nursing	• Lecture • Video	• Short answer • MCQ
VIII	4hrs	Describe the functions of bones, joints, various types of muscles, its special properties and nerves supplying them	**Musculo-skeletal system** • Bones- Functions, movements of bone s of axial and appendicular skeleton, Bone healing • Joints and joint movements • Alteration of joint disease • Properties and Functions of skeletal muscles – mechanism of muscle contraction • Structure and properties of cardiac muscles and smooth muscles • Application and implication in nursing	• Lecture • Discussion • Video presentation	• Structured essay • Short answer • MCQ
IX	4hrs	Describe the physiology of renal system	**Renal system** • Functions of kidney in maintaining homeostasis • GFR • Functions of ureters, bladder and urethra • Micturition • Regulation of renal function • Application and implication in nursing	• Lecture • Charts and models	• Short answer • MCQ

X	4hrs	Describe the structure of reproductive system	**The Reproductive System** • Female reproductive system- Menstrual cycle, function and hormones of ovary, oogenesis, fertilization, implantation, Functions of breast • Male reproductive system- Spermatogenesis, hormones and its functions, semen • Application and implication in providing nursing care	• Lecture • Explain using charts, models, specimens	• Short answer • MCQ
XI	7hrs	Describe the functions of brain, physiology of nerve stimulus, reflexes, cranial and spinal nerves	**Nervous system** • Overview of nervous system • Review of types, structure and functions of neurons • Nerve impulse • Review functions of Brain- Medulla, Pons, Cerebrum, Cerebellum • Sensory and Motor Nervous system • Peripheral Nervous system • Autonomic Nervous system • Limbic system and higher mental Functions- Hippocampus, Thalamus, Hypothalamus • Vestibular apparatus • Functions of cranial nerves • Autonomic functions • Physiology of Pain- somatic, visceral and referred • Reflexes • CSF formation, composition, circulation of CSF, blood brain barrier and blood CSF barrier • Application and implication in nursing	• Lecture cum Discussion • Video slides	• Brief structured essays • Short answer • MCQ • Critical reflection

NURSING FOUNDATIONS - II

NURSING FOUNDATIONS II (SEMESTER II)

THEORY: 6 Credits (120 Hours)
(Lab-L/Skill Lab-SL): 3 Credits (120hours)

1. Identify and meet the hygienic needs of patients
2. Demonstrate fundamental skills of assessment, planning, implementation and evaluation of nursing care using Nursing process approach in supervised clinical settings
3. Assess the Nutritional needs of patients and provide relevant care under supervision
4. Identify and meet the elimination needs of patient
5. Interpret findings of specimen testing applying the knowledge of normal values
6. Promote oxygenation based on identified oxygenation needs of patients under supervision
7. Review the concept of fluid, electrolyte balance integrating the knowledge of applied physiology
8. Apply the knowledge of the principles, routes, effects of administration of medications in administering medication
9. Calculate conversions of drugs and dosages within and between systems of measurements
10. Demonstrate knowledge and understanding in caring for patients with altered functioning of sense organs and unconsciousness
11. Explain loss, death and grief
12. Describe sexual development and sexuality
13. Identify stressors and stress adaptation modes
14. Integrate the knowledge of culture and cultural differences in meeting the spiritual needs
15. Explain the introductory concepts relevant to models of health and illness in patient care
16. Perform first aid measures during emergencies

***Module used in teaching/learning:**

II Semester: First Aid-40 Hours (including Basic CPR)

COURSE OUTLINE

UNIT	TIME (HRS) T & L/SL	LEARNING OUTCOMES	CONTENT	TEACHING LEARNING ACTIVITIES	ASSESSMENT METHODS
I	5 T 15 L	Identify and meet the hygienic needs of patients	**Hygiene** • Factors Influencing Hygienic Practice • Hygienic care: Indications and purposes, effects of neglected care o Care of the Skin- (Bath, feet and nail, Hair Care) o Care of pressure points o Assessment of Pressure Ulcers using Braden Scale and Norton Scale o Pressure ulcers- causes, stages and manifestations, care and prevention o Perineal care/Meatal care o Oral care, Care of Eyes, Ears and Nose including assistive devices (eye glasses, contact lens, dentures, hearing aid)	• Lecture • Discussion • Demonstration	• Essay • Short answers Objective type
II	14 T 7 L	Describe assessment, planning, implementation and evaluation of nursing care using Nursing process approach	**The Nursing Process** • Critical Thinking Competencies, Attitudes for Critical Thinking, Levels of critical thinking in Nursing • Nursing Process Overview o **Assessment** ▪ Collection of Data: Types, Sources, Methods ▪ Organizing Data ▪ Validating Data ▪ Documenting Data o **Nursing Diagnosis** ▪ Identification of client problems, risks and strengths ▪ Nursing diagnosis statement- parts, Types, Formulating, Guidelines for formulating Nursing Diagnosis ▪ NANDA approved diagnoses	• Lecture • Discussion • Demonstration Supervised Clinical practice	• Essay • Short answers • Objective type Evaluation of care plan

			▪ 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		
III	5 T 5 L	Identify and meet the Nutritional needs of patients	**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	• Lecture • Discussion • Demonstration • Exercise • Supervised Clinical practice	• Essay • Short answers • Objective type • Evaluation of nutritional assessmen t & diet planning
IV	10 T 10 L	Identify and meet the elimination needs of patient	**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:	• Lecture • Discussion • Demonstration	• Essay • Short answers • Objective type

			assessment, types, equipment, procedures and special considerations o Providing urinal/bed pan o Care of patients with ▪ Condom drainage ▪ Intermittent Catheterization ▪ Indwelling Urinary catheter and urinary drainage ▪ Urinary diversions ▪ Bladder irrigation • Bowel Elimination o Review of Physiology of Bowel Elimination, Composition and characteristics of feces o Factors affecting Bowel elimination o Alteration in Bowel Elimination o Facilitating bowel elimination: Assessment, equipment, procedures ▪ Enemas ▪ Suppository ▪ Bowel wash ▪ Digital Evacuation of impacted feces ▪ Care of patients with Ostomies (Bowel Diversion Procedures)		
V	4 T 3 L	Explain various types of specimens and identify normal values of tests Develop skill in specimen collection, handling and transport	**Diagnostic testing** • Phases of diagnostic testing (pre-test, intra-test & post-test) in Common investigations and clinical implications o Complete Blood Count o Serum Electrolytes o LFT o Lipid/Lipoprotein profile o Serum Glucose- AC, PC, HbA1c o Monitoring Capillary Blood Glucose (Glucometer Random Blood Sugar-GRBS) o Stool Routine Examination o Urine Testing- Albumin, Acetone, pH, Specific Gravity o Urine Culture, Routine, Timed Urine Specimen o Sputum culture o Overview of Radiologic & Endoscopic Procedures	• Lecture • Discussion • Demonstration	• Essay • Short answers • Objective type

VI	11 T
	10 L
		Assess patients for oxygenation needs, promote oxygenation and provide care during oxygen therapy	**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
				• Lecture
				• Discussion
				• Demonstration & Re-demonstration
					• Essay
					• Short answers
					• Objective type

VII	7 T
	8 L
		Describe the concept of fluid, electrolyte balance	**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
				• Lecture
				• Discussion
				• Demonstration
					• Essay
					• Short answers
					• Objective type
					• Problem solving- calculations

			▪ Respiratory- acidosis & alkalosis o 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		
VIII	22 T 20 L	Explain the principles, routes, effects of administration of medications Calculate conversions of drugs and dosages within and between systems of measurements Administer oral and topical medication and document accurately under supervision	**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 o Care of equipment: decontamination and disposal of syringes, needles, infusion sets o Prevention of Needle-Stick Injuries	• Lecture • Discussion • Demonstration & Redemonstration	• Essay • Short answers • Objective type

			• Topical Administration: Types, purposes, site, equipment, procedure o Application to skin & mucous membrane o Direct application of liquids, Gargle and swabbing the throat o Insertion of Drug into body cavity: Suppository/ medicated packing in rectum/vagina o Instillations: Ear, Eye, Nasal, Bladder, and Rectal o Irrigations: Eye, Ear, Bladder, Vaginal and Rectal o 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, intrapleural, intraarterial		
IX	7 T 4 L	Provide care to patients with altered functioning of sense organs and unconsciousness in supervised clinical practice	**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 o 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	• Lecture • Discussion • Demonstration	• Essay • Short answers • Objective type
X	5 T 5 L	Explain loss, death and grief	**Care of Terminally ill, death and dying** • Loss- Types • Grief, Bereavement & Mourning • Types of Grief responses • Manifestations of Grief	• Lecture • Discussion • Case discussions	• Essay • Short answers

			• 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)**	• Death care/last office	• Objective type
XI	3 T	Develop basic understanding of self- concept	**A. Self-concept** • Introduction • Components (Personal Identity, Body Image, Role Performance, Self Esteem) • Factors affecting Self Concept • Nursing Management	• Lecture • Discussion • Demonstration • Case Discussion/ Role play	• Essay • Short answers • Objective type
XII	2 T	Describe sexual development and sexuality	**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	• Lecture • Discussion • Demonstration	• Essay • Short answers • Objective type
XIII	3 T 3 L	Describe stress and adaptation	**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	• Lecture • Discussion • Demonstration	• Essay • Short answers • Objective type

			• Coping strategies/ Mechanisms
			• Stress Management
			  o Assist with coping and adaptation
			  o Creating therapeutic environment
			• Recreational and diversion therapies		

XIV	6 T	Explain culture and cultural norms
		
		Integrate cultural differences and spiritual needs in providing care to patients under supervision
			D. Concepts of Cultural Diversity and Spirituality
			• Cultural diversity
			  o Cultural Concepts- Culture, Subculture, Multicultural, Diversity, Race, Acculturation, Assimilation
			  o Transcultural Nursing
			  o Cultural Competence
			  o Providing Culturally Responsive Care
			• Spirituality
			  o Concepts- Faith, Hope, Religion, Spirituality, Spiritual Wellbeing
			  o Factors affecting Spirituality
			  o Spiritual Problems in Acute, Chronic, Terminal illnesses & Near-Death Experience
			  o Dealing with Spiritual Distress/Problems
				• Lecture
				• Discussion
					• Essay
					• Short answers
					• Objective type

XV	6 T	Explain the significance of nursing theories	**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	• Lecture • Discussion	• Essay • Short answers • Objective type
XVI	20 T 20 L	Explain and apply principles of First Aid during emergencies	**First Aid & Emergencies *** • Definition, Basic Principles, Scope & Rules • First Aid Management o Wounds, Hemorrhage & Shock o Musculoskeletal Injuries: Fractures, Dislocation, Muscle injuries o Transportation of Injured persons o Respiratory Emergencies & Basic CPR o Unconsciousness o Foreign Bodies- Skin, Eye, Ear, Nose, Throat & Stomach o Burns & Scalds o Poisoning, Bites & stings o Frostbite & Effects of Heat o Community Emergencies	• Lecture • Discussion • Demonstration & Re-demonstration • Module completion **National Disaster Management Authority (NDMA) First aid module**	• Essay • Short answers • Objective type • OSCE

SCHOOL OF PHARMACEUTICAL & POPULATIONS HEALTH INFORMATICS
COURSE STRUCTURE FOR B PHARMACY, 2022 ONWARDS

Course Title: Human Anatomy and Physiology II			**Course Code:** BP201T
Credit: 4	**L**	**T**	**P**
	3	1	0
Year: 1st			**Semester:** II

Course Objective: This subject is designed to impart fundamental knowledge on the structure and functions of the various systems of the human body. It also helps in understanding both homeostatic mechanisms. The subject provides the basic knowledge required to understand the various disciplines of pharmacy.

Course Content:

Unit I

Nervous system

Organization of nervous system, neuron, neuroglia, classification and properties of nerve fibre, electrophysiology, action potential, nerve impulse, receptors, synapse, neurotransmitters. Central nervous system: Meninges, ventricles of brain and cerebrospinal fluid.structure and functions of brain (cerebrum, brain stem, cerebellum), spinal cord (gross structure, functions of afferent and efferent nerve tracts,reflex activity)

Unit II

Digestive system

Anatomy of GI Tract with special reference to anatomy and functions of stomach, (Acid production in the stomach, regulation of acid production through parasympathetic nervous system, pepsin role in protein digestion) small intestine and large intestine, anatomy and functions of salivary glands, pancreas and liver, movements of GIT, digestion and absorption of nutrients and disorders of GIT.

Energetics

Formation and role of ATP, Creatinine Phosphate and BMR.

Unit III

Respiratory system 10 hours

Anatomy of respiratory system with special reference to anatomy of lungs, mechanism of respiration, regulation of respiration Lung Volumes and capacities transport of respiratory gases, artificial respiration, and resuscitation methods.

Urinary system

Anatomy of urinary tract with special reference to anatomy of kidney and nephrons, functions of kidney and urinary tract, physiology of urine formation, micturition reflex and role of kidneys in acid base balance, role of RAS in kidney and disorders of kidney.

Unit IV

Endocrine system

Classification of hormones, mechanism of hormone action, structure and functions of pituitary gland, thyroid gland, parathyroid gland, adrenal gland, pancreas, pineal gland, thymus and their disorders.

Unit V

Reproductive system

Anatomy of male and female reproductive system, Functions of male and female reproductive system, sex hormones, physiology of menstruation, fertilization, spermatogenesis, oogenesis, pregnancy and parturition

Introduction to genetics

Chromosomes, genes and DNA, protein synthesis, genetic pattern of inheritance

Learning Outcome: Upon completion of this course the student should be able to:

1. Explain the gross morphology, structure and functions of various organs of the human body.
2. Describe the various homeostatic mechanisms and their imbalances.
3. Identify the various tissues and organs of different systems of human body.
4. Perform the hematological tests like blood cell counts, haemoglobin estimation, bleeding/clotting time etc and also record blood pressure, heart rate, pulse and respiratory volume.
5. Appreciate coordinated working pattern of different organs of each system
6. Appreciate the interlinked mechanisms in the maintenance of normal functioning(homeostasis) of human body.

SCHOOL OF PHARMACEUTICAL & POPULATIONS HEALTH INFORMATICS
COURSE STRUCTURE FOR B PHARMACY, 2022 ONWARDS

Course Title: Social and Preventive Pharmacy	**Course Code:** BP802T		
Credit: 4	**L**	**T**	**P**
	3	1	0
Year: 4th	**Semester:** VIII		

Course Objective: The purpose of this course is to introduce to students a number of health issues and their challenges. This course also introduced a number of national health programmes. The roles of the pharmacist in these contexts are also discussed.

Course content:

Unit I

Concept of health and disease: Definition, concepts and evaluation of public health. Understanding the concept of prevention and control of disease, social causes of diseases and social problems of the sick.

Social and health education: Food in relation to nutrition and health, Balanced diet, Nutritional deficiencies, Vitamin deficiencies, Malnutrition and its prevention.

Sociology and health: Socio cultural factors related to health and disease, Impact of urbanization on health and disease, Poverty and health

Hygiene and health: personal hygiene and health care; avoidable habits

Unit II

Preventive medicine: General principles of prevention and control of diseases such as cholera, SARS, Ebola virus, influenza, acute respiratory infections, malaria, chicken guinea, dengue, lymphatic filariasis, pneumonia, hypertension, diabetes mellitus, cancer, drug addiction-drug substance abuse

Unit III

National health programs, its objectives, functioning and outcome of the following: HIV AND AIDS control programme, TB, Integrated disease surveillance program (IDSP), National leprosy control programme, National mental health program, National programme for prevention and control of deafness, Universal immunization programme, National programme for control of blindness, Pulse polio programme.

Unit IV

National health intervention programme for mother and child, National family welfare programme, National tobacco control programme, National Malaria Prevention Program, National programme for the health care for the elderly, Social health programme; role of WHO in Indian national program

Unit V

Community services in rural, urban and school health: Functions of PHC, Improvement in rural sanitation, national urban health mission, Health promotion and education in school.

SCHOOL OF PHARMACEUTICAL & POPULATIONS HEALTH INFORMATICS
COURSE STRUCTURE FOR B PHARMACY, 2022 ONWARDS

Recommended Books (Latest edition):

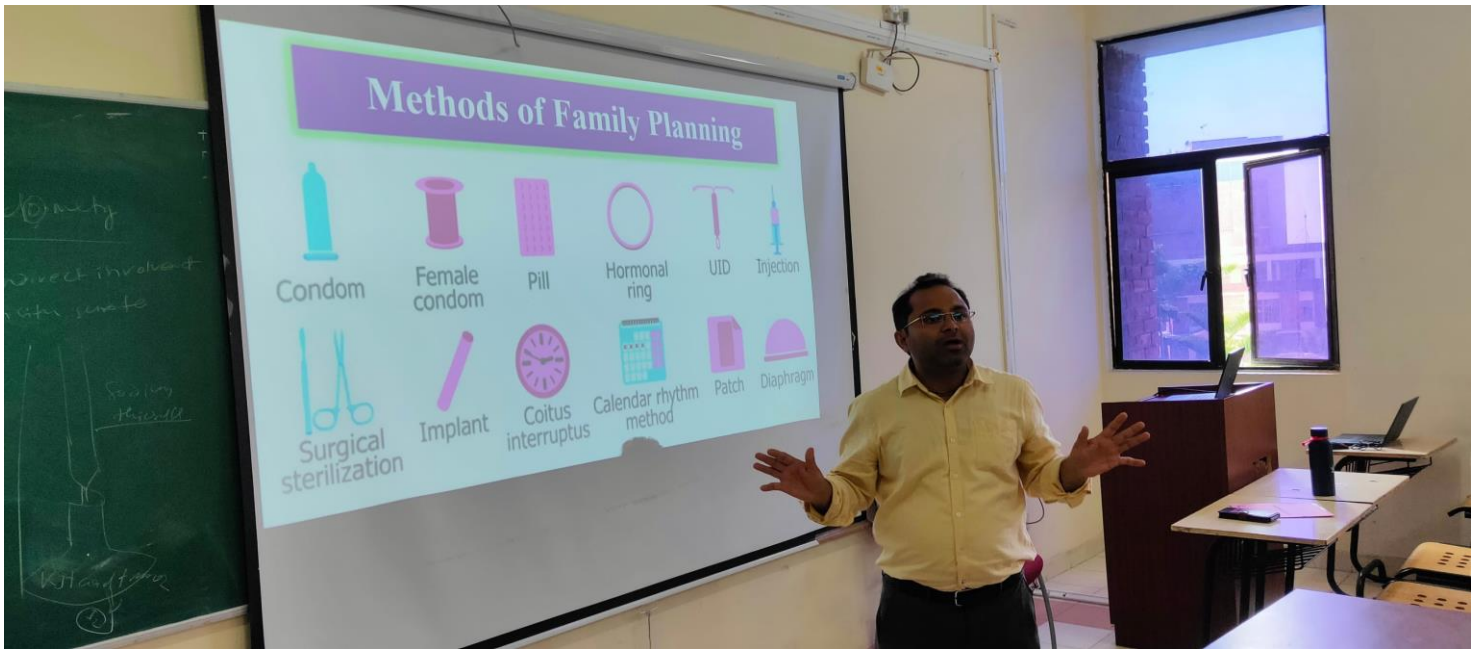
1. Short Textbook of Preventive and Social Medicine, Prabhakara GN, 2nd Edition, 2010, ISBN: 9789380704104, JAYPEE Publications
2. Textbook of Preventive and Social Medicine (Mahajan and Gupta), Edited by Roy Rabindra Nath, Saha Indranil, 4th Edition, 2013, ISBN: 9789350901878, JAYPEE Publications
3. Review of Preventive and Social Medicine (Including Biostatistics), Jain Vivek, 6th Edition, 2014, ISBN: 9789351522331, JAYPEE Publications
4. Essentials of Community Medicine—A Practical Approach, Hiremath Lalita D, Hiremath Dhananjaya A, 2nd Edition, 2012, ISBN: 9789350250440, JAYPEE Publications
5. Park Textbook of Preventive and Social Medicine, K Park, 21st Edition, 2011, ISBN-14: 9788190128285, BANARSIDAS BHANOT PUBLISHERS.
6. Community Pharmacy Practice, Ramesh Adepu, BSP publishers, Hyderabad

Learning Outcome: After the successful completion of this course, the student shall be able to:

1. Acquire high consciousness/realization of current issues related to health and pharmaceutical problems within the country and worldwide.
2. Have a critical way of thinking based on current healthcare development.
3. Evaluate alternative ways of solving problems related to health and pharmaceutical issues


HUMAN SKELETON
REPRODUCTIVE ORGANS
T.S. TESTIS
T.S. OVARY


Methods of Family Planning
Condom
Female condom
Pill
Hormonal ring
UID
Injection
Patch
Diaphragm


Methods of Family Planning
Condom
Female condom
Pill
Hormonal ring
UID
Injection
Surgical sterilization
Implant
Coitus interruptus
Calendar rhythm method
Patch
Diaphragm